# Rittal – North American Industrial Buyer's Guide

ENCLOSURES
POWER DISTRIBUTION
CLIMATE CONTROL
IT INFRASTRUCTURE
SOFTWARE & SERVICES

RITTAL

FRIEDHELM LOH GROUP

The Rittal Corporation, the U.S. subsidiary of Rittal GmbH & Co. KG in Germany, manufactures the world's leading Industrial and IT enclosures and accessories, including climate control and power distribution systems.  Rittal is backed by a half-century of pioneering comprehensive product concepts that have set or redefined industry standards – giving us the experience and know-how to help our customers meet the demands of their applications in better, more effective ways.

Rittal has offices in over 60 countries worldwide, as well as production facilities and several channel and support locations in the United States and throughout North America.  Enjoying this kind of proximity to the markets we serve allows us to thoroughly understand the needs of each one and tailor our product offerings accordingly.  Rittal delivers everything our customers require to successfully tackle their unique challenges including the expertise and service to assist them from project specification to on-time delivery.

More than just a manufacturer of superior Industrial and IT products, Rittal is a trusted ally, providing you with the attention you deserve and the information you demand to create solutions that work for today and prepare you for tomorrow.

# Rittal Corporation

At Rittal, we believe that true innovation requires purpose, and our purpose is to make your job easier. Whether our innovations are driven by new technologies and business processes or practical improvements derived directly from customer inputs, we strive to constantly better our product offerings and further separate ourselves from the competition. Thoughtful design, based on real-world applications is built into everything we do. We offer a host of resources to assist you before, during and after the sale including well-trained, professional sales & support personnel, comprehensive product literature and an informative website.

To take full advantage of everything Rittal can do for you, please visit us online at www.rittal-corp.com, contact your local Rittal representative or call our Inside Sales Department at 800-477-4000.

## Precision Modifications to Suit Your Needs

Because Rittal produces the most flexible standard lineup of modular freestanding, wallmount and junction box enclosures and accessories available in the world today, there is an excellent chance you may find what you're looking for right off the shelf—in a wide variety of construction materials and protection ratings. If you decide that a more customized product is right for you, you can choose to modify any of our standard products or start from scratch with a newly designed, comprehensive solution.

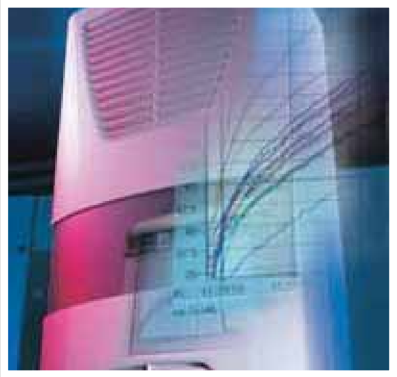
Rittal's Focus Factory is an independent production and assembly operation located in our Urbana, Ohio facility that is dedicated solely to creating customer-specific products. Assembly and integration of Rittal parts into custom solutions can be completed and shipped in as little as 4 weeks. Quote-to-order, custom-engineered products including those with cut-outs and special paint colors or finishes are evaluated on a case-by-case basis and we will be happy to provide you with an estimated production time for your specific situation.

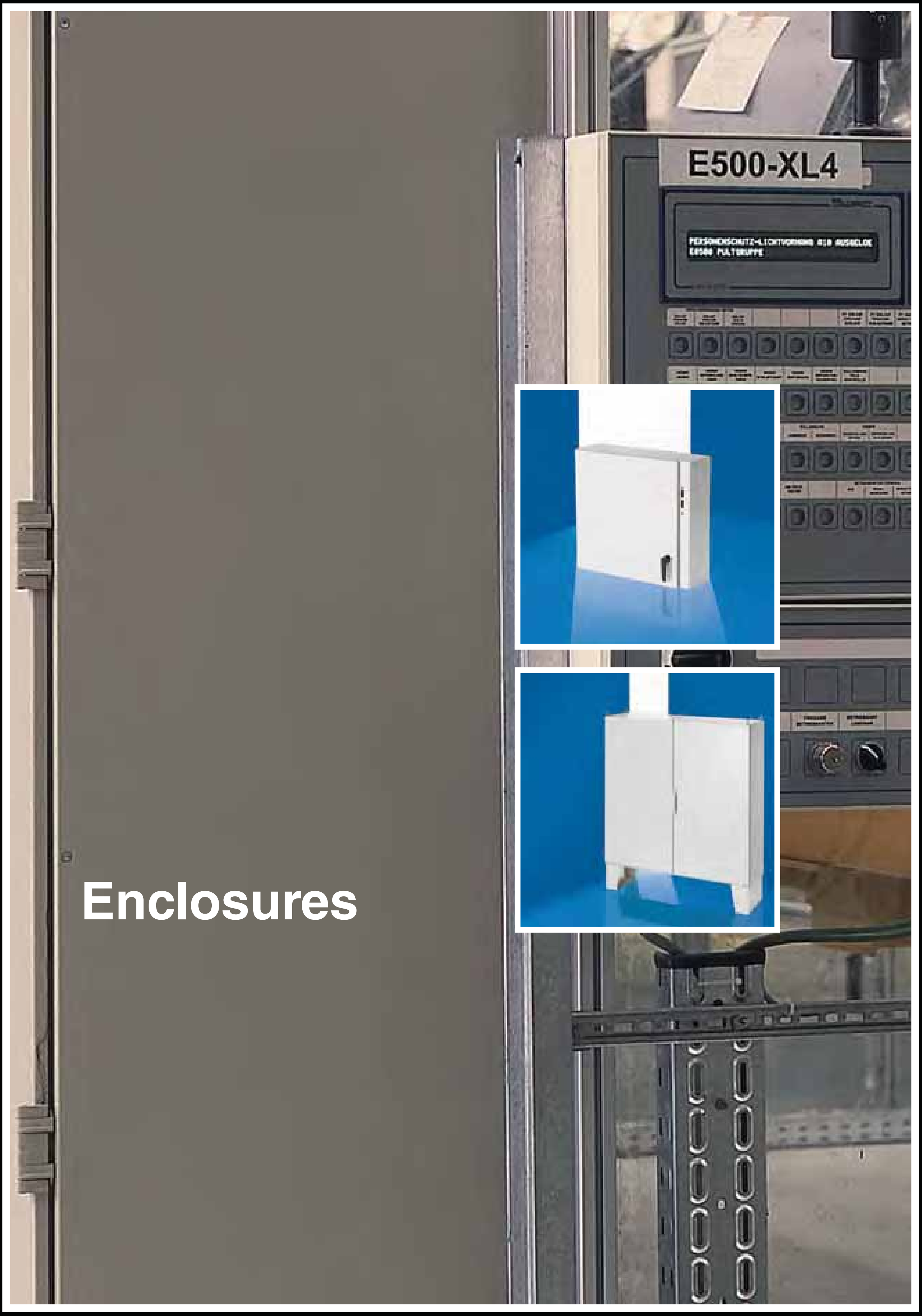
## Electronic Tools

Rittal customers not only demand the finest affordable enclosures and accessories available in the world today, but also a wide range of tools at their disposal to aid in the selection, deployment and routine maintenance of those products. As part of our ongoing commitment to ensure that our customers have everything they need to succeed, we have developed a number of easy-to-use electronic tools including an extensive 3D CAD Model database and industry-leading climate control sizing software.

These helpful tools are available on our website and allow you to get the most out of your relationship with Rittal any time of day.

Take advantage of the enhanced capabilities that add even greater value to our product and service offerings and allow you to tackle your application challenges easier and more efficiently than ever before!





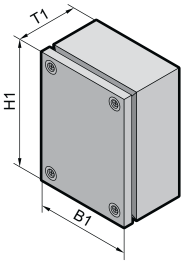
# Enclosures

# Enclosures

# Enclosure Accessories

# KL Screw Cover - Junction Box

## Depth: 3 - 5" (80 - 120 mm), Height: 6 - 8" (150 - 200 mm)



**Material:**
Sheet steel
Enclosure:
18 ga (1.25 mm);
17 ga (1.38 mm) for
1507.510 to 1513.510
Cover:
18 ga (1.25 mm)

**Finish:**
Case and cover:
Dipcoat-primed,
powder coated on the outside in
textured RAL 7035 (light gray)

**Protection Ratings:**
UL Type 4 (IP 66 to EN 60
529/10.91) w/o Gland Plate

UL Type 12 (IP 54 to EN 60
529/10.91) w/ Gland Plate

UL file: E76083

**Configuration:**
Enclosure, cover with foamed-on
polyurethane seal around the
perimeter and quick-release
cover screws, including
plastic bushes.

**For additional technical information, please visit www.rittal-corp.com**

**Without gland plate**

| **Height** (H1) inches (mm) | PU | 6 (150) | 6 (150) | 6 (150) | 8 (200) | 8 (200) | 8 (200) | 8 (200) | 6 (150) | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 6 (150) | 8 (200) | 12 (300) | 8 (200) | 12 (300) | 16 (400) | 24 (600) | 6 (150) | |
| **Depth** (T1) inches (mm) | | 3 (80) | 3 (80) | 3 (80) | 3 (80) | 3 (80) | 3 (80) | 3 (80) | 5 (120) | |
| **Part No.** | 1 | **1514.510** | **1528.510** | **1515.510** | **1516.510** | **1517.510** | **1518.510** | **1519.510** | **1500.510** | |
| Weight lb (kg) | | 3 (1) | 4 (2) | 5 (2) | 4 (2) | 6 (3) | 7 (3) | 10 (5) | 4 (2) | |
| **Accessories** | | | | | | | | | | |
| Mounting panel | 1 | 1560.700 | 1575.700 | 1561.700 | 1562.700 | 1563.700 | 1564.700 | 1566.700 | 1560.700 | 229 |
| Support rail TS 35/7.5 | 10 | 2314.000 | 2315.000 | 2316.000 | 2315.000 | 2316.000 | 2317.000 | – | 2314.000 | – |
| Support rail TS 35/15 | 10 | – | | | | | | 2319.000 | – | – |
| Cover retainer | 3 pairs | 1591.000 | | | | | | | | 215 |
| Cover hinge | 6 | 1592.000 | | | | | | | | 215 |
| Wallmount bracket | 4 | 1590.000 | | | | | | | | 253 |

**Without gland plate**

| **Height** (H1) inches (mm) | PU | 6 (150) | 6 (150) | 6 (150) | 8 (200) | 8 (200) | 8 (200) | 8 (200) | 8 (200) | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 8 (200) | 12 (300) | 16 (400) | 8 (200) | 12 (300) | 16 (400) | 20 (500) | 24 (600) | |
| **Depth** (T1) inches (mm) | | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | |
| **Part No.** | 1 | **1529.510** | **1501.510** | **1589.510** | **1502.510** | **1503.510** | **1504.510** | **1505.510** | **1506.510** | |
| Weight lb (kg) | | 4 (2) | 6 (3) | 7 (3) | 5 (2) | 7 (3) | 8 (4) | 10 (4) | 13 (6) | |
| **Accessories** | | | | | | | | | | |
| Mounting panel | 1 | 1575.700 | 1561.700 | 1576.700 | 1562.700 | 1563.700 | 1564.700 | 1565.700 | 1566.700 | 229 |
| Support rail TS 35/7.5 | 10 | 2315.000 | 2316.000 | 2317.000 | 2315.000 | 2316.000 | 2317.000 | 2318.000 | 2319.000 | – |
| Cover retainer | 3 pairs | 1591.000 | | | | | | | | 215 |
| Cover hinge | 6 | 1592.000 | | | | | | | | 215 |
| Wallmount bracket | 4 | 1590.000 | | | | | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# KL Screw Cover - Junction Box

## Depth: 5" (120 mm), Height: 6 - 16" (150 - 400 mm)

**Without gland plate**

| **Height** (H1) inches (mm) | PU | 8 (200) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 16 (400) | 16 (400) | 16 (400) | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 32 (800) | 12 (300) | 16 (400) | 20 (500) | 24 (600) | 16 (400) | 24 (600) | 32 (800) | |
| **Depth** (T1) inches (mm) | | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | |
| **Part No.** | 1 | **1527.510** | **1507.510** | **1508.510** | **1509.510** | **1510.510** | **1511.510** | **1512.510** | **1513.510** | |
| Weight lb (kg) | | 15 (7) | 9 (4) | 11 (5) | 13 (6) | 15 (7) | 14 (6) | 19 (8) | 24 (11) | |
| **Accessories** | | | | | | | | | | |
| Mounting panel | 1 | 1574.700 | 1567.700 | 1568.700 | 1569.700 | 1570.700 | 1571.700 | 1572.700 | 1573.700 | 229 |
| Support rail TS 35/7.5 | 10 | – | 2316.000 | 2317.000 | 2318.000 | 2319.000 | 2317.000 | – | | – |
| Cover retainer | 3 pairs | 1591.000 | | | | | | | | 215 |
| Cover hinge | 6 | 1592.000 | | | | | | | | 215 |
| Wallmount bracket | 4 | 1590.000 | | | | | | | | 253 |

**With gland plate**

| **Height** (H1) inches (mm) | PU | 6 (150) | 8 (200) | 8 (200) | 8 (200) | 8 (200) | 8 (200) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 12 (300) | 12 (300) | 16 (400) | 20 (500) | 24 (600) | 32 (800) | |
| **Depth** (T1) inches (mm) | | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | |
| **Part No.** | 1 | **1530.510** | **1531.510** | **1532.510** | **1533.510** | **1534.510** | **1542.510** | |
| Weight lb (kg) | | 6 (3) | 7 (3) | 9 (4) | 11 (5) | 13 (6) | 16 (7) | |
| **Accessories** | | | | | | | | |
| Mounting panel | 1 | 1561.700 | 1563.700 | 1564.700 | 1565.700 | 1566.700 | 1574.700 | 229 |
| Gland plate (top + bottom) | | 1 + 1 | | | 2 + 2 | 2 + 2 | 3 + 3 | – |
| Support rail TS 35/7.5 | 10 | 2316.000 | | 2317.000 | 2318.000 | 2319.000 | – | – |
| Cover retainer | 3 pairs | – | | | 1591.000 | | | 215 |
| Cover hinge | 6 | – | | | 1592.000 | | | 215 |
| Wallmount bracket | 4 | 1590.000 | | | | | | 253 |

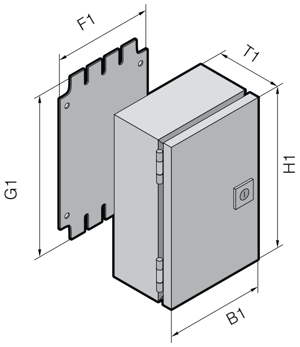
**With gland plate**

| **Height** (H1) inches (mm) | PU | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 16 (400) | 16 (400) | 16 (400) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 12 (300) | 16 (400) | 20 (500) | 24 (600) | 16 (400) | 24 (600) | 32 (800) | |
| **Depth** (T1) inches (mm) | | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | |
| **Part No.** | 1 | **1535.510** | **1536.510** | **1537.510** | **1538.510** | **1539.510** | **1540.510** | **1541.510** | |
| Weight lb (kg) | | 10 (5) | 12 (5) | 12 (5) | 17 (8) | 15 (7) | 20 (9) | 27 (12) | |
| **Accessories** | | | | | | | | | |
| Mounting panel | 1 | 1567.700 | 1568.700 | 1569.700 | 1570.700 | 1571.700 | 1572.700 | 1573.700 | 229 |
| Gland plate (top + bottom) | | 1 + 1 | | 2 + 2 | | 1 + 1 | 2 + 2 | 3 + 3 | – |
| Gland plate (left + right) | | 1 + 1 | | | | | | | – |
| Support rail TS 35/15 | 10 | 2316.000 | 2317.000 | 2318.000 | 2319.000 | 2317.000 | 2319.000 | – | – |
| Cover retainer | 3 pairs | – | | 1591.000 | | – | 1591.000 | | 215 |
| Cover hinge | 6 | – | | 1592.000 | | – | 1592.000 | | 215 |
| Wallmount bracket | 4 | 1590.000 | | | | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# JB Hinge Cover - Junction Box

## Depth: 3 - 10" (75 - 250 mm), Height: 4 - 16" (100 - 400 mm)



**Material:**
Sheet steel
Enclosure:
16 ga (1.5 mm)

**Configuration:**
Door with 180° left-hand hinges, includes screwdriver insert.

**Finish:**
Enclosure and door:
Powder coated
on the outside in textured
RAL 7035 (light gray)

**Protection Ratings:**
UL/cUL Type 3R
UL/cUL Type 4
(IP 66 to EN 60 529/10.91)

UL Type 12
(IP 54 to EN 60 529/10.91)

UL File Number: E170282

**Note: zinc-plated enclosure mounting panel sold separately (see below)**

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | PU | 4 (100) | 6 (150) | 6 (150) | 6 (150) | 8 (200) | 8 (200) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 4 (100) | 4 (100) | 4 (100) | 6 (150) | 6 (150) | 8 (200) | |
| **Depth** (T1) inches (mm) | | 3 (75) | 3 (75) | 4 (100) | 4 (100) | 4 (100) | 4 (100) | |
| Panel Height (G1) inches (mm) | | - | 5 (135) | 5 (135) | 5 (135) | 7 (185) | 7 (185) | |
| Panel Width (F1) inches (mm) | | - | 3 (75) | 3 (75) | 5 (125) | 5 (125) | 7 (175) | |
| **Part No.** | 1 | **JB040403HC** | **JB060403HC** | **JB060404HC** | **JB060604HC** | **JB080604HC** | **JB080804HC** | |
| Weight lb (kg) | | 2 (0.9) | 3 (1.4) | 3 (1.4) | 4 (1.6) | 5 (2.0) | 6 (2.5) | |
| **Accessories** | | | | | | | | |
| Mounting panel | 1 | - | JBMP0604 | | JBMP0606 | JBMP0806 | JBMP0808 | 230 |
| Wallmount bracket | 4 | 1590.000 | | | | | | 253 |

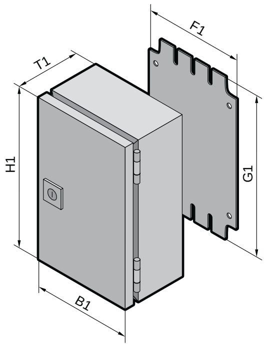
| **Height** (H1) inches (mm) | PU | 10 (250) | 12 (300) | 12 (300) | 8 (200) | 10 (250) | 10 (250) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 8 (200) | 6 (150) | 10 (250) | 6 (150) | 8 (200) | 10 (250) | |
| **Depth** (T1) inches (mm) | | 4 (100) | 4 (100) | 5 (125) | 6 (150) | 6 (150) | 6 (150) | |
| Panel Height (G1) inches (mm) | | 9 (235) | 11 (285) | 11 (285) | 7 (185) | 9 (235) | 9 (235) | |
| Panel Width (F1) inches (mm) | | 7 (175) | 5 (125) | 9 (225) | 5 (125) | 7 (175) | 9 (225) | |
| **Part No.** | 1 | **JB100804HC** | **JB120604HC** | **JB121005HC** | **JB080606HC** | **JB100806HC** | **JB101006HC** | |
| Weight lb (kg) | | 8 (3.4) | 6 (2.7) | 9 (4.1) | 6 (2.5) | 8 (3.4) | 9 (3.9) | |
| **Accessories** | | | | | | | | |
| Mounting panel | 1 | JBMP1008 | JBMP1206 | JBMP1210 | JBMP0806 | JBMP1008 | JBMP1010 | 230 |
| Wallmount bracket | 4 | 1590.000 | | | | | | 253 |

| **Height** (H1) inches (mm) | PU | 12 (300) | 12 (300) | 14 (350) | 16 (400) | 12 (300) | 16 (400) | 16 (400) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 10 (250) | 12 (300) | 12 (300) | 14 (350) | 10 (250) | 14 (350) | 14 (350) | |
| **Depth** (T1) inches (mm) | | 6 (150) | 6 (150) | 6 (150) | 6 (150) | 8 (200) | 8 (200) | 10 (250) | |
| Panel Height (G1) inches (mm) | | 11 (285) | 11 (285) | 13 (335) | 15 (385) | 11 (285) | 15 (385) | 15 (385) | |
| Panel Width (F1) inches (mm) | | 9 (225) | 11 (275) | 11 (275) | 13 (325) | 9 (225) | 13 (325) | 14 (350) | |
| **Part No.** | 1 | **JB121006HC** | **JB121206HC** | **JB141206HC** | **JB161406HC** | **JB121008HC** | **JB161408HC** | **JB161410HC** | |
| Weight lb (kg) | | 10 (4.5) | 11 (5.0) | 12 (5.5) | 15 (6.8) | 11 (5.0) | 17 (7.7) | 19 (8.6) | |
| **Accessories** | | | | | | | | | |
| Mounting panel | 1 | JBMP1210 | JBMP1212 | JBMP1412 | JBMP1614 | JBMP1210 | JBMP1614 | JBMP1614 | 230 |
| Wallmount bracket | 4 | 1590.000 | | | | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# EB Hinge Cover - Junction Box

## Depth: 3 - 5" (80 - 120 mm), Height: 6 - 16" (150 - 400 mm)



**Material:**
Sheet steel
Enclosure:
18 ga (1.25 mm)
17 ga (1.38 mm) for 1555.500, 1556.500, 1577.500 to 1579.500
16 ga (1.50 mm) for 1751.500 to 1755.500

**Finish:**
Enclosure and door:
Dipcoat-primed, powder coated on the outside in textured RAL 7035 (light gray)
Mounting panel: Zinc-plated

**Protection Ratings:**
UL/cUL Type 3R
UL/cUL Type 4
(IP 66 to EN 60 529/10.91)

UL Type 12
(IP 54 to EN 60 529/10.91)

UL file: E76083

**Configuration:**
Includes mounting panel, cam lock with double-bit insert, right-hand hinged

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | PU | 6 (150) | 8 (200) | 12 (300) | 12 (300) | 16 (400) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 6 (150) | 8 (200) | 6 (150) | 8 (200) | 8 (200) | |
| **Depth** (T1) inches (mm) | | 3 (80) | 3 (80) | 3 (80) | 3 (80) | 3 (80) | |
| Panel height (G1) inches (mm) | | 5 (135) | 7 (185) | 11 (285) | 11 (285) | 15 (385) | |
| Panel width (F1) inches (mm) | | 5 (125) | 7 (175) | 5 (125) | 7 (175) | 7 (175) | |
| **Part No.** | 1 | **1551.500** | **1546.500** | **1545.500** | **1552.500** | **1547.500** | |
| Weight lb (kg) | | 4 (1.7) | 5 (2.4) | 6 (2.6) | 7 (3.2) | 10 (4.4 ) | |
| **Accessories** | | | | | | | |
| Wallmount bracket | 4 | 1590.000 | | | | | 253 |
| Handle | 1 | 2533.000 | | | | | 219 |

| **Height** (H1) inches (mm) | PU | 6 (150) | 8 (200) | 8 (200) | 12 (300) | 12 (300) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 6 (150) | 6 (150) | 8 (200) | 6 (150) | 8 (200) | |
| **Depth** (T1) inches (mm) | | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | |
| Panel height (G1) inches (mm) | | 5 (135) | 7 (185) | 7 (185) | 11 (285) | 11 (285) | |
| Panel width (F1) inches (mm) | | 5 (125) | 5 (125) | 7 (175) | 5 (125) | 7 (175) | |
| **Part No.** | 1 | **1553.500** | **1751.500** | **1549.500** | **1548.500** | **1554.500** | |
| Weight lb (kg) | | 4 (2.0) | 5 (2.4) | 6 (2.8) | 7 (3.0) | 8 (3.6) | |
| **Accessories** | | | | | | | |
| Wallmount bracket | 4 | 1590.000 | | | | | 253 |
| Handle | 1 | 2533.000 | | | | | 219 |

Inch and pound measurements are rounded to the nearest whole number.

# EB Hinge Cover - Junction Box

## Depth: 5 - 6" (120 - 155 mm), Height: 12 - 32" (300 - 800 mm)

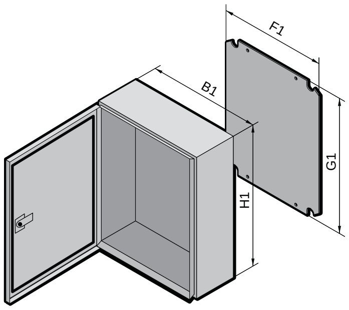
| **Height** (H1) inches (mm) | PU | 12 (300) | 16 (400) | 16 (400) | 20 (500) | 10 (250) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 12 (300) | 8 (200) | 12 (300) | 8 (200) | 8 (200) | |
| **Depth** (T1) inches (mm) | | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 6 (155) | |
| Panel height (G1) inches (mm) | | 11 (285) | 15 (385) | 15 (385) | 19 (485) | 9 (235) | |
| Panel width (F1) inches (mm) | | 11 (275) | 7 (175) | 11 (275) | 7 (175) | 7 (175) | |
| **Part No.** | 1 | **1555.500** | **1550.500** | **1556.500** | **1557.500** | **1752.500** | |
| Weight lb (kg) | | 11 (5.0) | 11 (5.0) | 14 (6.4) | 14 (6.2) | 8 (3.6) | |
| **Accessories** | | | | | | | |
| Wallmount bracket | 4 | 1590.000 | | | | | 253 |
| Handle | 1 | 2533.000 | | | | | 219 |

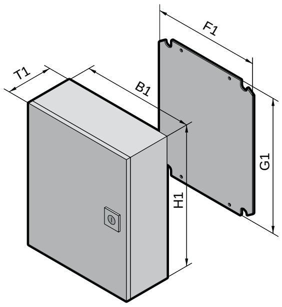
| **Height** (H1) inches (mm) | PU | 12 (300) | 14 (350) | 16 (400) | 16 (400) | 24 (600) | 32 (800) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 10 (250) | 12 (300) | 12 (300) | 14 (350) | 12 (300) | 12 (300) | |
| **Depth** (T1) inches (mm) | | 6 (155) | 6 (155) | 6 (155) | 6 (155) | 6 (155) | 6 (155) | |
| Panel height (G1) inches (mm) | | 11 (285) | 13 (335) | 15 (385) | 15 (385) | 23 (585) | 31 (785) | |
| Panel width (F1) inches (mm) | | 9 (225) | 11 (275) | 11 (275) | 13 (325) | 11 (275) | 11 (275) | |
| **Part No.** | 1 | **1753.500** | **1754.500** | **1577.500** | **1755.500** | **1578.500** | **1579.500** | |
| Weight lb (kg) | | 11 (5.0) | 13 (5.8) | 16 (7.1) | 14 (6.3) | 23 (10.4) | 29 (13.2) | |
| **Accessories** | | | | | | | | |
| Wallmount bracket | 4 | 1590.000 | | | | | | 253 |
| Handle | 1 | 2533.000 | | | | | | 219 |

Inch and pound measurements are rounded to the nearest whole number.

# WM - Wallmount

## Depth: 6 - 8" (150 - 210 mm), Height: 12 - 30" (300 - 760 mm)





**Material:**
Sheet steel
Enclosure:
16 - 14 ga (1.5 - 2.0 mm)
-12" H x 12" W – 24" H x 20" W -
16 ga body/ 16 ga door
- 24" H x 24" W – 36" H x 24" W -
16 ga body/ 14 ga door
- 36" H x 30" W – 42" H x 32" W -
14 ga body/ 14 ga door

**Finish:**
Housing and door:
Powder coated, RAL 7035 (light gray)
Mounting panel:
Zinc-plated carbon steel

**Protection Ratings:**
Single door enclosures:
UL/cUL Type 12
(IP 55 to EN 60 529/10.91)
UL/cUL Type 3R
UL/cUL Type 4
(IP 66 to EN 60 529/10.91)

Double door enclosures:
UL/cUL Type 1
UL/cUL Type 12
(IP 55 to EN 60 529/10.91)

UL File Number: E170282

**Configuration:**
Left-hand hinge, slotted head insert
One-piece enclosure body
Single door enclosures less than 20" high have one 1/4 turn latch
Single door enclosures 20 - 40" high have two 1/4 turn latches
Single door enclosures greater than or equal to 42” high and all double door enclosures have a 3-point locking L-Handle
Mounting panel
Wall-mounting holes
Foamed-in-place gasket

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | PU | 12 (300) | 16 (400) | 16 (400) | 16 (400) | 20 (500) | 20 (500) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 12 (300) | 12 (300) | 16 (400) | 20 (500) | 16 (400) | 20 (500) | |
| **Depth** (T1) inches (mm) | | 6 (150) | 6 (150) | 6 (150) | 6 (150) | 6 (150) | 6 (150) | |
| Panel Height (G1) inches (mm) | | 11 (275) | 15 (375) | 15 (375) | 15 (375) | 19 (475) | 19 (475) | |
| Panel Width (F1) inches (mm) | | 10 (254) | 10 (254) | 14 (354) | 18 (449) | 14 (354) | 18 (449) | |
| **Part No.** | 1 | **WM121206NC** | **WM161206NC** | **WM161606NC** | **WM162006NC** | **WM201606NC** | **WM202006NC** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 16 (7) | 20 (9) | 23 (10) | 28 (12) | 31 (14) | 37 (17) | |
| **Accessories** | | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | | 253 |
| Handle | 1 | 2533.000 | | | | | | 219 |
| Dead front kit | 1 | DFK1212C | DFK1612C | DFK1616C | DFK1620C | DFK2016C | DFK2020C | 230 |

| **Height** (H1) inches (mm) | PU | 24 (600) | 24 (600) | 24 (600) | 30 (760) | 16 (400) | 16 (400) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 16 (400) | 20 (500) | 24 (600) | 24 (600) | 12 (300) | 16 (400) | |
| **Depth** (T1) inches (mm) | | 6 (150) | 6 (150) | 6 (150) | 6 (150) | 8 (210) | 8 (210) | |
| Panel Height (G1) inches (mm) | | 22 (570) | 22 (570) | 22 (570) | 29 (730) | 15 (375) | 15 (375) | |
| Panel Width (F1) inches (mm) | | 14 (354) | 18 (449) | 22 (549) | 22 (549) | 10 (254) | 14 (354) | |
| **Part No.** | 1 | **WM241606NC** | **WM242006NC** | **WM242406NC** | **WM302406NC** | **WM161208NC** | **WM161608NC** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 36 (16) | 43 (19) | 53 (24) | 66 (30) | 23 (10) | 26 (12) | |
| **Accessories** | | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | | 253 |
| Handle | 1 | 2533.000 | | | | | | 219 |
| Dead front kit | 1 | DFK2416C | DFK2420C | DFK2424C | DFK3024C | DFK1612C | DFK1616C | 230 |

Inch and pound measurements are rounded to the nearest whole number.

# WM - Wallmount

## Depth: 8" (210 mm), Height: 16 - 47" (400 - 1200 mm)

| **Height** (H1) inches (mm) | PU | 16 (400) | 20 (500) | 20 (500) | 20 (500) | 24 (600) | 24 (600) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 20 (500) | 16 (400) | 20 (500) | 24 (600) | 16 (400) | 20 (500) | |
| **Depth** (T1) inches (mm) | | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | |
| Panel Height (G1) inches (mm) | | 15 (375) | 19 (475) | 19 (475) | 19 (475) | 22 (570) | 22 (570) | |
| Panel Width (F1) inches (mm) | | 18 (449) | 14 (354) | 18 (449) | 22 (549) | 14 (354) | 18 (449) | |
| **Part No.** | 1 | **WM162008NC** | **WM201608NC** | **WM202008NC** | **WM202408NC** | **WM241608NC** | **WM242008NC** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 30 (14) | 34 (15) | 40 (17) | 47 (21) | 39 (18) | 46 (21) | |
| **Accessories** | | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | | 253 |
| Handle | 1 | 2533.000 | | | | | | 219 |
| Dead front kit | 1 | DFK1620C | DFK2016C | DFK2020C | DFK2024C | DFK2416C | DFK2420C | 230 |

| **Height** (H1) inches (mm) | PU | 24 (600) | 24 (600) | 24 (600) | 30 (760) | 30 (760) | 30 (760) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 24 (600) | 30 (760) | 42 (1050) | 20 (500) | 24 (600) | 30 (760) | |
| **Depth** (T1) inches (mm) | | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | |
| Panel Height (G1) inches (mm) | | 22 (570) | 22 (570) | 22 (550) | 29 (730) | 29 (730) | 29 (730) | |
| Panel Width (F1) inches (mm) | | 22 (549) | 28 (704) | 39 (1000) | 18 (449) | 22 (549) | 28 (704) | |
| **Part No.** | 1 | **WM242408NC** | **WM243008NC** | **WM244208NC** | **WM302008NC** | **WM302408NC** | **WM303008NC** | |
| Door(s) | | 1 | 1 | 2 | 1 | 1 | 1 | |
| Weight lb (kg) | | 57 (26) | 70 (32) | 110 (50) | 60 (27) | 70 (32) | 86 (39) | |
| **Accessories** | | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | | 253 |
| Handle | 1 | 2533.000 | | WMLHKL | 2533.000 | | | 219 |
| Dead front kit | 1 | DFK2424C | DFK2430C | – | DFK3020C | DFK3024C | DFK3030C | 230 |

| **Height** (H1) inches (mm) | PU | 36 (900) | 36 (900) | 36 (900) | 42 (1050) | 42 (1050) | 47 (1200) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 24 (600) | 30 (760) | 36 (900) | 30 (760) | 36 (900) | 36 (900) | |
| **Depth** (T1) inches (mm) | | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | |
| Panel Height (G1) inches (mm) | | 34 (870) | 34 (870) | 34 (870) | 40 (1020) | 40 (1020) | 45 (1155) | |
| Panel Width (F1) inches (mm) | | 22 (549) | 28 (704) | 33 (840) | 28 (704) | 33 (840) | 33 (840) | |
| **Part No.** | 1 | **WM362408NC** | **WM363008NC** | **WM363608NC** | **WM423008NC** | **WM423608NC** | **WM483608NC** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 91 (41) | 111 (50) | 134 (61) | 137 (63) | 157 (71) | 176 (80) | |
| **Accessories** | | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | | 253 |
| Handle | 1 | 2533.000 | | | WMLHKL | | | 219 |
| Dead front kit | 1 | DFK3624C | DFK3630C | DFK3636C | DFK4230C | DFK4236C | DFK4836C | 230 |

## Depth: 10 - 12" (250 - 300 mm), Height: 20 - 60" (500 - 1500 mm)

| **Height** (H1) inches (mm) | PU | 20 (500) | 24 (600) | 24 (600) | 30 (760) | 30 (760) | 30 (760) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 20 (500) | 20 (500) | 24 (600) | 24 (600) | 30 (760) | 42 (1050) | |
| **Depth** (T1) inches (mm) | | 10 (250) | 10 (250) | 10 (250) | 10 (250) | 10 (250) | 10 (250) | |
| Panel Height (G1) inches (mm) | | 19 (475) | 22 (570) | 22 (570) | 29 (730) | 29 (730) | 28 (710) | |
| Panel Width (F1) inches (mm) | | 18 (449) | 18 (449) | 22 (549) | 22 (549) | 28 (704) | 39 (1000) | |
| **Part No.** | 1 | **WM202010NC** | **WM242010NC** | **WM242410NC** | **WM302410NC** | **WM303010NC** | **WM304210NC** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 2 | |
| Weight lb (kg) | | 45 (20) | 48 (22) | 50 (23) | 75 (34) | 89 (40) | 154 (70) | |
| **Accessories** | | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | | 253 |
| Handle | 1 | 2533.000 | | | | | WMLHKL | 219 |
| Dead front kit | 1 | DFK2020C | DFK2420C | DFK2424C | DFK3024C | DFK3030C | – | 230 |

| **Height** (H1) inches (mm) | PU | 30 (760) | 36 (900) | 36 (900) | 42 (1050) | 47 (1200) | 60 (1500) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 47 (1200) | 24 (600) | 30 (760) | 36 (900) | 36 (900) | 36 (900) | |
| **Depth** (T1) inches (mm) | | 10 (250) | 10 (250) | 10 (250) | 10 (250) | 10 (250) | 10 (250) | |
| Panel Height (G1) inches (mm) | | 28 (710) | 34 (870) | 34 (870) | 40 (1020) | 45 (1155) | 57 (1455) | |
| Panel Width (F1) inches (mm) | | 45 (1150) | 22 (549) | 28 (704) | 33 (840) | 33 (840) | 33 (840) | |
| **Part No.** | 1 | **WM304810NC** | **WM362410NC** | **WM363010NC** | **WM423610NC** | **WM483610NC** | **WM603610NC** | |
| Door(s) | | 2 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 138 (63) | 85 (38) | 116 (53) | 162 (74) | 178 (81) | 189 (86) | |
| **Accessories** | | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | | 253 |
| Handle | 1 | WMLHKL | 2533.000 | | WMLHKL | | | 219 |
| Dead front kit | 1 | - | DFK3624C | DFK3630C | DFK4236C | DFK4836C | DFK6036C | 230 |

| **Height** (H1) inches (mm) | PU | 20 (500) | 24 (600) | 24 (600) | 30 (760) | 30 (760) | 36 (900) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 20 (500) | 20 (500) | 24 (600) | 24 (600) | 30 (760) | 24 (600) | |
| **Depth** (T1) inches (mm) | | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | |
| Panel Height (G1) inches (mm) | | 19 (470) | 22 (570) | 22 (570) | 29 (730) | 29 (730) | 34 (870) | |
| Panel Width (F1) inches (mm) | | 18 (449) | 18 (449) | 22 (549) | 22 (549) | 28 (704) | 22 (549) | |
| **Part No.** | 1 | **WM202012NC** | **WM242012NC** | **WM242412NC** | **WM302412NC** | **WM303012NC** | **WM362412NC** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 48 (22) | 52 (23) | 63 (28) | 77 (35) | 93 (42) | 89 (40) | |
| **Accessories** | | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | | 253 |
| Handle | 1 | 2533.000 | | | | | | 219 |
| Dead front kit | 1 | DFK2020C | DFK2420C | DFK2424C | DFK3024C | DFK3030C | DFK3624C | 230 |

Inch and pound measurements are rounded to the nearest whole number.

# WM - Wallmount

## Depth: 12 - 20" (300 - 500 mm), Height: 36 - 60" (900 - 1500 mm)

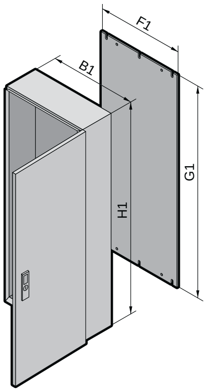
| **Height** (H1) inches (mm) | PU | 36 (900) | 36 (900) | 36 (900) | 36 (900) | 36 (900) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 30 (760) | 36 (900) | 42 (1050) | 47 (1200) | 60 (1500) | |
| **Depth** (T1) inches (mm) | | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | |
| Panel Height (G1) inches (mm) | | 34 (870) | 34 (870) | 33 (850) | 33 (850) | 33 (850) | |
| Panel Width (F1) inches (mm) | | 28 (704) | 33 (840) | 39 (1000) | 45 (1150) | 57 (1450) | |
| **Part No.** | 1 | **WM363012NC** | **WM363612NC** | **WM364212NC** | **WM364812NC** | **WM366012NC** | |
| Door(s) | | 1 | 1 | 2 | 2 | 2 | |
| Weight lb (kg) | | 120 (55) | 140 (64) | 167 (76) | 186 (85) | 226 (103) | |
| **Accessories** | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | 253 |
| Handle | 1 | 2533.000 | | WMLHKL | | | 219 |
| Dead front kit | 1 | DFK3636C | | – | – | – | 230 |

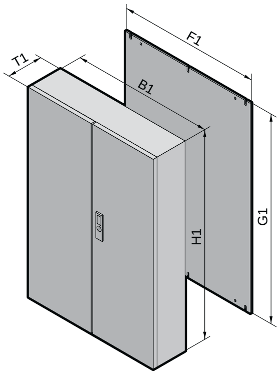
| **Height** (H1) inches (mm) | PU | 42 (1050) | 42 (1050) | 47 (1200) | 47 (1200) | 60 (1500) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 36 (900) | 60 (1500) | 36 (900) | 47 (1200) | 36 (900) | |
| **Depth** (T1) inches (mm) | | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | |
| Panel Height (G1) inches (mm) | | 40 (1020) | 39 (1000) | 45 (1155) | 45 (1150) | 57 (1455) | |
| Panel Width (F1) inches (mm) | | 33 (840) | 57 (1450) | 33 (840) | 45 (1150) | 33 (840) | |
| **Part No.** | 1 | **WM423612NC** | **WM426012NC** | **WM483612NC** | **WM484812NC** | **WM603612NC** | |
| Door(s) | | 1 | 2 | 1 | 2 | 1 | |
| Weight lb (kg) | | 169 (77) | 259 (118) | 180 (82) | 204 (93) | 200 (91) | |
| **Accessories** | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | 253 |
| Handle | 1 | WMLHKL | | | 2533.000 | WMLHKL | 219 |
| Dead front kit | 1 | DFK4236C | – | DFK4836C | – | DFK6036C | 230 |

| **Height** (H1) inches (mm) | PU | 36 (900) | 47 (1200) | 60 (1500) | 30 (760) | 47 (1200) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 30 (760) | 36 (900) | 36 (900) | 24 (600) | 36 (900) | |
| **Depth** (T1) inches (mm) | | 16 (400) | 16 (400) | 16 (400) | 20 (500) | 20 (500) | |
| Panel Height (G1) inches (mm) | | 34 (870) | 45 (1155) | 57 (1450) | 29 (730) | 45 (1155) | |
| Panel Width (F1) inches (mm) | | 28 (704) | 33 (840) | 33 (840) | 22 (549) | 33 (840) | |
| **Part No.** | 1 | **WM363016NC** | **WM483616NC** | **WM603616NC** | **WM302420NC** | **WM483620NC** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 134 (61) | 204 (93) | 210 (95) | 85 (39) | 212 (96) | |
| **Accessories** | | | | | | | |
| Wallmount bracket | 4 | 2508.200 | | | | | 253 |
| Handle | 1 | 2533.000 | WMLHKL | | | | 219 |
| Dead front kit | 1 | DFK3630C | DFK4836C | DFK6036C | DFK3024C | DFK4836C | 230 |

Inch and pound measurements are rounded to the nearest whole number.

## Depth: 5 - 8" (120 - 210 mm), Height: 12 - 30" (300 - 760 mm)





**Material:**
Sheet steel
Enclosure:
16 - 14 ga (1.5 - 2.0 mm)
-12" H x 12" W – 24" H x 20" W - 16 ga body/ 16 ga door
- 24" H x 24" W – 36" H x 24" W - 16 ga body/ 14 ga door
- 36" H x 30" W – 42" H x 32" W - 14 ga body/ 14 ga door

**Finish:**
Housing and door:
Powder coated, RAL 7035 (light gray)
Mounting panel:
Zinc-plated carbon steel

**Protection Ratings:**
Single door enclosures:
UL/cUL Type 12
(IP 55 to EN 60 529/10.91)
UL/cUL Type 3R
UL/cUL Type 4
(IP 66 to EN 60 529/10.91)
Double door enclosures:
UL/cUL Type 1
UL/cUL Type 12
(IP 55 to EN 60 529/10.91

UL File Number: E170282

**Configuration:**
Right-hand hinge
Double-bit insert
Gland plate
One-piece enclosure body
Mounting panel
Enclosures less than 20" high have one 1/4 turn latch
Enclosures 20 - 39" high have two 1/4 turn latches
Enclosures more than 39" high have 3 point latching
Wall-mounting holes
Foamed-in-place gasket

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | PU | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 15 (380) | 15 (380) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 8 (200) | 8 (200) | 15 (380) | 12 (300) | 15 (380) | 15 (380) | 24 (600) | |
| **Depth** (T1) inches (mm) | | 5 (120) | 6 (155) | 6 (155) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | |
| Panel Height (G1) inches (mm) | | 11 (275) | 11 (275) | 11 (275) | 11 (275) | 11 (275) | 14 (355) | 14 (355) | |
| Panel Width (F1) inches (mm) | | 6 (162) | 6 (162) | 13 (334) | 10 (254) | 13 (334) | 13 (334) | 22 (549) | |
| Panel Thickness ga (mm) | | 14 (2) | 14 (2) | 14 (2) | 14 (2) | 14 (2) | 14 (2) | 12 (2.5) | |
| **Part No.** | 1 | **1032.500** | **1035.500** | **1030.500** | **1033.500** | **1031.500** | **1380.500** | **1039.500** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 9 (4) | 10 (5) | 16 (7) | 15 (7) | 17 (8) | 22 (10) | 34 (15) | |
| **Accessories** | | | | | | | | | |
| Handle | 1 | 2576.000 | | | | | | | 219 |
| Wallmount bracket | 4 | 2508.200 | | | | | | | 253 |

| **Height** (H1) inches (mm) | | 16 (400) | 20 (500) | 20 (500) | 24 (600) | 24 (600) | 30 (760) | 30 (760) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 12 (300) | 16 (400) | 20 (500) | 15 (380) | 24 (600) | 24 (600) | 30 (760) | |
| **Depth** (T1) inches (mm) | | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | |
| Panel Height (G1) inches (mm) | | 15 (375) | 19 (475) | 19 (470) | 22 (570) | 22 (570) | 29 (730) | 29 (730) | |
| Panel Width (F1) inches (mm) | | 10 (254) | 14 (354) | 18 (449) | 13 (334) | 22 (549) | 22 (549) | 28 (704) | |
| Panel Thickness ga (mm) | | 14 (2) | 14 (2) | 12 (2.5) | 12 (2.5) | 12 (2.5) | 11 (3) | 11 (3) | |
| **Part No.** | 1 | **1034.500** | **1045.500** | **1050.500** | **1038.500** | **1060.500** | **1076.500** | **1077.500** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 19 (9) | 29 (13) | 37 (17) | 34 (16) | 50 (23) | 71 (32) | 88 (40) | |
| **Accessories** | | | | | | | | | |
| Handle | 1 | 2576.000 | | | | | | | 219 |
| Wallmount bracket | 4 | 2508.200 | | | | | | | 253 |

**Lock systems**

Standard double-bit lock insert of the locking rod may be exchanged for 1" (27 mm), type A, see page 219, lock cylinder, plastic handles, and T handles, type B, see page 219.

# AE - Wallmount

## Depth: 8 - 14" (210 - 350 mm), Height: 15 - 47" (380 - 1200 mm)

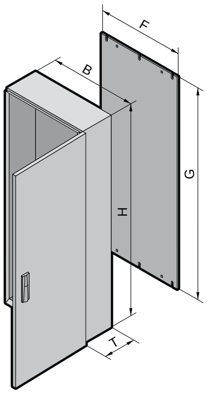
| **Height** (H1) inches (mm) | PU | 30 (760) | 32 (800) | 39 (1000) | 30 (760) | 39 (1000) | 39 (1000) | 47 (1200) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 39 (1000) | 24 (600) | 24 (600) | 39 (1000) | 32 (800) | 39 (1000) | 24 (600) | |
| **Depth** (T1) inches (mm) | | 8 (210) | 10 (250) | 10 (250) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | |
| Panel Height (G1) inches (mm) | | 29 (730) | 30 (770) | 38 (955) | 29 (730) | 38 (955) | 38 (955) | 46 (1155) | |
| Panel Width (F1) inches (mm) | | 37 (940) | 22 (549) | 21 (539) | 37 (944) | 29 (739) | 37 (939) | 21 (540) | |
| Panel Thickness ga (mm) | | 11 (3) | 11 (3) | 11 (3) | 11 (3) | 11 (3) | 11 (3) | 11 (3) | |
| **Part No.** | 1 | **1100.500** | **1058.500** | **1090.500** | **1130.500** | **1180.500** | **1110.500** | **1260.500** | |
| Door(s) | | 2 | 1 | 1 | 2 | 1 | 2 | 1 | |
| Weight lb (kg) | | 115 (52) | 75 (34) | 111 (51) | 124 (56) | 126 (57) | 157 (71) | 121 (55) | |
| **Accessories** | | | | | | | | | |
| Handle | 1 | 2576.000 | | | | | | | 219 |
| Wallmount bracket | 4 | 2508.200 | | | | | | | 253 |

| **Height** (H1) inches (mm) | PU | 47 (1200) | 47 (1200) | 15 (380) | 24 (600) | 24 (600) | 30 (760) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 32 (800) | 39 (1000) | 24 (600) | 15 (380) | 24 (600) | 24 (600) | |
| **Depth** (T1) inches (mm) | | 12 (300) | 12 (300) | 14 (350) | 14 (350) | 14 (350) | 14 (350) | |
| Panel Height (G1) inches (mm) | | 46 (1155) | 46 (1155) | 14 (355) | 22 (570) | 22 (570) | 29 (730) | |
| Panel Width (F1) inches (mm) | | 29 (740) | 37 (940) | 22 (549) | 13 (334) | 22 (549) | 22 (549) | |
| Panel Thickness ga (mm) | | 11 (3) | 11 (3) | 12 (2.5) | 12 (2.5) | 12 (2.5) | 11 (3) | |
| **Part No.** | 1 | **1280.500** | **1213.500** | **1339.500** | **1338.500** | **1360.500** | **1376.500** | |
| Door(s) | | 1 | 2 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 154 (70) | 187 (85) | 44 (20) | 43 (19) | 63 (28) | 80 (36) | |
| **Accessories** | | | | | | | | |
| Handle | 1 | 2576.000 | | | | | | 219 |
| Wallmount bracket | 4 | 2508.200 | | | | | | 253 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert of the locking rod may be exchanged for 1" (27 mm), type A, see page 219, lock cylinder, plastic handles, and T handles, type B, see page 219. | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# CM - Wallmount

## Depth: 12 - 16" (300 - 400 mm), Height: 32 - 55" (800 - 1400 mm)



**Material:**
Sheet steel
Enclosure: 16 ga (1.5 mm)
Door: 14 ga (2.0 mm)
Mounting panel: 11 ga (3.0 mm)

**Finish:**
Enclosure and door: Dipcoat-primed, powder painted on the outside in textured RAL 7035 (light gray)
Mounting panel: Zinc-plated

**Protection Ratings:**
UL Type 12 (IP 55), with selection of the appropriate gland plates, see page 259.

UL file: E76083

**Configuration:**
Enclosure with one door, right hand door hinge, may be changed to the opposite side, mounting panel, open base for individual cable entry.

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (T) inches (mm) | | PU | 39 (1000) | 39 (1000) | 47 (1200) | 47 (1200) | 47 (1200) | 55 (1400) | 32 (800) | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 32 (800) | 39 (1000) | 24 (600) | 32 (800) | 39 (1000) | 39 (1000) | 24 (600) | |
| **Depth** (T) inches (mm) | | | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 16 (400) | |
| Panel Height (G) inches (mm) | | | 38 (955) | 38 (955) | 46 (1155) | 46 (1155) | 46 (1155) | 53 (1355) | 30 (755) | |
| Panel Width (F) inches (mm) | | | 29 (740) | 37 (940) | 21 (540) | 29 (740) | 37 (940) | 37 (940) | 21 (540) | |
| **Part No.** | | 1 | **5114.500** | **5118.500** | **5112.500** | **5116.500** | **5119.500** | **5121.500** | **5110.500** | |
| Door(s) | | | 1 | 2 | 1 | 1 | 2 | 2 | 1 | |
| **Base/plinth** | | | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.800 | 8601.000 | 8601.600 | 8601.800 | 8601.000 | | 8601.600 | 194 |
| | Height 8 (200) | 1 set | 8602.800 | 8602.000 | 8602.600 | 8602.800 | 8602.000 | | 8602.600 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.030 | | | | | | 8601.040 | 194 |
| | Height 8 (200) | 1 set | 8602.030 | | | | | | 8602.040 | 194 |
| **Accessories** | | | | | | | | | | |
| Rail for interior installation | For height | 4 | 5001.052 | 5001.052 | 5001.053 | 5001.053 | 5001.053 | 5001.054 | 5001.051 | 233 |
| | For width | 4 | 5001.051 | 5001.052 | 5001.050 | 5001.051 | 5001.052 | | 5001.050 | 233 |
| Matching system chassis with mounting flange | In width | 4 | 8612.080 | 8612.000 | 8612.060 | 8612.080 | 8612.000 | | 8612.060 | 234 |
| | In depth | 4 | 8612.130 | | | | | | 8612.140 | 234 |
| Bottom cover plate | | 1 | - | | | | | | 5001.130 | 200 |

Note: CM gland plates (see page 259) or cover plate (see page 200) required for UL Type 12 rating.

Inch and pound measurements are rounded to the nearest whole number.

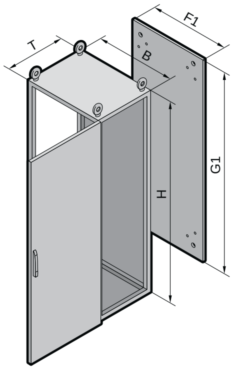
# CM - Wallmount

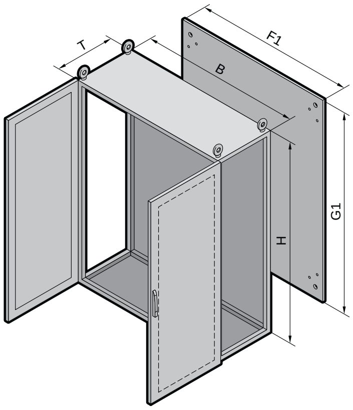
## Depth: 16" (400 mm), Height: 39 - 55" (1000 - 1400 mm)

| **Height** (T) inches (mm) | | PU | 39 (1000) | 39 (1000) | 47 (1200) | 47 (1200) | 47 (1200) | 47 (1200) | 55 (1400) | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 24 (600) | 32 (800) | 39 (1000) | 47 (1200) | 39 (1000) | |
| **Depth** (T) inches (mm) | | | 16 (400) | 16 (400) | 16 (400) | 16 (400) | 16 (400) | 16 (400) | 16 (400) | |
| Panel Height (G) inches (mm) | | | 38 (955) | 38 (955) | 46 (1155) | 46 (1155) | 46 (1155) | 46 (1155) | 53 (1355) | |
| Panel Width (F) inches (mm) | | | 21 (540) | 29 (740) | 21 (540) | 29 (740) | 37 (940) | 45 (1140) | 37 (940) | |
| **Part No.** | | 1 | **5111.500** | **5115.500** | **5113.500** | **5117.500** | **5120.500** | **5123.500** | **5122.500** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 2 | 2 | 2 | |
| **Base/Plinth** | | | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.600 | 8601.800 | 8601.000 | 8601.200 | 8601.000 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.600 | 8602.800 | 8602.000 | 8602.200 | 8602.000 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.040 | | | | | | | 194 |
| | Height 8 (200) | 1 set | 8602.040 | | | | | | | 194 |
| **Accessories** | | | | | | | | | | |
| Rail for interior installation | For height | 4 | 5001.052 | | 5001.053 | | | | 5001.054 | 233 |
| | For width | 4 | 5001.050 | 5001.051 | 5001.050 | 5001.051 | 5001.052 | 5001.053 | 5001.052 | 233 |
| Matching system chassis with mounting flange | In width | 4 | 8612.060 | 8612.080 | 8612.060 | 8612.080 | 8612.000 | 8612.020 | 8612.000 | 234 |
| | In depth | 4 | 8612.140 | | | | | | | 234 |
| Bottom cover plate | | 1 | 5001.130 | 5001.140 | 5001.130 | 5001.140 | 5001.150 | 5001.160 | 5001.150 | 200 |

Inch and pound measurements are rounded to the nearest whole number.

## Height: 55" (1400 mm), Depth: 20 - 24" (500 - 600 mm)





**Material:**
Sheet steel
Enclosure frame, roof, rear wall and gland plates: 16 ga (1.5 mm)
Door: 14 ga (2.0 mm)
Mounting panel: 11 ga (3.0 mm)

**Finish:**
Enclosure frame: Dipcoat-primed
Door, roof and rear wall: Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Mounting panel and gland plates: Zinc-plated

**Protection Ratings:**
UL/CUL Type 12
(IP 55 to EN 60 529)
UL, CSA certified

UL file: E76083

**Configuration:**
Enclosure frame with doors, mounting panel, gland plates, rear wall and roof plate

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H) inches (mm) | | PU | 55 (1400) | 55 (1400) | 55 (1400) | 55 (1400) | 55 (1400) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 47 (1200) | 24 (600) | 32 (800) | |
| **Depth** (T) inches (mm) | | | 20 (500) | 20 (500) | 20 (500) | 24 (600) | 24 (600) | |
| Panel Height (G1) inches (mm) | | | 51 (1296) | 51 (1296) | 51 (1296) | 51 (1296) | 51 (1296) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 43 (1099) | 20 (499) | 28 (699) | |
| **Part No.** | | 1 | **8645.500** | **8845.500** | **8245.500** | **8646.500** | **8846.500** | |
| Door(s) | | | 1 | 1 | 2 | 1 | 1 | |
| Weight lb (kg) | | | 190 (86) | 237 (108) | 361 (164) | 217 (98) | 270 (123) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8145.235 | | | 8146.235 | | 202 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.200 | 8601.600 | 8601.800 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.200 | 8602.600 | 8602.800 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.050 | | | 8601.060 | | 194 |
| | Height 8 (200) | 1 set | 8602.050 | | | 8602.060 | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | 4192.000 | 4196.000 | 4191.000 | 4192.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | 4945.000 | 4947.000 | 4944.000 | 4945.000 | 256 |
| Support rails for door | | 20 | 4596.000 | 4598.000 | 4596.000 | | 4598.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4118.000 | 4116.000 | | 4118.000 | 227 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

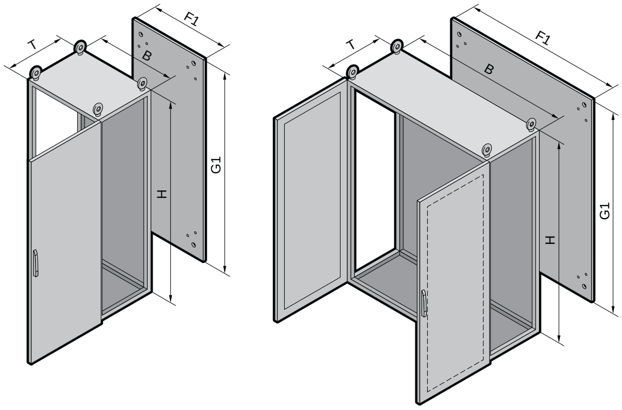
# TS8 - Freestanding

## Height: 55" (1400 mm), Depth: 24 - 32" (600 - 800 mm)

| **Height** (H) inches (mm) | | PU | 55 (1400) | 55 (1400) | 55 (1400) | 55 (1400) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 47 (1200) | 24 (600) | 32 (800) | 47 (1200) | |
| **Depth** (T) inches (mm) | | | 24 (600) | 32 (800) | 32 (800) | 32 (800) | |
| Panel Height (G1) inches (mm) | | | 51 (1296) | 51 (1296) | 51 (1296) | 51 (1296) | |
| Panel Width (F1) inches (mm) | | | 43 (1099) | 28 (699) | 28 (699) | 43 (1099) | |
| **Part No.** | | 1 | **8246.500** | **8648.500** | **8848.500** | **8248.500** | |
| Door(s) | | | 2 | 1 | 1 | 2 | |
| Weight lb (kg) | | | 187 (412) | 289 (131) | 360 (163) | 549 (249) | |
| **Walls** | | | | | | | |
| Sidewalls | | 2 | 8146.235 | 8148.235 | | | 202 |
| Divider panel | | 1 | - | | | | 204 |
| Divider panel for module plates | | 1 | - | | | | 205 |
| **Base/plinth** | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.200 | 8601.600 | 8601.800 | 8601.200 | 194 |
| | Height 8 (200) | 1 set | 8602.200 | 8602.600 | 8602.800 | 8602.200 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | 8601.080 | | | 194 |
| | Height 8 (200) | 1 set | 8602.060 | 8602.080 | | | 194 |
| **Accessories** | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4196.000 | 4191.000 | 4192.000 | 4196.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4947.000 | 4944.000 | 4945.000 | 4947.000 | 256 |
| Support rails for door | | 20 | 4596.000 | | 4598.000 | 4596.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | | 4118.000 | 4116.000 | 227 |
| **Lock systems** | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

## Height: 63" (1600 mm), Depth: 20 - 24" (600 - 800 mm)



**Material:**
Sheet steel
Enclosure frame, roof, rear wall and gland plates: 16 ga (1.5 mm)
Door: 14 ga (2.0 mm)
Mounting panel: 11 ga (3.0 mm)

**Finish:**
Enclosure frame: Dipcoat-primed
Door, roof and rear wall: Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Mounting panel and gland plates: Zinc-plated

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529)
UL, CSA certified

UL file: E76083

**Configuration:**
Enclosure frame with doors, mounting panel, gland plates, rear wall and roof plate

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H) inches (mm) | | PU | 63 (1600) | 63 (1600) | 63 (1600) | 63 (1600) | 63 (1600) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 47 (1200) | 24 (600) | 32 (800) | |
| **Depth** (T) inches (mm) | | | 20 (500) | 20 (500) | 20 (500) | 24 (600) | 24 (600) | |
| Panel Height (G1) inches (mm) | | | 59 (1496) | 59 (1496) | 59 (1496) | 59 (1496) | 59 (1496) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 43 (1099) | 20 (499) | 20 (499) | |
| **Part No.** | | 1 | **8665.500** | **8865.500** | **8265.500** | **8666.500** | **8866.500** | |
| Door(s) | | | 1 | 1 | 2 | 1 | 1 | |
| Weight lb (kg) | | | 221 (100) | 227 (103) | 351 (159) | 252 (114) | 259 (117) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8165.235 | | | 8166.235 | | 202 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.200 | 8601.600 | 8601.800 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.200 | 8602.600 | 8602.800 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.050 | | | 8601.060 | | 194 |
| | Height 8 (200) | 1 set | 8602.050 | | | 8602.060 | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | 4192.000 | 4196.000 | 4191.000 | 4192.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | 4945.000 | 4947.000 | 4944.000 | 4945.000 | 256 |
| Support rails for door | | 20 | 4596.000 | 4598.000 | 4596.000 | | 4598.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4118.000 | 4116.000 | | 4118.000 | 227 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

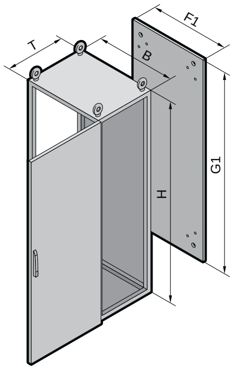
# TS8 - Freestanding

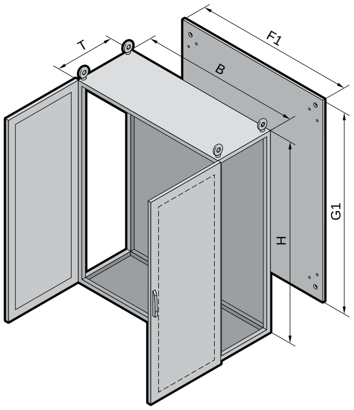
## Height: 63" (1600 mm), Depth: 24 - 32" (600 - 800 mm)

| **Height** (H) inches (mm) | | PU | 63 (1600) | 63 (1600) | 63 (1600) | 63 (1600) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 47 (1200) | 24 (600) | 32 (800) | 47 (1200) | |
| **Depth** (T) inches (mm) | | | 24 (600) | 32 (800) | 32 (800) | 32 (800) | |
| Panel Height (G1) inches (mm) | | | 59 (1496) | 59 (1496) | 59 (1496) | 59 (1496) | |
| Panel Width (F1) inches (mm) | | | 43 (1099) | 20 (499) | 28 (699) | 43 (1099) | |
| **Part No.** | | 1 | **8266.500** | **8668.500** | **8868.500** | **8268.500** | |
| Door(s) | | | 2 | 1 | 1 | 2 | |
| Weight lb (kg) | | | 400 (182) | 336 (153) | 345 (157) | 534 (242) | |
| **Walls** | | | | | | | |
| Sidewalls | | 2 | 8166.235 | 8168.235 | | | 202 |
| **Base/plinth** | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.200 | 8601.600 | 8601.800 | 8601.200 | 194 |
| | Height 8 (200) | 1 set | 8602.200 | 8602.600 | 8602.800 | 8602.200 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | 8601.080 | | | 194 |
| | Height 8 (200) | 1 set | 8602.060 | 8602.080 | | | 194 |
| **Accessories** | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4196.000 | 4191.000 | 4192.000 | 4196.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4947.000 | 4944.000 | 4945.000 | 4947.000 | 256 |
| Support rails for door | | 20 | 4596.000 | | 4598.000 | 4596.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | | 4118.000 | 4116.000 | 227 |
| **Lock Systems** | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

## Height: 71" (1800 mm), Depth: 16" (400 mm)





**Material:**
Sheet steel
Enclosure frame, roof, rear wall and gland plates: 16 ga (1.5 mm)
Door: 14 ga (2.0 mm)
Mounting panel: 11 ga (3.0 mm)

**Finish:**
Enclosure frame: Dipcoat-primed
Door, roof and rear wall: Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Mounting panel and gland plates: Zinc-plated

**Protection Ratings:**
UL Type 12
(IP 55 to EN 60 529)
UL, CSA certified

UL file: E76083

**Configuration:**
Enclosure frame with doors, mounting panel, gland plates, rear wall and roof plate

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H) inches (mm) | | PU | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 39 (1000) | 39 (1000) | 47 (1200) | |
| **Depth** (T) inches (mm) | | | 16 (400) | 16 (400) | 16 (400) | 16 (400) | 16 (400) | |
| Panel Height (G1) inches (mm) | | | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 35 (899) | 35 (899) | 43 (1099) | |
| **Part No.** | | 1 | **8684.500** | **8884.500** | **8084.500** | **8080.500** | **8284.500** | |
| Door(s) | | | 1 | 1 | 1 | 2 | 2 | |
| Weight lb (kg) | | | 201 (91) | 250 (114) | 301 (136) | 309 (140) | 376 (171) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8184.235 | | | | | 202 |
| Divider panel | | 1 | 8609.840 | | | | | 204 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.000 | | 8601.200 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.000 | | 8602.200 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.040 | | | | | 194 |
| | Height 8 (200) | 1 set | 8602.040 | | | | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | 4192.000 | 4336.000 | | 4196.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | 4945.000 | 4946.000 | | 4947.000 | 256 |
| Support rails for door | | 20 | 4596.000 | 4598.000 | 4599.000 | 4309.000 | 4596.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4118.000 | 4124.000 | 4115.000 | 4116.000 | 227 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 - Freestanding

## Height: 71" (1800 mm), Depth: 16 - 20" (400 - 500 mm)

| **Height** (H) inches (mm) | | PU | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 63 (1600) | 71 (1800) | 16 (400) | 24 (600) | 32 (800) | |
| **Depth** (T) inches (mm) | | | 16 (400) | 16 (400) | 20 (500) | 20 (500) | 20 (500) | |
| Panel Height (G1) inches (mm) | | | 67 (1696) | 67 (1696) | - | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | | 59 (1499) | 67 (1699) | - | 20 (499) | 28 (699) | |
| **Part No.** | | 1 | **8901.210** | **8901.250** | **8485.510*** | **8685.500** | **8885.500** | |
| Door(s) | | | 2 | 2 | 1 | 1 | 1 | |
| Weight kg (lb) | | | 478 (217) | 538 (244) | 109 (49) | 207 (94) | 255 (116) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8184.235 | | 8185.235 | | | 202 |
| Divider panel | | 1 | 8609.840 | | 8609.850 | | | 204 |
| Divider panel for module plates | | 1 | – | | 8609.100 | | | 205 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.920 | 8901.920 | 8601.400 | 8601.600 | 8601.800 | 194 |
| | Height 8 (200) | 1 set | 8602.920 | 8901.930 | 8602.400 | 8602.600 | 8602.800 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.040 | | 8601.050 | | | 194 |
| | Height 8 (200) | 1 set | 8602.040 | | 8602.050 | | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4338.000 | 4339.000 | 4193.000 | 4191.000 | 4192.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | – | | | 4944.000 | 4945.000 | 256 |
| Support rails for door | | 20 | 4598.000 | 4579.000 | – | 4596.000 | 4598.000 | 236 |
| Print pocket, sheet steel | | 1 | 4118.000 | 4123.000 | – | 4116.000 | 4118.000 | 227 |
| **Lock Systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

* Without tubular door frame, mounting panel and gland plates.

| **Height** (H) inches (mm) | | PU | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 32 (800) | 39 (1000) | 47 (1200) | 63 (1600) | 71 (1800) | |
| **Depth** (T) inches (mm) | | | 20 (500) | 20 (500) | 20 (500) | 20 (500) | 20 (500) | |
| Panel Height (G1) inches (mm) | | | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | | 28 (699) | 35 (899) | 43 (1099) | 59 (1499) | 67 (1699) | |
| **Part No.** | | 1 | **8880.500** | **8085.500** | **8285.500** | **8901.220** | **8901.260** | |
| Door(s) | | | 2 | 1 | 2 | 2 | 2 | |
| Weight kg (lb) | | | 270 (123) | 328 (149) | 382 (173) | 485 (220) | 546 (248) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8185.235 | | | | | 202 |
| Divider panel | | 1 | 8609.850 | | | | | 204 |
| Divider panel for module plates | | 1 | 8609.100 | | | | | 205 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.800 | 8601.000 | 8601.200 | 8601.920 | 8901.920 | 194 |
| | Height 8 (200) | 1 set | 8602.800 | 8602.000 | 8602.200 | 8602.920 | 8901.930 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.050 | | | | | 194 |
| | Height 8 (200) | 1 set | 8602.050 | | | | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4192.000 | 4336.000 | 4196.000 | 4338.000 | 4339.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4945.000 | 4946.000 | 4947.000 | – | | 256 |
| Support rails for door | | 20 | 4594.000 | 4599.000 | 4596.000 | 4598.000 | 4579.000 | 236 |
| Print pocket, sheet steel | | 1 | 4114.000 | 4124.000 | 4116.000 | 4118.000 | 4123.000 | 227 |
| **Lock Systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 - Freestanding

## Height: 71" (1800 mm), Depth: 24 - 32" (600 - 800 mm)

| **Height** (H) inches (mm) | | PU | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 16 (400) | 24 (600) | 32 (800) | 32 (800) | 47 (1200) | |
| **Depth** (T) inches (mm) | | | 24 (600) | 24 (600) | 24 (600) | 24 (600) | 24 (600) | |
| Panel Height (G1) inches (mm) | | | – | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | | – | 20 (499) | 28 (699) | 28 (699) | 43 (1099) | |
| **Part No.** | | 1 | **8486.510*** | **8686.500** | **8886.500** | **8881.500** | **8286.500** | |
| Door(s) | | | 1 | 1 | 1 | 2 | 2 | |
| Weight lb (kg) | | | 114 (52) | 213 (97) | 265 (120) | 277 (126) | 397 (180) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8186.235 | | | | | 202 |
| Divider panel | | 1 | 8609.860 | | | | | 204 |
| Divider panel for module plates | | 1 | 8609.110 | | | | | 205 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.400 | 8601.600 | 8601.800 | | 8601.200 | 194 |
| | Height 8 (200) | 1 set | 8602.400 | 8602.600 | 8602.800 | | 8602.200 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | | | | | 194 |
| | Height 8 (200) | 1 set | 8602.060 | | | | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4193.000 | 4191.000 | 4192.000 | | 4196.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | – | 4944.000 | 4945.000 | | 4947.000 | 256 |
| Support rails for door | | 20 | – | 4596.000 | 4598.000 | 4594.000 | 4596.000 | 236 |
| Print pocket, sheet steel | | 1 | – | 4116.000 | 4118.000 | 4114.000 | 4116.000 | 227 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

* Without tubular door frame, mounting panel and gland plates.

| **Height** (H) inches (mm) | | PU | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 39 (1000) | 63 (1600) | 71 (1800) | 24 (600) | 32 (800) | |
| **Depth** (T) inches (mm) | | | 24 (600) | 24 (600) | 24 (600) | 32 (800) | 32 (800) | |
| Panel Height (G1) inches (mm) | | | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | | 35 (899) | 59 (1499) | 67 (1699) | 20 (499) | 28 (699) | |
| **Part No.** | | 1 | **8086.500** | **8901.230** | **8901.270** | **8688.500** | **8888.500** | |
| Door(s) | | | 1 | 2 | 2 | 1 | 1 | |
| Weight lb (kg) | | | 314 (142 ) | 502 (228) | 565 (256) | 251 (114) | 420 (190) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8186.235 | | | 8188.235 | | 202 |
| Divider panel | | 1 | 8609.860 | | | – | | 204 |
| Divider panel for module plates | | 1 | 8609.110 | | | – | | 205 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.000 | 8601.920 | 8901.920 | 8601.600 | 8601.800 | 194 |
| | Height 8 (200) | 1 set | 8602.000 | 8602.920 | 8901.930 | 8602.600 | 8602.800 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | | | 8601.080 | | 194 |
| | Height 8 (200) | 1 set | 8602.060 | | | 8602.080 | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4336.000 | 4338.000 | 4339.000 | 4191.000 | 4192.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4946.000 | – | | 4944.000 | 4945.000 | 256 |
| Support rails for door | | 20 | 4599.000 | 4598.000 | 4579.000 | 4596.000 | 4598.000 | 236 |
| Print pocket, sheet steel | | 1 | 4124.000 | 4118.000 | 4123.000 | 4116.000 | 4118.000 | 227 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

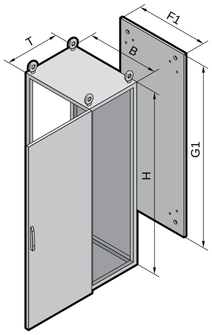
# TS8 - Freestanding

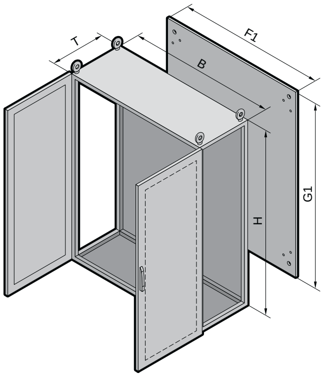
## Height: 71" (1800 mm), Depth: 32" (800 mm)

| | | PU | | | | | Page |
|---|---|---|---|---|---|---|---|
| **Height** (H) inches (mm) | | PU | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | Page |
| **Width** (B) inches (mm) | | | 39 (1000) | 47 (1200) | 63 (1600) | 71 (1800) | |
| **Depth** (T) inches (mm) | | | 32 (800) | 32 (800) | 32 (800) | 32 (800) | |
| Panel Height (G1) inches (mm) | | | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | | 35 (899) | 43 (1099) | 59 (1499) | 67 (1699) | |
| **Part No.** | | 1 | **8088.500** | **8288.500** | **8901.240** | **8901.280** | |
| Door(s) | | | 1 | 2 | 2 | 2 | |
| Weight lb (kg) | | | 525 (238) | 629 (286) | 839 (381) | 944 (428) | |
| **Walls** | | | | | | | |
| Sidewalls | | 2 | 8188.235 | | | | 202 |
| **Base/plinth** | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.000 | 8601.200 | 8601.920 | 8901.920 | 194 |
| | Height 8 (200) | 1 set | 8602.000 | 8602.200 | 8602.920 | 8901.930 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.080 | | | | 194 |
| | Height 8 (200) | 1 set | 8602.080 | | | | 194 |
| **Accessories** | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4336.000 | 4196.000 | 4338.000 | 4339.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4946.000 | 4947.000 | – | | 256 |
| Support rails for door | | 20 | 4599.000 | 4596.000 | 4598.000 | 4579.000 | 236 |
| Print pocket, sheet steel | | 1 | 4124.000 | 4116.000 | 4118.000 | 4123.000 | 227 |
| **Lock systems** | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

## Height: 79" (2000 mm), Depth: 16 - 20" (400 - 500 mm)





**Material:**
Sheet steel
Enclosure frame, roof, rear wall and gland plates: 16 ga (1.5 mm)
Door: 14 ga (2.0 mm)
Mounting panel: 11 ga (3.0 mm)

**Finish:**
Enclosure frame: Dipcoat-primed
Door, roof and rear wall: Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Mounting panel and gland plates: Zinc-plated

**Protection Ratings:**
UL Type 12
(IP 55 to EN 60 529)
UL, CSA certified

UL file: E76083

**Configuration:**
Enclosure frame with doors, mounting panel, gland plates, rear wall and roof plate

**For additional technical information, please visit www.rittal-corp.com**

| | | PU | | | | | | Page |
|---|---|---|---|---|---|---|---|---|
| **Height** (H) inches (mm) | | PU | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | Page |
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 47 (1200) | 16 (400) | 16 (400) | |
| **Depth** (T) inches (mm) | | | 16 (400) | 16 (400) | 16 (400) | 20 (500) | 20 (500) | |
| Panel Height (G1) inches (mm) | | | 75 (1896) | 75 (1896) | 75 (1896) | – | 75 (1896) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 43 (1099) | – | 12 (299) | |
| **Part No.** | | 1 | **8604.500** | **8804.500** | **8204.500** | **8405.510*** | **8405.500** | |
| Door(s) | | | 1 | 1 | 2 | 1 | 1 | |
| Weight lb (kg) | | | 218 (99) | 273 (124) | 407 (185) | 134 (61) | 116 (53) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8104.235 | | | 8105.235 | | 202 |
| Divider panel | | 1 | 8609.040 | | | 8609.050 | | 204 |
| Divider panel for module plates | | 1 | – | | | 8609.120 | | 205 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.200 | 8601.400 | | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.200 | 8602.400 | | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.040 | | | 8601.050 | | 194 |
| | Height 8 (200) | 1 set | 8602.040 | | | 8602.050 | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | 4192.000 | 4196.000 | 4193.000 | | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | 4945.000 | 4947.000 | – | | 256 |
| Support rails for door | | 20 | 4596.000 | 4598.000 | 4596.000 | – | 4594.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4118.000 | 4116.000 | – | 4114.000 | 227 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

* Without tubular door frame, mounting panel and gland plates.

Inch and pound measurements are rounded to the nearest whole number.

# TS8 - Freestanding

## Height: 79" (2000 mm), Depth: 20 - 24" (500 - 600 mm)

| **Height** (H) inches (mm) | | PU | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 39 (1000) | 47 (1200) | 63 (1600) | |
| **Depth** (T) inches (mm) | | | 20 (500) | 20 (500) | 20 (500) | 20 (500) | 20 (500) | |
| Panel Height (G1) inches (mm) | | | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 35 (899) | 43 (1099) | 59 (1499) | |
| **Part No.** | | 1 | **8605.500** | **8805.500** | **8005.500** | **8205.500** | **8901.290** | |
| Door(s) | | | 1 | 1 | 2 | 2 | 2 | |
| Weight lb (kg) | | | 223 (101) | 278 (126) | 346 (157) | 420 (191) | 583 (264) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8105.235 | | | | | 202 |
| Divider panel | | 1 | 8609.050 | | | | | 204 |
| Divider panel for module plates | | 1 | 8609.120 | | | | | 205 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.000 | 8601.200 | 8601.920 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.000 | 8602.200 | 8602.920 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.050 | | | | | 194 |
| | Height 8 (200) | 1 set | 8602.050 | | | | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | 4192.000 | 4336.000 | 4196.000 | 4338.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | 4945.000 | 4946.000 | 4947.000 | – | 256 |
| Support rails for door | | 20 | 4596.000 | 4598.000 | 4309.000 | 4596.000 | 4598.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4118.000 | 4115.000 | 4116.000 | 4118.000 | 227 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

| **Height** (H) inches (mm) | | PU | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 71 (1800) | 16 (400) | 24 (600) | 32 (800) | 39 (1000) | |
| **Depth** (T) inches (mm) | | | 20 (500) | 24 (600) | 24 (600) | 24 (600) | 24 (600) | |
| Panel Height (G1) inches (mm) | | | 75 (1896) | – | 75 (1896) | 75 (1896) | 75 (1896) | |
| Panel Width (F1) inches (mm) | | | 67 (1699) | – | 20 (499) | 28 (699) | 35 (899) | |
| **Part No.** | | 1 | **8901.420** | **8406.510*** | **8606.500** | **8806.500** | **8006.500** | |
| Door(s) | | | 2 | 1 | 1 | 1 | 2 | |
| Weight lb (kg) | | | 656 (298) | 123 (56) | 229 (104) | 288 (131) | 355 (161) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8105.235 | 8106.235 | | | | 202 |
| Divider panel | | 1 | 8609.050 | 8609.060 | | | | 204 |
| Divider panel for module plates | | 1 | 8609.120 | 8609.130 | | | | 205 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8901.920 | 8601.400 | 8601.600 | 8601.800 | 8601.000 | 194 |
| | Height 8 (200) | 1 set | 8901.930 | 8602.400 | 8602.600 | 8602.800 | 8602.000 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.050 | 8601.060 | | | | 194 |
| | Height 8 (200) | 1 set | 8602.050 | 8602.060 | | | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4339.000 | 4193.000 | 4191.000 | 4192.000 | 4336.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | – | | 4944.000 | 4945.000 | 4946.000 | 256 |
| Support rails for door | | 20 | 4579.000 | – | 4596.000 | 4598.000 | 4309.000 | 236 |
| Print pocket, sheet steel | | 1 | 4123.000 | – | 4116.000 | 4118.000 | 4115.000 | 227 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

* Without tubular door frame, mounting panel and gland plates.

Inch and pound measurements are rounded to the nearest whole number.

## Height: 79" (2000 mm), Depth: 24 - 32" (600 - 800 mm)

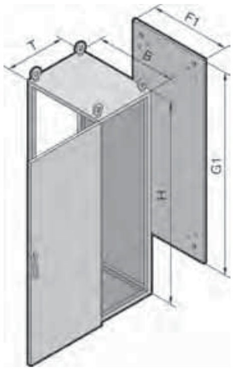
| **Height** (H) inches (mm) | | PU | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 39 (1000) | 47 (1200) | 63 (1600) | 71 (1800) | 24 (600) | |
| **Depth** (T) inches (mm) | | | 24 (600) | 24 (600) | 24 (600) | 24 (600) | 32 (800) | |
| Panel Height (G1) inches (mm) | | | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | |
| Panel Width (F1) inches (mm) | | | 35 (899) | 43 (1099) | 59 (1499) | 67 (1699) | 20 (499) | |
| **Part No.** | | 1 | **8006.530** | **8206.500** | **8901.400** | **8901.430** | **8608.500** | |
| Door(s) | | | 1 | 2 | 2 | 2 | 1 | |
| Weight lb (kg) | | | 437 (198) | 429 (195) | 699 (317) | 787 (357) | 245 (111) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8106.235 | | | | 8108.235 | 202 |
| Divider panel | | 1 | 8609.060 | | | | 8609.080 | 204 |
| Divider panel for module plates | | 1 | 8609.130 | | | | 3348.200 | 205 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.000 | 8601.200 | 8601.920 | 8901.920 | 8601.600 | 194 |
| | Height 8 (200) | 1 set | 8602.000 | 8602.200 | 8602.920 | 8901.930 | 8602.600 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | | | | 8601.080 | 194 |
| | Height 8 (200) | 1 set | 8602.060 | | | | 8602.080 | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4336.000 | 4196.000 | 4338.000 | 4339.000 | 4191.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4946.000 | 4947.000 | – | | 4944.000 | 256 |
| Support rails for door | | 20 | 4599.000 | 4596.000 | 4598.000 | 4579.000 | 4596.000 | 236 |
| Print pocket, sheet steel | | 1 | 4124.000 | 4116.000 | 4118.000 | 4123.000 | 4116.000 | 227 |
| **Lock Systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

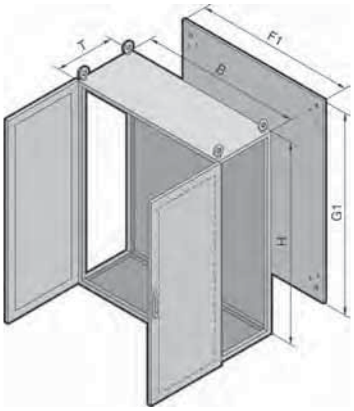
| **Height** (H) inches (mm) | | PU | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 32 (800) | 39 (1000) | 47 (1200) | 63 (1600) | 71 (1800) | |
| **Depth** (T) inches (mm) | | | 32 (800) | 32 (800) | 32 (800) | 32 (800) | 32 (800) | |
| Panel Height (G1) inches (mm) | | | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | |
| Panel Width (F1) inches (mm) | | | 28 (699) | 35 (899) | 43 (1099) | 59 (1499) | 67 (1699) | |
| **Part No.** | | 1 | **8808.500** | **8008.530** | **8208.500** | **8901.410** | **8901.440** | |
| Door(s) | | | 1 | 1 | 2 | 2 | 2 | |
| Weight lb (kg) | | | 302 (137) | 583 (264) | 448 (203) | 932 (423) | 1049 (476) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8108.235 | | | | | 202 |
| Divider panel | | 1 | 8609.080 | | | | | 204 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.800 | 8601.000 | 8601.200 | 8601.920 | 8901.920 | 194 |
| | Height 8 (200) | 1 set | 8602.800 | 8602.000 | 8602.200 | 8602.920 | 8901.930 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.080 | | | | | 194 |
| | Height 8 (200) | 1 set | 8602.080 | | | | | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4192.000 | 4336.000 | 4196.000 | 4338.000 | 4339.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4945.000 | 4946.000 | 4947.000 | – | | 256 |
| Support rails for door | | 20 | 4598.000 | 4599.000 | 4596.000 | 4598.000 | 4579.000 | 236 |
| Print pocket, sheet steel | | 1 | 4118.000 | 4124.000 | 4116.000 | 4118.000 | 4123.000 | 227 |
| **Lock Systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 - Freestanding

## Height: 87" (2200 mm), Depth: 20 - 24" (500 - 600 mm)





**Material:**
Sheet steel
Enclosure frame, roof, rear wall and gland plates: 16 ga (1.5 mm)
Door: 14 ga (2.0 mm)
Mounting panel: 11 ga (3.0 mm)

**Finish:**
Enclosure frame: Dipcoat-primed
Door, roof and rear wall: Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Mounting panel and gland plates: Zinc-plated

**Protection Ratings:**
UL Type 12
(IP 55 to EN 60 529)
UL, CSA certified

UL file: E76083

**Configuration:**
Enclosure frame with doors, mounting panel, gland plates, rear wall and roof plate

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H) inches (mm) | | PU | 87 (2200) | 87 (2200) | 87 (2200) | 87 (2200) | 87 (2200) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 39 (1000) | 47 (1200) | 16 (400) | |
| **Depth** (T) inches (mm) | | | 20 (500) | 20 (500) | 20 (500) | 20 (500) | 24 (600) | |
| Panel Height (G1) inches (mm) | | | 83 (2096) | 83 (2096) | 83 (2096) | 83 (2096) | 83 (2096) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 35 (899) | 43 (1099) | 12 (299) | |
| **Part No.** | | 1 | **8625.500** | **8825.500** | **8025.500** | **8225.500** | **8426.500** | |
| Door(s) | | | 1 | 1 | 1 | 2 | 1 | |
| Weight lb (kg) | | | 192 (87) | 321 (145) | 401 (182) | 481 (218) | 153 (70) | |
| **Walls** | | | | | | | | |
| Sidewalls | | 2 | 8125.235 | | | | 8126.235 | 202 |
| Divider panel | | 1 | – | | | | 8609.260 | 204 |
| **Base/plinth** | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.000 | 8601.200 | 8601.400 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.000 | 8602.200 | 8602.400 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.050 | | | | 8601.060 | 194 |
| | Height 8 (200) | 1 set | 8602.050 | | | | 8602.060 | 194 |
| **Accessories** | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | 4192.000 | 4336.000 | 4196.000 | 4193.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | 4945.000 | 4946.000 | 4947.000 | – | 256 |
| Support rails for door | | 20 | 4596.000 | 4598.000 | 4599.000 | 4596.000 | 4594.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4118.000 | 4124.000 | 4116.000 | 4114.000 | 227 |
| **Lock Systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

## Height: 87" (2200 mm), Depth: 24 - 32" (600 - 800 mm)

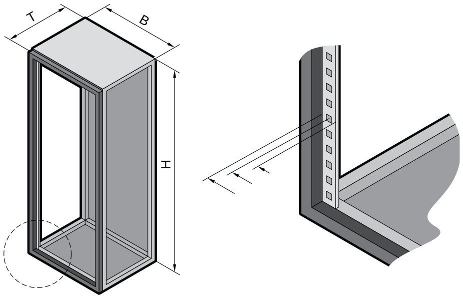
| **Height** (H) inches (mm) | | PU | 87 (2200) | 87 (2200) | 87 (2200) | 87 (2200) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 39 (1000) | 47 (1200) | |
| **Depth** (T) inches (mm) | | | 24 (600) | 24 (600) | 24 (600) | 24 (600) | |
| Panel Height (G1) inches (mm) | | | 83 (2096) | 83 (2096) | 83 (2096) | 83 (2096) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 35 (899) | 43 (1099) | |
| **Part No.** | | 1 | **8626.500** | **8826.500** | **8026.500** | **8226.500** | |
| Door(s) | | | 1 | 1 | 1 | 2 | |
| Weight lb (kg) | | | 249 (113) | 250 (139) | 345 (157) | 459 (208) | |
| **Walls** | | | | | | | |
| Sidewalls | | 2 | 8126.235 | | | | 202 |
| Divider panel | | 1 | 8609.260 | | | | 204 |
| **Base/plinth** | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.000 | 8601.200 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.000 | 8602.200 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | | | | 194 |
| | Height 8 (200) | 1 set | 8602.060 | | | | 194 |
| **Accessories** | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | 4192.000 | 4336.000 | 4196.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | 4945.000 | 4946.000 | 4947.000 | 256 |
| Support rails for door | | 20 | 4596.000 | 4598.000 | 4599.000 | 4596.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4118.000 | 4124.000 | 4116.000 | 227 |
| **Lock Systems** | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | |

| **Height** (H) inches (mm) | | PU | 87 (2200) | 87 (2200) | 87 (2200) | 87 (2200) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 39 (1000) | 47 (1200) | |
| **Depth** (T) inches (mm) | | | 32 (800) | 32 (800) | 32 (800) | 32 (800) | |
| Panel Height (G1) inches (mm) | | | 83 (2096) | 83 (2096) | 83 (2096) | 83 (2096) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 35 (899) | 43 (1099) | |
| **Part No.** | | 1 | **8628.500** | **8828.500** | **8028.500** | **8228.500** | |
| Door(s) | | | 1 | 1 | 1 | 2 | |
| Weight lb (kg) | | | 260 (118) | 320 (145) | 358 (163) | 470 (214) | |
| **Walls** | | | | | | | |
| Sidewalls | | 2 | 8128.235 | | | | 202 |
| **Base/plinth** | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.000 | 8601.200 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.000 | 8602.200 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.080 | 8601.080 | 8601.080 | 8601.080 | 194 |
| | Height 8 (200) | 1 set | 8602.080 | 8602.080 | 8602.080 | 8602.080 | 194 |
| **Accessories** | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | 4192.000 | 4336.000 | 4196.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | 4945.000 | 4946.000 | 4947.000 | 256 |
| Support rails for door | | 20 | 4596.000 | 4598.000 | 4599.000 | 4596.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4118.000 | 4124.000 | 4116.000 | 227 |
| **Lock Systems** | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 Electronic - Freestanding

## Height: 63 - 79" (1600 - 2000 mm), Depth: 24 - 32" (600 - 800 mm)



**Material:**
Sheet steel
Enclosure frame, roof and gland plates: 16 ga (1.5 mm)
Rear door: 14 ga (2.0 mm)
19" rail sections: Aluminum
Front frame: Extruded aluminum sections with die-cast corner pieces

**Finish:**
Enclosure frame: Dipcoat-primed front frame, rear door and roof: Powder coated in RAL 7035 (light gray)
19" rail sections: Conductive, corrosion-resistant coating
Gland plates: Zinc-plated

**Protection Ratings:**
UL Type 1
UL, CSA

UL file: E76083

**Configuration:**
Enclosure frame with doors (solid or vented), mounting panel, gland plates, rear wall and roof plate.

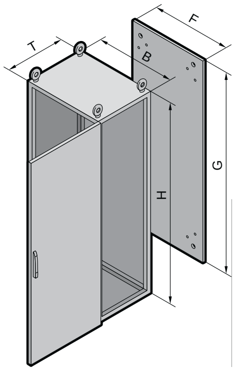
**For additional technical information, please visit www.rittal-corp.com**

| **Height rack units (U)** | | PU | 33 | 33 | 42 | 42 | Page |
|---|---|---|---|---|---|---|---|
| **Height** (H) inches (mm) | | | 63 (1600) | 63 (1600) | 79 (2000) | 79 (2000) | |
| **Width** (B) inches (mm) | | | 24 (600) | 24 (600) | 24 (600) | 24 (600) | |
| **Depth** (T) inches (mm) | | | 24 (600) | 32 (800) | 24 (600) | 32 (800) | |
| **Part No.** | | 1 | **8410.510** | **8418.510** | **8430.510** | **8438.510** | |
| Door(s) | | | 1 | 1 | 1 | 1 | |
| **Base/plinth** | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | | | | 194 |
| | Height 8 (200) | 1 set | 8602.600 | | | | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | 8601.080 | 8601.060 | 8601.080 | 194 |
| | Height 8 (200) | 1 set | 8602.060 | 8602.080 | 8602.060 | 8602.080 | 194 |
| **Accessories** | | | | | | | |
| Sidewalls | | 2 | 8166.235 | 8168.235 | 8106.235 | 8108.235 | 202 |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | | | | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | | | | 256 |
| Rear mounting angles | | 2 | 8613.360 | | 8613.300 | | – |
| **Lock systems** | | | | | | | |
| Standard double-bit lock insert (in rear door) may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 NEMA 4/IP 66 - Freestanding

## Height: 79" (2000 mm), Depth: 24" (600 mm)



**Material:**
Sheet steel
Enclosure frame, roof, base, rear wall: 1.5 mm (16 ga)
Door: 2.0 mm (14 ga)
Mounting panel:
3.0 mm (11 ga)

**Finish:**
Enclosure frame, door, roof, base, rear wall: Dipcoat-primed and powder coated, textured RAL 7035 (light gray)

Mounting panel: Zinc-plated

**Protection Ratings:**
UL Type 4
(IP 66 to EN 60 529)

UL file: E76083

**Configuration:**
Enclosure frame with door, roof/base plate, rear wall, mounting panel

**For additional technical information, please visit www.rittal-corp.com**

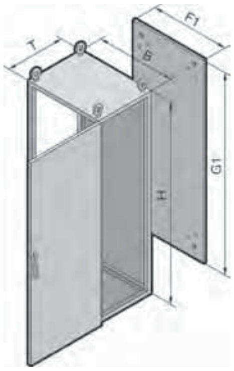
| **Height** (H) inches (mm) | | PU | 79 (2000) | Page |
|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 32 (800) | |
| **Depth** (T) inches (mm) | | | 24 (600) | |
| Panel Height (G1) inches (mm) | | | 75 (1896) | |
| Panel Width (F1) inches (mm) | | | 28 (699) | |
| **Part No.** | | 1 | **8806.580** | |
| Door(s) | | | 1 | |
| **Required Accessories** | | | | |
| Sidewalls IP 66/UL Type 4 | | 2 | 8106.580 | |
| Baying frame IP 66/UL Type 4 | | 1 | 8106.504 | |
| **Base/plinth** | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.800 | 194 |
| | Height 8 (200) | 1 set | 8602.800 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | 194 |
| | Height 8 (200) | 1 set | 8602.060 | 194 |
| **Accessories** | | | | |
| Cable clamp rails | | 2 | 4192.000 | 256 |
| System support rails | | 2 | 4362.000 | – |
| Support rails for door | | 20 | 4598.000 | 236 |
| Print pocket, sheet steel | | 1 | 4118.000 | 227 |
| **Lock systems** | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | |

Additional sizes available upon request.

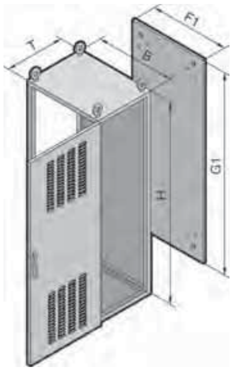
Inch and pound measurements are rounded to the nearest whole number.

# TS8 UL Type 3R - Freestanding

## Height: 79" (2000 mm), Depth: 24 - 32" (600 - 800 mm)



Solid Door



Vented Door

**Material:**
Sheet steel
Enclosure frame and doors:
14 ga (2.0 mm)
Rear walls: 16 ga (1.5 mm)
Mounting Panel: 11 ga (3.0 mm)

**Finish:**
Enclosure frame: Dipcoat-primed and powder coated RAL 7035 (light gray)
Door, trim panel, roof and rear wall: Dipcoat-primed powder coated on the outside in textured RAL 7035 (light gray)
Mounting panel and gland plates: Zinc-plated

**Protection Rating:**
UL/cUL Type 1, 3R, 12

Vented versions:

UL/cUL Type 1, 3R

UL File: E170282

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H) inches (mm) | | PU | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 39 (1000) | 24 (600) | 32 (800) | 39 (1000) | |
| **Depth** (T) inches (mm) | | | 24 (600) | 24 (600) | 24 (600) | 32 (800) | 32 (800) | 32 (800) | |
| Panel Height (G1) inches (mm) | | | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 35 (899) | 20 (499) | 28 (699) | 35 (899) | |
| **Part No. with vented door** | | 1 | **8606.547** | **8806.547** | **8006.547** | **8608.547** | **8808.547** | **8008.547** | |
| **Part No. with solid door** | | 1 | **8606.548** | **8806.548** | **8006.548** | **8608.548** | **8808.548** | **8008.548** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | | 229 (104) | 288 (131) | 355 (161) | 245 (111) | 302 (137) | 335 (151) | |
| **Walls** | | | | | | | | | |
| Sidewalls | | 2 | 8106.235 | | | 8108.235 | | | 202 |
| Divider panel | | 1 | 8609.060 | | | 8609.080 | | | 204 |
| Divider panel for module plates | | 1 | 8609.130 | | | – | | | 205 |
| **Base/plinth** | | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.000 | 8601.600 | 8601.800 | 8601.000 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.000 | 8602.600 | 8602.800 | 8602.000 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | | | 8601.080 | | | 194 |
| | Height 8 (200) | 1 set | 8602.060 | | | 8602.080 | | | 194 |
| **Accessories** | | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | 4192.000 | 4336.000 | 4191.000 | 4192.000 | 4336.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | 4945.000 | 4946.000 | 4944.000 | 4945.000 | 4946.000 | 256 |
| Support rails for door | | 20 | 4596.000 | 4598.000 | 4309.000 | 4596.000 | 4598.000 | 4599.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4118.000 | 4115.000 | 4116.000 | 4118.000 | 4124.000 | 227 |
| Rain canopy | | 1 | 9969.921 | 9969.923 | 9969.925 | 9969.922 | 9969.924 | 9969.926 | – |
| **Lock systems** | | | | | | | | | |
| Standard double-bit lock insert (in rear door) may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 UL Type 3R - Freestanding

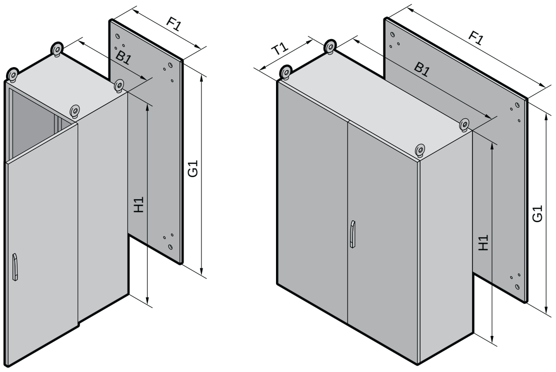
## Height: 87" (2200 mm), Depth: 24 - 32" (600 - 800 mm)

| **Height** (H) inches (mm) | | PU | 87 (2200) | 87 (2200) | 87 (2200) | 87 (2200) | 87 (2200) | 87 (2200) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 39 (1000) | 24 (600) | 32 (800) | 39 (1000) | |
| **Depth** (T) inches (mm) | | | 24 (600) | 24 (600) | 24 (600) | 32 (800) | 32 (800) | 32 (800) | |
| Panel Height (G1) inches (mm) | | | 83 (2096) | 83 (2096) | 83 (2096) | 83 (2096) | 83 (2096) | 83 (2096) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 35 (899) | 20 (499) | 28 (699) | 35 (899) | |
| **Part No. with vented door** | | 1 | **8626.547** | **8826.547** | **8026.547** | **8628.547** | **8828.547** | **8028.547** | |
| **Part No. with solid door** | | 1 | **8626.548** | **8826.548** | **8026.548** | **8628.548** | **8828.548** | **8028.548** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | | 249 (113) | 250 (139) | 345 (155) | 260 (117) | 320 (144) | 365 (164) | |
| **Walls** | | | | | | | | | |
| Sidewalls | | 2 | 8126.235 | | | 8128.235 | | | 202 |
| Divider panel | | 1 | 8609.260 | | | – | | | 204 |
| **Base/plinth** | | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.000 | 8601.600 | 8601.800 | 8601.000 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.000 | 8602.600 | 8602.800 | 8602.000 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | | | 8601.080 | | | 194 |
| | Height 8 (200) | 1 set | 8602.060 | | | 8602.080 | | | 194 |
| **Accessories** | | | | | | | | | |
| Cable clamp rails for cable clamps | | 2 | 4191.000 | 4192.000 | 4336.000 | 4191.000 | 4192.000 | 4336.000 | 256 |
| Cable clamp rails (C section) for cable clamps | | 6 | 4944.000 | 4945.000 | 4946.000 | 4944.000 | 4945.000 | 4946.000 | 256 |
| Support rails for door | | 20 | 4596.000 | 4598.000 | 4599.000 | 4596.000 | 4598.000 | 4599.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4118.000 | 4124.000 | 4116.000 | 4118.000 | 4124.000 | 227 |
| Rain canopy | | 1 | 9969.921 | 9969.923 | 9969.925 | 9969.922 | 9969.924 | 9969.926 | – |
| **Lock systems** | | | | | | | | | |
| Standard double-bit lock insert (in rear door) may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# ES - Freestanding

## Height: 63 - 71" (1600 - 1800 mm), Depth: 16 - 20" (400 - 500 mm)



**For additional technical information, please visit www.rittal-corp.com**

**Material:**
Sheet steel
Enclosure: 15 ga (1.8 mm)
Door: 14 ga (2.0 mm)
Rear wall and gland plates:
16 ga (1.5 mm)
Mounting panel: 11 ga (3.0 mm)

**Finish:**
Enclosure, door and rear wall: Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Mounting panel and gland plates: Zinc-plated

**Protection Ratings:**
Single door enclosures:
UL Type 12
(IP 56 to EN 60 529/10.91)

Double door enclosures:
UL Type 12
(IP 55 to EN 60 529/10.91)

UL, CSA certified
UL file: E76083

**Configuration:**
Enclosure with door(s), right door hinge, can be changed to the opposite side (except 5080.500), mounting panel, gland plates and rear wall, detachable,
Enclosures < 1000 mm wide:
2 eyebolts , not installed
Enclosures > = 1000 mm wide:
4 eyebolts, installed.

| **Height** (H1) inches (mm) | | PU | 63 (1600) | 63 (1600) | 63 (1600) | 71 (1800) | 71 (1800) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 24 (600) | 32 (800) | 47 (1200) | 24 (600) | 32 (800) | |
| **Depth** (T1) inches (mm) | | | 20 (500) | 20 (500) | 20 (500) | 16 (400) | 16 (400) | |
| Panel Height (G1) inches (mm) | | | 59 (1496) | 59 (1496) | 59 (1496) | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 43 (1099) | 20 (499) | 28 (699) | |
| **Part No.** | | 1 | **5665.500** | **5865.500** | **5265.500** | **5684.500** | **5884.500** | |
| Door(s) | | | 1 | 1 | 2 | 1 | 1 | |
| Weight lb (kg) | | | 226 (103) | 275 (125) | 387 (176) | 230 (105) | 276 (125) | |
| **Base/Plinth** | | | | | | | | |
| Base/plinth inches (mm) | Height 4 (100) | 1 set | 2807.200 | 2829.200 | 2839.200 | 2804.200 | 2823.200 | 196 |
| | Height 8 (200) | 1 set | 2808.200 | 2830.200 | 2840.200 | 2805.200 | 2824.200 | 196 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | |

| **Height** (H1) inches (mm) | | PU | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 39 (1000) | 39 (1000) | 47 (1200) | 63 (1600) | |
| **Depth** (T1) inches (mm) | | | 16 (400) | 16 (400) | 16 (400) | 16 (400) | |
| Panel Height (G1) inches (mm) | | | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | | 35 (899) | 35 (899) | 43 (1099) | 59 (1499) | |
| **Part No.** | | 1 | **5084.500** | **5080.500** | **5284.500** | **5784.500** | |
| Door(s) | | | 1 | 2 | 2 | 2 | |
| Weight lb (kg) | | | 324 (147) | 326 (148) | 397 (180) | 489 (222) | |
| **Base/Plinth** | | | | | | | |
| Base/plinth inches (mm) | Height 4 (100) | 1 set | 2909.200 | 2909.200 | 2836.200 | 2905.200 | 196 |
| | Height 8 (200) | 1 set | 2910.200 | 2910.200 | 2837.200 | 2906.200 | 196 |
| **Lock systems** | | | | | | | |
| Standard double-bit lock insert may be exchanged for 1” (27 mm) lock insert, type A, and Ergoform-S lock system, see page 218. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

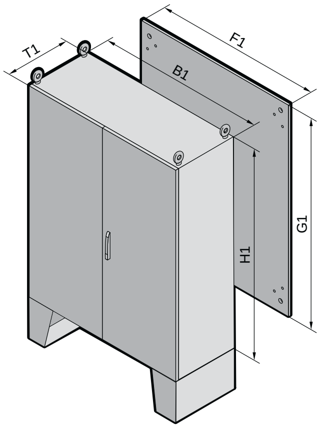
## Height: 79" (1600 - 2000 mm), Depth: 20" (500 mm)

| **Height** (H1) inches (mm) | | PU | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 24 (600) | 32 (800) | 47 (1200) | 71 (1800) | |
| **Depth** (T1) inches (mm) | | | 20 (500) | 20 (500) | 20 (500) | 20 (500) | |
| Panel Height (G1) inches (mm) | | | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | |
| Panel Width (F1) inches (mm) | | | 20 (499) | 28 (699) | 43 (1099) | 67 (1699) | |
| **Part No.** | | 1 | **5605.500** | **5805.500** | **5205.500** | **5905.500** | |
| Doors | | | 1 | 1 | 2 | 2 | |
| Weight lb (kg) | | | 273 (124) | 334 (152) | 463 (210) | 661 (300) | |
| **Base/Plinth** | | | | | | | |
| Base/plinth inches (mm) | Height 4 (100) | 1 set | 2807.200 | 2829.200 | 2839.200 | 2903.200 | 196 |
| | Height 8 (200) | 1 set | 2808.200 | 2830.200 | 2840.200 | 2904.200 | 196 |
| **Lock systems** | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 - Floormount

## Height: 63 - 71" (1600 - 1800 mm), Depth: 12 - 24" (300 - 600 mm)



**Material:**
Sheet steel
Enclosure frame: 16 ga (1.5 mm)
Roof, door, rear wall, solid floor panel: 14 ga (2.0 mm)
Legs, mounting panel:
11 ga (3.0 mm)

**Finish:**
Enclosure frame:
Dipcoat-primed
Door, roof and rear wall:
Powder coated in RAL 7035 (light gray) on the outside
Mounting panel:
Zinc-plated

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529)

UL file: E76083

**For additional technical information, please visit www.rittal-corp.com**

**Configuration:**
Enclosure frame with doors, 12 inch bolt-on leg kit, mounting panel, roof plate, rear wall, sidewalls, solid floor panel, comfort handle with push button insert

| **Height** (H1) inches (mm) | PU | 63 (1600) | 63 (1600) | 63 (1600) | 63 (1600) | 63 (1600) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 47 (1200) | 63 (1600) | 47 (1200) | 63 (1600) | 47 (1200) | |
| **Depth** (T1) inches (mm) | | 12 (300) | 12 (300) | 16 (400) | 16 (400) | 20 (500) | |
| Panel Height (G1) inches (mm) | | 59 (1496) | 59 (1496) | 59 (1496) | 59 (1496) | 59 (1496) | |
| Panel Width (F1) inches (mm) | | 43 (1099) | 59 (1499) | 43 (1099) | 59 (1499) | 43 (1099) | |
| **Part No.** | 1 | **TSFM634712NC** | **TSFM636312NC** | **TSFM634716NC** | **TSFM636316NC** | **TSFM634720NC** | |
| Weight lb (kg) | | 352 (160) | 452 (205) | 359 (163) | 459 (209) | 366 (166) | |
| **Accessories** | | | | | | | |
| Cable clamp rails for cable clamps | 2 | 4196.000 | 4338.000 | 4196.000 | 4338.000 | 4196.000 | 256 |
| Support rails for door | 1 | 4596.000 | 4598.000 | 4596.000 | 4598.000 | 4596.000 | 236 |
| Print pocket | 1 | 4116.000 | 4118.000 | 4116.000 | 4118.000 | 4116.000 | 227 |
| **Lock Systems** | | | | | | | |
| Standard comfort handle and PB insert may be exchanged for other lock inserts and comfort handles, see pages 217-220. | | | | | | | |

| **Height** (H1) inches (mm) | PU | 63 (1600) | 63 (1600) | 71 (1800) | 71 (1800) | 71 (1800) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 47 (1200) | 63 (1600) | 63 (1600) | 71 (1800) | 63 (1600) | |
| **Depth** (T1) inches (mm) | | 24 (600) | 24 (600) | 12 (300) | 12 (300) | 16 (400) | |
| Panel Height (G1) inches (mm) | | 59 (1496) | 59 (1496) | 67 (1696) | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | 43 (1099) | 59 (1499) | 59 (1499) | 67 (1699) | 59 (1499) | |
| **Part No.** | 1 | **TSFM634724NC** | **TSFM636324NC** | **TSFM716312NC** | **TSFM717112NC** | **TSFM716316NC** | |
| Weight lb (kg) | | 415 (189) | 481 (219) | 486 (221) | 546 (248) | 493 (224) | |
| **Accessories** | | | | | | | |
| Cable clamp rails for cable clamps | 2 | 4196.000 | 4338.000 | 4338.000 | 4339.000 | 4338.000 | 256 |
| Support rails for door | 1 | 4596.000 | 4598.000 | 4598.000 | 4579.000 | 4598.000 | 236 |
| Print pocket | 1 | 4116.000 | 4118.000 | 4118.000 | 4123.000 | 4118.000 | 227 |
| **Lock Systems** | | | | | | | |
| Standard comfort handle and PB insert may be exchanged for other lock inserts and comfort handles, see pages 217-220. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

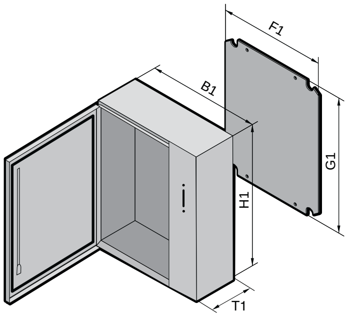
## Height: 71" (1800 mm), Depth: 16 - 24" (400 - 600 mm)

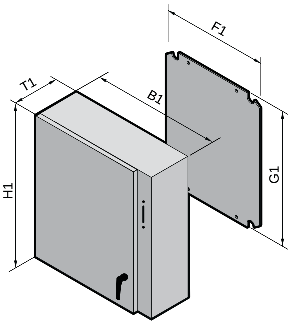
| **Height** (H1) inches (mm) | PU | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 71 (1800) | 63 (1600) | 71 (1800) | 63 (1600) | 71 (1800) | |
| **Depth** (T1) inches (mm) | | 16 (400) | 20 (500) | 20 (500) | 24 (600) | 24 (600) | |
| Panel Height (G1) inches (mm) | | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | 67 (1699) | 59 (1499) | 67 (1699) | 59 (1499) | 67 (1699) | |
| **Part No.** | 1 | **TSFM717116NC** | **TSFM716320NC** | **TSFM717120NC** | **TSFM716324NC** | **TSFM717124NC** | |
| Weight lb (kg) | | 553 (251) | 500 (227) | 560 (255) | 517 (235) | 580 (264) | |
| **Accessories** | | | | | | | |
| Cable clamp rails for cable clamps | 2 | 4339.000 | 4338.000 | 4339.000 | 4338.000 | 4339.000 | 256 |
| Support rails for door | 1 | 4579.000 | 4598.000 | 4579.000 | 4598.000 | 4579.000 | 236 |
| Print pocket | 1 | 4123.000 | 4118.000 | 4123.000 | 4118.000 | 4123.000 | 227 |
| **Lock Systems** | | | | | | | |
| Standard comfort handle and PB insert may be exchanged for other lock inserts and comfort handles, see pages 217-220. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# WM Disconnect - Wallmount

## Depth: 8 - 16" (210 - 400 mm), Height : 24 - 60" (600 - 1500 mm)





**Material:**
Sheet steel
Enclosure and door: 14 ga (2.0 mm) except WM242608XC, which is 16 ga body/ 14 ga door

**Finish:**
Enclosure and door: Powder coated, RAL 7035 (light gray)
Mounting panel:
Zinc-plated carbon steel

**Protection Ratings:**
UL/cUL Type 12
(IP 55 to EN 60 529/10.91)
UL/cUL Type 3R
UL/cUL Type 4
(IP 66 to EN 60 529/10.91)

UL File Number: E170282

**Configuration:**
Left-hand hinge
Universal disconnect cut-out
One-piece enclosure body
2 or 3-point locking L-handle
Mounting panel
Wall-mounting holes
Foamed-in-place gasket

**Note: See page 330 for FMD Operator Information**

**For additional technical information, please visit www.rittal-corp.com**

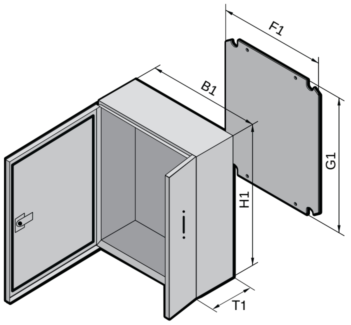
| **Height** (H1) inches (mm) | PU | 24 (600) | 36 (900) | 36 (900) | 60 (1500) | 36 (900) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 26 (650) | 32 (825) | 32 (825) | 38 (975) | 32 (825) | |
| **Depth** (T1) inches (mm) | | 8 (210) | 8 (210) | 10 (250) | 10 (250) | 12 (300) | |
| Panel Height (G1) inches (mm) | | 22 (570) | 34 (870) | 34 (870) | 57 (1455) | 34 (870) | |
| Panel Width (F1) inches (mm) | | 22 (549) | 28 (704) | 28 (704) | 33 (840) | 29 (730) | |
| Panel Thickness ga (mm) | | 11 (3) | 11 (3) | 11 (3) | 11 (3) | 11 (3) | |
| **Part No.** | 1 | **WM242608XC** | **WM363208XC** | **WM363210XC** | **WM603810XC** | **WM363212XC** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | |
| Locking handle points | | 2 | 2 | 2 | 3 | 2 | |
| Weight lb (kg) | | 68 (31) | 119 (54) | 125 (57) | 205 (93) | 127 (58) | |
| **Accessories** | | | | | | | |
| Handle | 1 | WMLHKL | | | | | 220 |
| Wallmount bracket | 4 | 2503.200 | | | | | 253 |

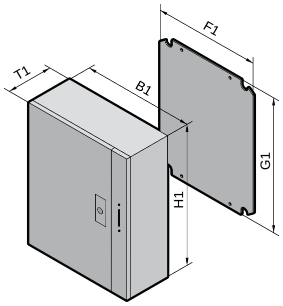
| **Height** (H1) inches (mm) | PU | 42 (1050) | 47 (1200) | 60 (1500) | 47 (1200) | Page |
|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 32 (825) | 38 (975) | 38 (975) | 38 (975) | |
| **Depth** (T1) inches (mm) | | 12 (300) | 12 (300) | 12 (300) | 16 (400) | |
| Panel Height (G1) inches (mm) | | 40 (1020) | 45 (1155) | 57 (1455) | 45 (1155) | |
| Panel Width (F1) inches (mm) | | 29 (730) | 33 (840) | 33 (840) | 33 (840) | |
| Panel Thickness ga (mm) | | 11 (3) | 11 (3) | 11 (3) | 11 (3) | |
| **Part No.** | 1 | **WM423212XC** | **WM483812XC** | **WM603812XC** | **WM483816XC** | |
| Door(s) | | 1 | 1 | 1 | 1 | |
| Locking handle points | | 3 | 3 | 3 | 3 | |
| Weight lb (kg) | | 139 (63) | 200 (91) | 204 (93) | 192 (87) | |
| **Accessories** | | | | | | |
| Handle | 1 | WMLHKL | | | | 220 |
| Wallmount bracket | 4 | 2503.200 | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# AE Disconnect - Wallmount

## Depth: 8 - 16" (210 - 400 mm), Height: 20 - 60" (500 - 1500 mm)





**Material:**
Sheet steel
Enclosure: 16 ga (1.5 mm)
Door: 14 ga (2.0 mm)

**Finish:**
Enclosure and door: Powder coated, RAL 7035 (light gray)
Mounting panel: Zinc-plated

**Protection Ratings:**
UL/cUL Type 12
(IP 55 to EN 60 529/10.91)

UL File Number: E170282

**Configuration:**
Enclosure of unibody construction, single door: 1 gland plate, 3-point lock system, foamed-in door seal, zinc-plated mounting panel.

**Note: See page 330 for FMD Operator Information**

**For additional technical information, please visit www.rittal-corp.com**

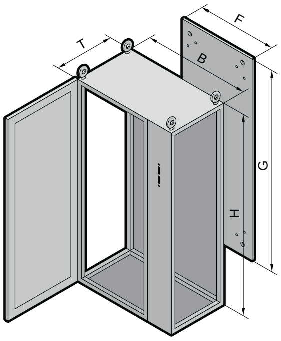
| **Height** (H1) inches (mm) | PU | 20 (500) | 24 (600) | 30 (760) | 30 (760) | 28 (700) | 39 (1000) | 20 (500) | 30 (760) | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 20 (500) | 24 (600) | 24 (600) | 30 (760) | 20 (500) | 24 (600) | 20 (500) | 30 (760) | |
| **Depth** (T1) inches (mm) | | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 10 (250) | 10 (250) | 12 (300) | 12 (300) | |
| Panel Height (G1) inches (mm) | | 19 (470) | 22 (570) | 29 (730) | 29 (730) | 26 (670) | 38 (955) | 19 (470) | 29 (730) | |
| Panel Width (F1) inches (mm) | | 18 (449) | 22 (549) | 27 (549) | 28 (704) | 18 (449) | 21 (539) | 18 (449) | 28 (704) | |
| **Part No.** | 1 | **1053.500** | **1063.500** | **1075.500** | **1078.500** | **1097.810** | **1097.850** | **1353.500** | **1074.500** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 42 (19) | 57 (26) | 71 (32) | 88 (40) | 68 (31) | 114 (52) | 46 (21) | 98 (45) | |
| **Accessories** | | | | | | | | | | |
| Wallmount bracket | 4 | 2503.200 | | | | | | | | 253 |

| **Height** (H1) inches (mm) | PU | 36 (900) | 39 (1000) | 47 (1200) | 47 (1200) | 55 (1400) | 60 (1500) | 24 (600) | 30 (760) | 60 (1500) | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 30 (760) | 32 (800) | 32 (800) | 36 (900) | 40 (1000) | 36 (900) | 24 (600) | 24 (600) | 35 (900) | |
| **Depth** (T1) inches (mm) | | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 14 (350) | 14 (350) | 16 (400) | |
| Panel Height (G1) inches (mm) | | 34 (870) | 38 (955) | 46 (1155) | 46 (1155) | 53 (1355) | 57 (1455) | 22 (570) | 29 (730) | 57 (1455) | |
| Panel Width (F1) inches (mm) | | 28 (704) | 29 (739) | 29 (739) | 33 (839) | 37 (940) | 33 (839) | 22 (549) | 22 (549) | 33 (839) | |
| **Part No.** | 1 | **1097.800** | **1183.500** | **1283.500** | **1097.870** | **1115.500** | **1097.820** | **1363.500** | **1375.500** | **1097.830** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 112 (51) | 125 (57) | 154 (70) | 161 (73) | 213 (97) | 213 (97) | 68 (31) | 84 (38) | 220 (100) | |
| **Accessories** | | | | | | | | | | | |
| Wallmount bracket | 4 | 2503.200 | | | | | | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 Disconnect - Freestanding

## Height: 55 - 71" (1400 - 1800 mm), Depth: 16 - 24" (400 - 600 mm)



**Material:**
Sheet steel
Enclosure frame, roof, rear wall, and gland plates: 16 ga (1.5 mm)
Door and trim panel: 14 ga (2.0 mm)
Mounting panel: 11 ga (3.0 mm)

**Finish:**
Enclosure frame: Dipcoat-primed
Door, trim panel, roof, and rear wall: Dipcoat-primed, powder coated on the outside in textured RAL 7035 (light gray)
Mounting panel and gland plates: Zinc-plated

**Protection Ratings:**
UL Type 12
(IP 55 to EN 60 529/10.91)
(with disconnect handle installed)

UL file: E76083

**Configuration:**
Enclosure frame, door (left hinged), trim panel (right hinged, with a swing lever at the top and bottom, with cut-out for disconnect handle), roof, rear wall, mounting panel, three-piece gland plates. Includes handle interlocking kit 8611.310.

**Note: See page 222 for FMD Operator Information**

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H) inches (mm) | | PU | 55 (1400) | 55 (1400) | 63 (1600) | 63 (1600) | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 32 (800) | 39 (1000) | 32 (800) | 32 (800) | 32 (800) | 63 (1600) | 71 (1800) | 32 (800) | |
| **Depth** (T) inches (mm) | | | 20 (500) | 20 (500) | 20 (500) | 24 (600) | 16 (400) | 16 (400) | 16 (400) | 20 (500) | |
| Panel Height (G1) inches (mm) | | | 51 (1296) | 51 (1296) | 59 (1496) | 59 (1496) | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | | 28 (699) | 35 (899) | 28 (699) | 28 (699) | 28 (699) | 59 (1499) | 67 (1699) | 28 (699) | |
| **Part No.** | | 1 | **8945.580** | **8945.500** | **8965.500** | **8966.500** | **8984.500** | **8901.600** | **8901.620** | **8985.500** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | |
| Weight lb (kg) | | | 163 (74) | 203 (92) | 186 (84) | 223 (101) | 250 (114) | 335 (152) | 377 (171) | 255 (116) | |
| **Walls** | | | | | | | | | | | |
| Sidewalls | | 2 | 8145.235 | | 8165.235 | 8166.235 | 8184.235 | | | 8185.235 | 202 |
| **Base/plinth** | | | | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.800 | 8601.000 | 8601.800 | | | 8601.920 | 8901.920 | 8601.800 | 194 |
| | Height 8 (200) | 1 set | 8602.800 | 8602.000 | 8602.800 | | | 8602.920 | 8901.930 | 8602.800 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.050 | | | 8601.060 | 8601.040 | 8601.040 | | 8601.050 | 194 |
| | Height 8 (200) | 1 set | 8602.050 | | | 8602.060 | 8602.040 | 8602.040 | | 8602.050 | 194 |
| **Accessories** | | | | | | | | | | | |
| Handle interlocking kit (included with enclosure) | | 1 kit | 8611.310 | | | | | | | | 222 |
| Slave door interlocking kit | | 1 | 4911.000 | | | | | | | | 222 |
| Interlocking rods 24" (600 mm) | | 10 | 4916.000 | | | | | | | | 222 |
| Interlocking rods 32" (800 mm) | | 10 | 4918.000 | | | | | | | | 222 |
| Interlocking rods 47" (1200 mm) | | 10 | 4920.000 | | | | | | | | 222 |
| **Lock Systems** | | | | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 Disconnect - Freestanding

## Height: 71 - 87" (1800 - 2200 mm), Depth: 20 - 32" (500 - 800 mm)

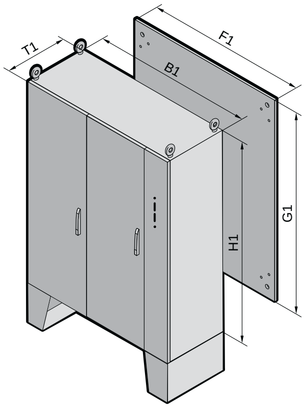
| **Height** (H) inches (mm) | | PU | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 39 (1000) | 63 (1600) | 71 (1800) | 71 (1800) | 32 (800) | 39 (1000) | 63 (1600) | 71 (1800) | |
| **Depth** (T) inches (mm) | | | 20 (500) | 20 (500) | 20 (500) | 24 (600) | 20 (500) | 20 (500) | 20 (500) | 20 (500) | |
| Panel Height (G1) inches (mm) | | | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | |
| Panel Width (F1) inches (mm) | | | 35 (899) | 59 (1499) | 67 (1699) | 67 (1699) | 28 (699) | 35 (899) | 59 (1499) | 67 (1699) | |
| **Part No.** | | 1 | **8980.500** | **8901.610** | **8901.630** | **8901.640** | **8905.500** | **8995.500** | **8901.650** | **8901.680** | |
| Door(s) | | | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | |
| Weight lb (kg) | | | 262 (119) | 418 (190) | 471 (214) | 565 (256) | 278 (126) | 291 (132) | 488 (221) | 523 (237) | |
| **Walls** | | | | | | | | | | | |
| Sidewalls | | 2 | 8185.235 | | | 8186.235 | 8105.235 | | | | 202 |
| **Base/plinth** | | | | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.000 | 8601.920 | 8901.920 | | 8601.800 | 8601.000 | 8601.920 | 8901.920 | 194 |
| | Height 8 (200) | 1 set | 8602.000 | 8602.920 | 8901.930 | | 8602.800 | 8602.000 | 8602.920 | 8901.930 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.050 | | | 8601.060 | 8601.050 | | | | 194 |
| | Height 8 (200) | 1 set | 8602.050 | | | 8602.060 | 8602.050 | | | | 194 |
| **Accessories** | | | | | | | | | | | |
| Handle interlocking kit (included with enclosure) | | 1 kit | 8611.310 | | | | | | | | 222 |
| Slave door interlocking kit | | 1 | 4911.000 | | | | | | | | 222 |
| Interlocking rods 24" (600 mm) | | 10 | 4916.000 | | | | | | | | 222 |
| Interlocking rods 32" (800 mm) | | 10 | 4918.000 | | | | | | | | 222 |
| Interlocking rods 47" (1200 mm) | | 10 | 4920.000 | | | | | | | | 222 |
| **Lock Systems** | | | | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | | | | |

| **Height** (H) inches (mm) | | PU | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | 79 (2000) | 87 (2200) | 87 (2200) | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 32 (800) | 39 (1000) | 63 (1600) | 71 (1800) | 32 (800) | 63 (1600) | 32 (800) | 39 (1000) | |
| **Depth** (T) inches (mm) | | | 24 (600) | 24 (600) | 24 (600) | 24 (600) | 32 (800) | 32 (800) | 24 (600) | 20 (500) | |
| Panel Height (G1) inches (mm) | | | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | 75 (1896) | 83 (2096) | 83 (2096) | |
| Panel Width (F1) inches (mm) | | | 28 (699) | 35 (899) | 59 (1489) | 67 (1699) | 28 (699) | 59 (1499) | 28 (699) | 35 (899) | |
| **Part No.** | | 1 | **8906.500** | **8996.500** | **8901.660** | **8901.690** | **8908.500** | **8901.670** | **8926.500** | **8958.500** | |
| Door(s) | | | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | |
| Weight lb (kg) | | | 288 (131) | 366 (166) | 586 (266) | 628 (285) | 372 (169) | 744 (337) | 307 (139) | 320 (145) | |
| **Walls** | | | | | | | | | | | |
| Sidewalls | | 2 | 8106.235 | | | | 8108.235 | | 8126.235 | 8125.235 | 202 |
| **Base/plinth** | | | | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.800 | 8601.000 | 8601.920 | 8901.920 | 8601.800 | 8601.920 | 8601.800 | 8601.000 | 194 |
| | Height 8 (200) | 1 set | 8602.800 | 8602.000 | 8602.920 | 8901.930 | 8602.800 | 8602.920 | 8602.800 | 8602.000 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.060 | | | | 8601.080 | | 8601.060 | 8601.050 | 194 |
| | Height 8 (200) | 1 set | 8602.060 | | | | 8602.080 | | 8602.060 | 8602.050 | 194 |
| **Accessories** | | | | | | | | | | | |
| Handle interlocking kit (included with enclosure) | | 1 kit | 8611.310 | | | | | | | | 222 |
| Slave door interlocking kit | | 1 | 4911.000 | | | | | | | | 222 |
| Interlocking rods 24" (600 mm) | | 10 | 4916.000 | | | | | | | | 222 |
| Interlocking rods 32" (800 mm) | | 10 | 4918.000 | | | | | | | | 222 |
| Interlocking rods 47" (1200 mm) | | 10 | 4920.000 | | | | | | | | 222 |
| **Lock Systems** | | | | | | | | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 Disconnect - Floormount

## Height: 63 - 71" (1600 - 1800 mm), Depth: 16 - 24" (400 - 600 mm)



**For additional technical information, please visit www.rittal-corp.com**

**Material:**
Sheet steel
Enclosure frame: 16 ga (1.5 mm)
Roof, rear wall, solid floor panel: 14 ga (2.0 mm)
Legs: 11 ga (3.0 mm)
Door: 14 ga (2.0 mm)
Mounting Panel: 11 ga (3.0 mm)

**Finish:**
Enclosure frame: Dipcoat-primered
Door, roof, rear wall and floor panel: Dipcoat-primered and powder coated in RAL 7035 (light gray) on the outside
Mounting panel: Zinc-plated

**Protection Ratings:**
UL Type 12 (with disconnect handle installed)

UL file: E170282

**Configuration:**
Enclosure frame with removable center mullion, two doors (both left hinged), trim panel (right hinged with swing lever at the top and bottom, with cut-out for disconnect handle), 12 inch bolt-on leg kit, mounting panel, roof, rear wall, sidewalls, solid floor panel, comfort handle with pad lock hasp and push button insert
Includes handle interlocking kit (8611.310) for the main door as well as the adjacent door locking kit (4911.000) and interlocking rods for the adjacent door.

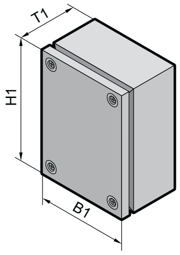
| **Height** (H1) inches (mm) | PU | 63 (1600) | 63 (1600) | 71 (1800) | 71 (1800) | 63 (1600) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 47 (1200) | 63 (1600) | 63 (1600) | 71 (1800) | 47 (1200) | |
| **Depth** (T1) inches (mm) | | 16 (400) | 16 (400) | 16 (400) | 16 (400) | 20 (500) | |
| Panel Height (G1) inches (mm) | | 59 (1496) | 59 (1496) | 67 (1696) | 67 (1696) | 59 (1496) | |
| Panel Width (F1) inches (mm) | | 43 (1099) | 59 (1499) | 59 (1499) | 67 (1699) | 43 (1099) | |
| **Part No.** | 1 | **TSFM634716XC** | **TSFM636316XC** | **TSFM716316XC** | **TSFM717116XC** | **TSFM634720XC** | |
| Weight lb (kg) | | 370 (168) | 470 (213) | 505 (229) | 565 (256) | 378 (171) | |
| **Accessories** | | | | | | | |
| Print pocket | 1 | 2514.000 | | | | | 227 |
| **Lock Systems** | | | | | | | |
| The standard comfort handle with pad lock hasp and pushbutton insert may be exchanged for other comfort handles and lock inserts, see pages 217-219. | | | | | | | |

| **Height** (H1) inches (mm) | PU | 63 (1600) | 71 (1800) | 71 (1800) | 63 (1600) | 63 (1600) | 71 (1800) | |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 63 (1600) | 63 (1600) | 71 (1800) | 47 (1200) | 63 (1600) | 71 (1800) | |
| **Depth** (T1) inches (mm) | | 20 (500) | 20 (500) | 20 (500) | 24 (600) | 24 (600) | 24 (600) | |
| Panel Height (G1) inches (mm) | | 59 (1496) | 67 (1696) | 67 (1696) | 59 (1496) | 59 (1496) | 67 (1696) | |
| Panel Width (F1) inches (mm) | | 59 (1499) | 59 (1499) | 67 (1699) | 43 (1099) | 59 (1499) | 67 (1699) | |
| **Part No.** | 1 | **TSFM636320XC** | **TSFM716320XC** | **TSFM717120XC** | **TSFM634724XC** | **TSFM636324XC** | **TSFM717124XC** | |
| Weight lb (kg) | | 495 (225) | 515 (234) | 575 (261) | 430 (195) | 495 (225) | 595 (270) | |
| **Accessories** | | | | | | | | |
| Print pocket | 1 | 2514.000 | | | | | | 227 |
| **Lock Systems** | | | | | | | | |
| The standard comfort handle with pad lock hasp and pushbutton insert may be exchanged for other comfort handles and lock inserts, see pages 217-219. | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# KL Screw Cover - Junction Box

## Depth: 3 - 5" (80 - 120 mm), Height: 6 - 12" (150 - 300 mm)



**Material:**
Type 304 stainless steel
Enclosure: 18 ga (1.25 mm)
Cover: 18 ga (1.25 mm)

**Finish:**
Case and cover:
Brushed

**Protection Ratings:**
UL Type 4X
(IP 66 to EN 60 529/10.91)
UL file: E76082

**Configuration:**
Enclosure, cover with foamed-on polyurethane gasket and quick-release cover screws, including plastic bushes.

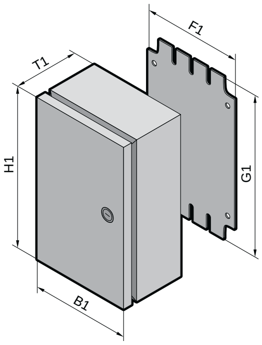
**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | PU | 6 (150) | 6 (150) | 8 (200) | 8 (200) | 8 (200) | 12 (300) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 6 (150) | 12 (300) | 8 (200) | 12 (300) | 16 (400) | 12 (300) | |
| **Depth** (T1) inches (mm) | | 3 (80) | 3 (80) | 3 (80) | 3 (80) | 5 (120) | 5 (120) | |
| **Part No.** | 1 | **1521.010** | **1522.010** | **1523.010** | **1524.010** | **1525.010** | **1526.010** | |
| Weight lb (kg) | | 3 (1) | 4 (2) | 4 (2) | 5 (2) | 8 (4) | 9 (4) | |
| Cover screws | | 4 | 4 | 4 | 4 | 4 | 4 | |
| **Accessories** | | | | | | | | |
| Mounting panel | 1 | 1560.700 | 1561.700 | 1562.700 | 1563.700 | 1564.700 | 1567.700 | 229 |
| Wallmount bracket | 4 | 1594.000 | | | | | | 253 |
| Wall angle | 1 | 2583.000 | | | | | | 254 |
| Pole clamp | 1 | 2584.000 | | | | | | 254 |
| Support rails TS 35/7.5 | 10 | 2314.000 | 2316.000 | 2315.000 | 2316.000 | 2317.000 | 2316.000 | |
| Cover retainer | 3 pairs | 1591.000 | | | | | | 215 |
| Cover hinge | 6 | 1592.010 | | | | | | 215 |

Inch and pound measurements are rounded to the nearest whole number.

# JB Hinge Cover - Junction Box

## Depth: 3 - 6" (75 - 150 mm), Height: 4 - 12" (100 - 300 mm)



**Material:**
Type 304 or 316L stainless steel
Enclosure:
16 ga (1.5 mm)

**Finish:**
Enclosure and door:
#4 brushed

**Protection Ratings:**
UL/cUL Type 12
(IP 54 to EN 60 529/10.91)
UL/cUL Type 3R
UL/cUL 4x
(IP 66 to EN 60 529/10.91)

UL file: E76083

**Configuration:** Door with 180° left-hand hinges, includes screwdriver insert and wallmounting blind nuts
**Note: zinc-plated enclosure mounting panel sold separately (see below)**

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | PU | 4 (100) | 6 (150) | 6 (150) | 6 (150) | 8 (200) | 8 (200) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 4 (100) | 4 (100) | 4 (100) | 6 (150) | 6 (150) | 8 (200) | |
| **Depth** (T1) inches (mm) | | 3 (75) | 3 (75) | 4 (100) | 4 (100) | 4 (100) | 4 (100) | |
| Panel Height (G1) inches (mm) | | – | 5 (135) | 5 (135) | 5 (135) | 7 (185) | 7 (185) | |
| Panel Width (F1) inches (mm) | | – | 3 (75) | 3 (75) | 5 (125) | 5 (125) | 7 (175) | |
| **Part No.** **Type 304** | 1 | **JB040403H4** | **JB060403H4** | **JB060404H4** | **JB060604H4** | **JB080604H4** | **JB080804H4** | |
| **Type 316L** | 1 | **JB040403H6** | **JB060403H6** | **JB060404H6** | **JB060604H6** | **JB080604H6** | **JB080804H6** | |
| Weight lb (kg) | | 2 (0.9) | 3 (1.4) | 3 (1.4) | 4 (1.6) | 5 (2.0) | 6 (2.5) | |
| **Accessories** | | | | | | | | |
| Mounting panel | 1 | – | JBMP0604 | | JBMP0606 | JBMP0806 | JBMP0808 | 230 |
| Wallmount bracket Type 304 | 4 | 2433.000 | | | | | | 253 |
| Wallmount bracket Type 316L | 4 | 2433.500 | | | | | | 253 |

| **Height** (H1) inches (mm) | PU | 10 (250) | 12 (300) | 12 (300) | 8 (200) | 10 (250) | 10 (250) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 8 (200) | 6 (150) | 10 (250) | 6 (150) | 8 (200) | 10 (250) | |
| **Depth** (T1) inches (mm) | | 4 (100) | 4 (100) | 5 (125) | 6 (150) | 6 (150) | 6 (150) | |
| Panel Height (G1) inches (mm) | | 9 (235) | 11 (285) | 11 (285) | 7 (185) | 9 (235) | 9 (235) | |
| Panel Width (F1) inches (mm) | | 7 (175) | 5 (125) | 9 (225) | 5 (125) | 7 (175) | 9 (225) | |
| **Part No.** **Type 304** | 1 | **JB100804H4** | **JB120604H4** | **JB121005H4** | **JB080606H4** | **JB100806H4** | **JB101006H4** | |
| **Type 316L** | 1 | **JB100804H6** | **JB120604H6** | **JB121005H6** | **JB080606H6** | **JB100806H6** | **JB101006H6** | |
| Weight lb (kg) | | 8 (3.4) | 6 (2.7) | 9 (4.1) | 6 (2.5) | 8 (3.4) | 9 (3.9) | |
| **Accessories** | | | | | | | | |
| Mounting panel | 1 | JBMP1008 | JBMP1206 | JBMP1210 | JBMP0806 | JBMP1008 | JBMP1010 | 230 |
| Wallmount bracket Type 304 | 4 | 2433.000 | | | | | | 253 |
| Wallmount bracket Type 316L | 4 | 2433.500 | | | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# JB Hinge Cover - Junction Box

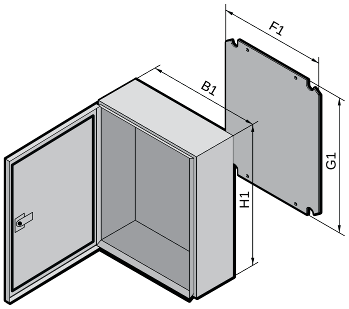
## Depth: 6 - 10" (150 - 250 mm), Height: 12 - 16" (300 - 400 mm)

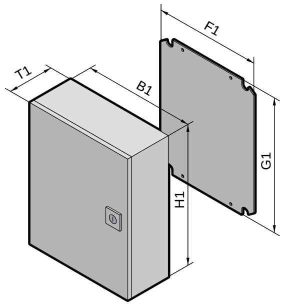
| **Height** (H1) inches (mm) | | PU | 12 (300) | 12 (300) | 14 (350) | 16 (400) | 12 (300) | 16 (400) | 16 (400) | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 10 (250) | 12 (300) | 12 (300) | 14 (350) | 10 (250) | 14 (350) | 14 (350) | |
| **Depth** (T1) inches (mm) | | | 6 (150) | 6 (150) | 6 (150) | 6 (150) | 8 (200) | 8 (200) | 10 (250) | |
| Panel Height (G1) inches (mm) | | | 11 (285) | 11 (285) | 13 (335) | 15 (385) | 11 (285) | 15 (385) | 15 (385) | |
| Panel Width (F1) inches (mm) | | | 9 (225) | 11 (275) | 11 (275) | 13 (325) | 9 (225) | 13 (325) | 13 (325) | |
| **Part No.** | **Type 304** | 1 | **JB121006H4** | **JB121206H4** | **JB141206H4** | **JB161406H4** | **JB121008H4** | **JB161408H4** | **JB161410H4** | |
| | **Type 316L** | 1 | **JB121006H6** | **JB121206H6** | **JB141206H6** | **JB161406H6** | **JB121008H6** | **JB161408H6** | **JB161410H6** | |
| Weight lb (kg) | | | 10 (4.5) | 11 (5.0) | 12 (5.5) | 15 (6.8) | 11 (5.0) | 17 (7.7) | 19 (8.6) | |
| **Accessories** | | | | | | | | | | |
| Mounting panel | | 1 | JBMP1210 | JBMP1212 | JBMP1412 | JBMP1614 | JBMP1210 | JBMP1614 | | 230 |
| Wallmount bracket Type 304 | | 4 | 2433.000 | | | | | | | 253 |
| Wallmount bracket Type 316L | | 4 | 2433.500 | | | | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# WM - Wallmount

## Depth: 6 - 8" (150 - 210 mm), Height: 12 - 30" (300 - 760 mm)





**For additional technical information, please visit www.rittal-corp.com**

**Material:**
Type 304 or 316L stainless steel
Enclosure and door:
16 - 14 ga (1.5 - 2.0 mm)
-12" H x 12" W – 24" H x 20" W - 16 ga body/ 16 ga door
- 24" H x 24" W – 36" H x 24" W - 16 ga body/ 14 ga door
- 36" H x 30" W – 42" H x 32" W - 14 ga body/ 14 ga door

**Finish:**
Enclosure and door:
#4 Brushed
Mounting panel:
Zinc-plated carbon steel

**Protection Ratings:**
Single door enclosures:
UL/cUL Type 12
(IP 55 to EN 60 529/10.91)
UL/cUL Type 3R
UL/cUL Type 4
(IP 66 to EN 60 529/10.91)
UL/cUL Type 4X
(IP 66 to EN 60 529/10.91)

**Configuration:**
Left-hand hinge
Slotted head insert
One-piece enclosure body
Single door WM enclosures less than 20" high have one 1/4 Turn latch
Single door WM enclosures 20 - 40" high have two 1/4 Turn latches
Single door WM enclosures greater than or equal to 42" high have an L-Handle
Mounting panel
Wall-mounting blind nuts
Foamed-in-place gasket

| **Height** (H1) inches (mm) | | PU | 12 (300) | 16 (400) | 16 (400) | 20 (500) | 20 (500) | 16 (400) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 12 (300) | 12 (300) | 16 (400) | 16 (400) | 20 (500) | 12 (300) | |
| **Depth** (T1) inches (mm) | | | 6 (150) | 6 (150) | 6 (150) | 6 (150) | 6 (150) | 8 (210) | |
| Panel Height (G1) inches (mm) | | | 11 (275) | 15 (375) | 15 (375) | 19 (475) | 19 (475) | 15 (375) | |
| Panel Width (F1) inches (mm) | | | 10 (254) | 10 (254) | 14 (354) | 14 (354) | 18 (449) | 10 (254) | |
| **Part No.** | **Type 304** | 1 | **WM121206N4** | **WM161206N4** | **WM161606N4** | **WM201606N4** | **WM202006N4** | **WM161208N4** | |
| | **Type 316L** | 1 | **WM121206N6** | **WM161206N6** | **WM161606N6** | **WM201606N6** | **WM202006N6** | **WM161208N6** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | | 16 (7) | 20 (9) | 23 (10) | 31 (14) | 37 (17) | 23 (10) | |
| **Accessories** | | | | | | | | | |
| Handle | | 1 | WMQTPLS6 | | | | | | 219 |
| Wallmount bracket for Type 304 | | 4 | 2433.000 | | | | | | 253 |
| Wallmount bracket for Type 316L | | 4 | 2433.500 | | | | | | 253 |
| Dead front kit | | 1 | DFK1212C | DFK1612C | DFK1616C | DFK2016C | DFK2020C | DFK1612C | 230 |

| **Height** (H1) inches (mm) | | PU | 20 (500) | 20 (500) | 24 (600) | 24 (600) | 24 (600) | 30 (760) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 16 (400) | 20 (500) | 16 (400) | 20 (500) | 24 (600) | 24 (600) | |
| **Depth** (T1) inches (mm) | | | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | |
| Panel Height (G1) inches (mm) | | | 19 (475) | 19 (470) | 22 (570) | 22 (570) | 22 (570) | 29 (730) | |
| Panel Width (F1) inches (mm) | | | 14 (354) | 18 (449) | 14 (354) | 18 (449) | 22 (549) | 22 (549) | |
| **Part No.** | **Type 304** | 1 | **WM201608N4** | **WM202008N4** | **WM241608N4** | **WM242008N4** | **WM242408N4** | **WM302408N4** | |
| | **Type 316L** | 1 | **WM201608N6** | **WM202008N6** | **WM241608N6** | **WM242008N6** | **WM242408N6** | **WM302408N6** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | | 34 (15) | 41 (18) | 39 (18) | 46 (21) | 57 (26) | 70 (32) | |
| **Accessories** | | | | | | | | | |
| Handle | | 1 | WMQTPLS6 | | | | | | 219 |
| Wallmount bracket for Type 304 | | 4 | 2433.000 | | | | | | 253 |
| Wallmount bracket for Type 316L | | 4 | 2433.500 | | | | | | 253 |
| Dead front kit | | 1 | DFK2016C | DFK2020C | DFK2416C | DFK2420C | DFK2424C | DFK3024C | 230 |

Inch and pound measurements are rounded to the nearest whole number.

## Depth: 8 - 16" (210 - 400 mm), Height: 30 - 60" (760 - 1500 mm)

| **Height** (H1) inches (mm) | | PU | 30 (760) | 36 (900) | 36 (900) | 24 (600) | 30 (760) | 30 (760) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 30 (760) | 24 (600) | 30 (760) | 20 (500) | 24 (600) | 30 (760) | |
| **Depth** (T1) inches (mm) | | | 8 (210) | 8 (210) | 8 (210) | 10 (250) | 10 (250) | 10 (250) | |
| Panel Height (G1) inches (mm) | | | 29 (730) | 34 (870) | 34 (870) | 22 (570) | 29 (730) | 29 (730) | |
| Panel Width (F1) inches (mm) | | | 28 (704) | 22 (549) | 28 (704) | 18 (449) | 22 (549) | 28 (704) | |
| **Part No.** | **Type 304** | 1 | **WM303008N4** | **WM362408N4** | **WM363008N4** | **WM242010N4** | **WM302410N4** | **WM303010N4** | |
| | **Type 316L** | 1 | **WM303008N6** | **WM362408N6** | **WM363008N6** | **WM242010N6** | **WM302410N6** | **WM303010N6** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | | 86 (39) | 91 (41) | 111 (50) | 49 (22) | 154 (70) | 89 (40) | |
| **Accessories** | | | | | | | | | |
| Handle | | 1 | WMQTPLS6 | | | | | | 219 |
| Wallmount bracket for Type 304 | | 4 | 2433.000 | | | | | | 253 |
| Wallmount bracket for Type 316L | | 4 | 2433.500 | | | | | | 253 |
| Dead front kit | | 1 | DFK3030C | DFK3624C | DFK3630C | DFK2420C | DFK3024C | DFK3030C | 230 |

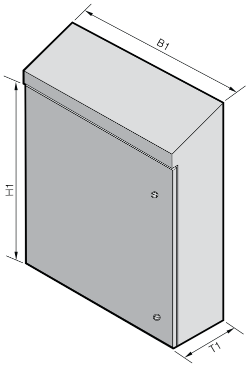
| **Height** (H1) inches (mm) | | PU | 36 (900) | 48 (1200) | 24 (600) | 30 (760) | 36 (900) | 36 (900) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 30 (760) | 36 (900) | 24 (600) | 24 (600) | 30 (760) | 36 (900) | |
| **Depth** (T1) inches (mm) | | | 10 (250) | 10 (250) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | |
| Panel Height (G1) inches (mm) | | | 34 (870) | 45 (1155) | 23 (570) | 29 (730) | 34 (870) | 34 (870) | |
| Panel Width (F1) inches (mm) | | | 28 (704) | 33 (840) | 22 (549) | 22 (549) | 28 (704) | 33 (840) | |
| **Part No.** | **Type 304** | 1 | **WM363010N4** | **WM483610N4** | **WM242412N4** | **WM302412N4** | **WM363012N4** | **WM363612N4** | |
| | **Type 316L** | 1 | **WM363010N6** | **WM483610N6** | **WM242412N6** | **WM302412N6** | **WM363012N6** | **WM363612N6** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | | 116 (53) | 178 (81) | 63 (28) | 77 (35) | 122 (55) | 146 (66) | |
| **Accessories** | | | | | | | | | |
| Handle | | 1 | WMQTPLS6 | WMLHKLS6 | WMQTPLS6 | | | | 219 |
| Wallmount bracket for Type 304 | | 4 | 2433.000 | | | | | | 253 |
| Wallmount bracket for Type 316L | | 4 | 2433.500 | | | | | | 253 |
| Dead Front Kit | | 1 | DFK3630C | DFK4836C | DFK2424C | DFK3024C | DFK3630C | DFK3636C | 230 |

| **Height** (H1) inches (mm) | | PU | 42 (1050) | 47 (1200) | 60 (1500) | 36 (900) | 47 (1200) | 60 (1500) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 36 (900) | 36 (900) | 36 (900) | 30 (760) | 36 (900) | 36 (900) | |
| **Depth** (T1) inches (mm) | | | 12 (300) | 12 (300) | 12 (300) | 16 (400) | 16 (400) | 16 (400) | |
| Panel Height (G1) inches (mm) | | | 40 (1020) | 45 (1155) | 57 (1455) | 34 (870) | 46 (1155) | 57 (1455) | |
| Panel Width (F1) inches (mm) | | | 33 (840) | 33 (840) | 33 (840) | 28 (704) | 33 (840) | 33 (840) | |
| **Part No.** | **Type 304** | 1 | **WM423612N4** | **WM483612N4** | **WM603612N4** | **WM363016N4** | **WM483616N4** | **WM603616N4** | |
| | **Type 316L** | 1 | **WM423612N6** | **WM483612N6** | **WM603612N6** | **WM363016N6** | **WM483616N6** | **WM603616N6** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | | 169 (77) | 189 (86) | 229 (104) | 134 (61) | 204 (93) | 210 (95) | |
| **Accessories** | | | | | | | | | |
| Handle | | 1 | WMLHKLS6 | | | | | | 220 |
| Wallmount bracket for Type 304 | | 4 | 2433.000 | | | | | | 253 |
| Wallmount bracket for Type 316L | | 4 | 2433.500 | | | | | | 253 |
| Dead front kit | | 1 | DFK4236C | DFK4836C | DFK6036C | DFK3630C | DFK4836C | DFK6036C | 230 |

Inch and pound measurements are rounded to the nearest whole number.

# WM Slop Top - Wallmount

## Depth: 8 - 12" (210 - 300 mm), Height: 16 - 36" (395 - 895 mm)



**Material:**
Type 304 or 316L stainless steel
Enclosure and door:
16 - 14 ga (1.5 - 2.0 mm)
- 16" H x 12" W – 24" H x 20" W - 16 ga body / 16 ga door
- 24" H x 24" W – 30" H x 24" W - 16 ga body / 14 ga door
- 30" H x 30" W – 60" H x 36" W - 14 ga body / 14 ga door

**Finish:**
Enclosure and door:
#4 Brushed
Mounting panel:
Zinc-plated

**Protection Ratings:**
UL Type 1, 12, 3R, 4, 4X
UL/cUL

UL file: E170282

**Configuration:**
20° overhanging sloped roof
Slotted head spring loaded insert
One-piece enclosure body
Foamed-in-place gasket
Includes recessed blind nuts for mounting enclosure to wall
Enclosures less than 20" high have one 1/4-turn latch
Enclosures 20 - 40" have two 1/4-turn latches
Enclosures greater than or equal to 42" equipped with L-Handle and three point lock rod system
Mounting Panel

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | | PU | 16 (395) | 16 (395) | 20 (495) | 20 (495) | 24 (595) | 24 (595) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 12 (300) | 16 (400) | 16 (400) | 20 (500) | 20 (500) | 24 (600) | |
| **Depth** (T1) inches (mm) | | | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | |
| Panel Height inches (mm) | | | 15 (375) | 15 (375) | 19 (475) | 19 (475) | 22 (570) | 22 (570) | |
| Panel Width inches (mm) | | | 10 (254) | 14 (354) | 14 (354) | 18 (449) | 18 (449) | 22 (549) | |
| **Part No.** | **Type 304** | 1 | **WMS161208N4** | **WMS161608N4** | **WMS201608N4** | **WMS202008N4** | **WMS242008N4** | **WMS242408N4** | |
| | **Type 316L** | 1 | **WMS161208N6** | **WMS161608N6** | **WMS201608N6** | **WMS202008N6** | **WMS242008N6** | **WMS242408N6** | |
| Weight lb (kg) | | | 21 (10) | 26 (12) | 34 (15) | 41 (19) | 47 (21) | 58 (26) | |
| **Accessories** | | | | | | | | | |
| Wallmount bracket Type 304 | | 4 | 2433.000 | | | | | | 253 |
| Wallmount bracket Type 316L | | 4 | 2433.500 | | | | | | 253 |

| **Height** (H1) inches (mm) | | PU | 30 (755) | 30 (755) | 36 (895) | 20 (495) | 20 (495) | 24 (595) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 24 (600) | 30 (760) | 30 (760) | 16 (400) | 20 (500) | 24 (600) | |
| **Depth** (T1) inches (mm) | | | 8 (210) | 8 (210) | 8 (210) | 12 (300) | 12 (300) | 12 (300) | |
| Panel Height inches (mm) | | | 29 (730) | 29 (730) | 34 (870) | 19 (475) | 19 (475) | 22 (570) | |
| Panel Width inches (mm) | | | 22 (549) | 28 (704) | 28 (704) | 14 (354) | 18 (449) | 22 (549) | |
| **Part No.** | **Type 304** | 1 | **WMS302408N4** | **WMS303008N4** | **WMS363008N4** | **WMS201612N4** | **WMS202012N4** | **WMS242412N4** | |
| | **Type 316L** | 1 | **WMS302408N6** | **WMS303008N6** | **WMS363008N6** | **WMS201612N6** | **WMS202012N6** | **WMS242412N6** | |
| Weight lb (kg) | | | 71 (32) | 88 (40) | 115 (52) | 38 (17) | 46 (21) | 64 (29) | |
| **Accessories** | | | | | | | | | |
| Wallmount bracket Type 304 | | 4 | 2433.000 | | | | | | 253 |
| Wallmount bracket Type 316L | | 4 | 2433.500 | | | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# WM Slope Top - Wallmount

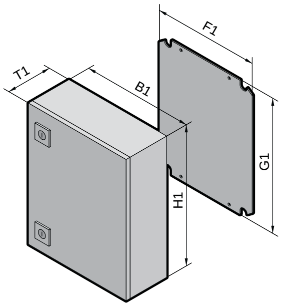
## Depth: 12 - 16” (300 - 400 mm), Height: 30 - 60” (755 - 1495 mm)

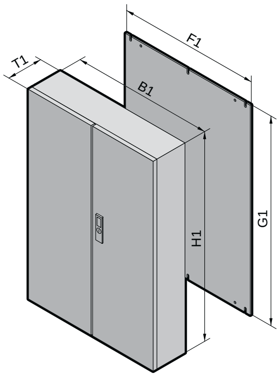
| **Height** (H1) inches (mm) | | PU | 30 (755) | 36 (895) | 36 (895) | 36 (895) | 48 (1195) | 60 (1495) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 24 (600) | 30 (760) | 36 (900) | 30 (760) | 36 (900) | 36 (900) | |
| **Depth** (T1) inches (mm) | | | 12 (300) | 12 (300) | 12 (300) | 16 (400) | 16 (400) | 16 (400) | |
| Panel Height inches (mm) | | | 29 (730) | 34 (870) | 34 (870) | 34 (870) | 45 (1155) | 57 (1455) | |
| Panel Width inches (mm) | | | 22 (549) | 28 (704) | 33 (840) | 28 (704) | 33 (840) | 33 (840) | |
| **Part No.** | **Type 304** | 1 | **WMS302412N4** | **WMS363012N4** | **WMS363612N4** | **WMS363016N4** | **WMS483616N4** | **WMS603616N4** | |
| | **Type 316L** | 1 | **WMS302412N6** | **WMS363012N6** | **WMS363612N6** | **WMS363016N6** | **WMS483616N6** | **WMS603616N6** | |
| Weight lb (kg) | | | 79 (36) | 126 (57) | 153 (69) | 139 (63) | 209 (95) | 251 (114) | |
| **Accessories** | | | | | | | | | |
| Wallmount bracket Type 304 | | 4 | 2433.000 | | | | | | 253 |
| Wallmount bracket Type 316L | | 4 | 2433.500 | | | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# AE - Wallmount

## Depth: 5 - 12” (120 - 300 mm), Height: 12 - 30” (300 - 760 mm)





**Material:**
Type 304 stainless steel
Enclosure and door:
16 - 14 ga (1.5 - 2.0 mm)
-12" H x 12" W – 24" H x 20" W - 16 ga body/ 16 ga door
- 24" H x 24" W – 36" H x 24" W - 16 ga body/ 14 ga door
- 36" H x 30" W – 47" H x 32" W - 14 ga body/ 14 ga door

**Finish:**
Stainless steel enclosure:
#4 Brushed
Mounting panel:
Zinc-plated carbon steel

**Protection Ratings:**
Single door enclosures:
UL/cUL Type 12
(IP 55 to EN 60 529/10.91)
UL/cUL Type 3R
UL/cUL Type 4
(IP 66 to EN 60 529/10.91)
UL/cUL Type 4X
(IP 66 to EN 60 529/10.91)

Double door enclosures:
UL/cUL Type 12
(IP 55 to EN 60 529/10.91)

UL File Number: E170282

**Configuration:**
Right-hand hinge
Double-bit insert
One-piece enclosure body

Enclosures less than 20" high have one 1/4 Turn latch
Enclosures 20 - 39" high have two 1/4 Turn latches
Enclosures more than 39" high have 3 point latching
Foamed-in-place gasket

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | PU | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 15 (380) | 15 (380) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 8 (200) | 8 (200) | 15 (380) | 12 (300) | 15 (380) | 12 (300) | 15 (380) | |
| **Depth** (T1) inches (mm) | | 5 (120) | 6 (155) | 6 (155) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | |
| Panel Height (G1) inches (mm) | | 11 (275) | 11 (275) | 11 (275) | 11 (275) | 11 (275) | 14 (355) | 14 (355) | |
| Panel Width (F1) inches (mm) | | 6 (162) | 6 (162) | 13 (334) | 10 (254) | 13 (334) | 10 (254) | 13 (334) | |
| **Part No.** | 1 | **1001.600** | **1002.600** | **1004.600** | **1003.600** | **1011.600** | **1005.600** | **1006.600** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 8 (4) | 10 (5) | 19 (9) | 15 (7) | 18 (8) | 19 (9) | 27 (12) | |
| **Accessories** | | | | | | | | | |
| Wallmount bracket | 4 | 2433.000 | | | | | | | 253 |

| **Height** (H1) inches (mm) | PU | 15 (380) | 20 (500) | 20 (500) | 24 (600) | 24 (600) | 30 (760) | 20 (500) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 24 (600) | 16 (400) | 20 (500) | 15 (380) | 24 (600) | 24 (600) | 20 (500) | |
| **Depth** (T1) inches (mm) | | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | 12 (300) | |
| Panel Height (G1) inches (mm) | | 14 (355) | 19 (475) | 19 (470) | 22 (570) | 22 (570) | 29 (730) | 19 (470) | |
| Panel Width (F1) inches (mm) | | 22 (549) | 14 (354) | 18 (449) | 13 (334) | 22 (549) | 22 (549) | 18 (449) | |
| **Part No.** | 1 | **1009.600** | **1015.600** | **1007.600** | **1008.600** | **1010.600** | **1012.600** | **1013.600** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | 38 (17) | 28 (13) | 41 (18) | 38 (17) | 95 (25) | 70 (32) | 42 (19) | |
| **Accessories** | | | | | | | | | |
| Wallmount bracket | 4 | 2433.000 | | | | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

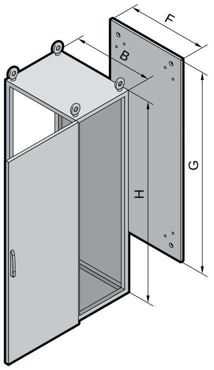
## Depth: 12" (300 mm), Height: 30 - 47" (760 - 1200 mm)

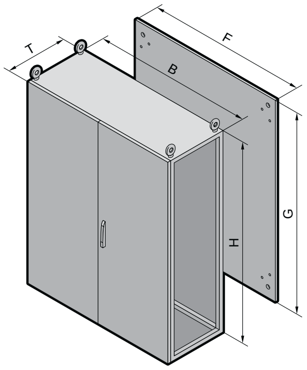
| **Height** (H1) inches (mm) | PU | 30 (760) | 39 (1000) | 39 (1000) | 47 (1200) | 47 (1200) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 30 (760) | 32 (800) | 39 (1000) | 32 (800) | 39 (1000) | |
| **Depth** (T1) inches (mm) | | 12 (300) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | |
| Panel Height (G1) inches (mm) | | 29 (730) | 38 (955) | 38 (955) | 45 (1155) | 45 (1155) | |
| Panel Width (F1) inches (mm) | | 28 (704) | 29 (730) | 37 (939) | 29 (740) | 37 (940) | |
| **Part No.** | 1 | **1014.600** | **1016.600** | **1018.600** | **1017.600** | **1019.600** | |
| Door(s) | | 1 | 1 | 2 | 1 | 2 | |
| Weight lb (kg) | | 94 (43) | 117 (53) | 157 (71) | 154 (70) | 167 (76) | |
| **Accessories** | | | | | | | |
| Wallmount bracket | 4 | 2433.000 | | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# TS8 - Freestanding

## Height: 71 - 79" (1800 - 2000 mm), Depth: 16 - 24" (400 - 600 mm)





**Material:**
Type 304 and 316L stainless steel
Enclosure frame, roof, rear panel and gland plates: 16 ga (1.5 mm)
Door(s): 14 ga (2.0 mm); Mounting panel: Sheet steel, 11 ga (3.0 mm)

**Finish:**
Enclosure frame and gland plates: Uncoated
Door, roof and rear panel: Brushed on the outside, grain size 400
Mounting panel: Zinc-plated

**Protection ratings:**
NEMA 12
(IP 55 to EN 60 529/09.2000)

**Configuration:**
Enclosure frame with door(s), mounting panel, gland plates, rear panel and roof,
2 support strips mounted in the enclosure depth (only with a depth of 24" [600 mm]).

**Note:**
Due to the hardness of the material, we recommend using metal multi-tooth screw 2486.300, see page 240, for the interior installation.

**For additional technical information, please visit www.rittal-corp.com**

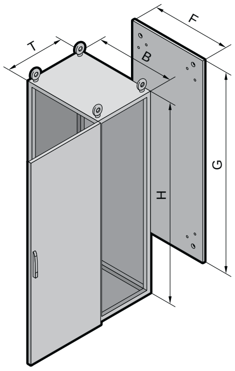
| **Height** (H) inches (mm) | | PU | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | 71 (1800) | 79 (2000) | 79 (2000) | 79 (2000) | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 32 (800) | 47 (1200) | 24 (600) | 32 (800) | 47 (1200) | 24 (600) | 32 (800) | 47 (1200) | |
| **Depth** (T) inches (mm) | | | 16 (400) | 16 (400) | 20 (500) | 20 (500) | 20 (500) | 24 (600) | 24 (600) | 24 (600) | |
| Panel Width (F) inches (mm) | | | 28 (699) | 43 (1099) | 20 (499) | 28 (699) | 43 (1099) | 20 (499) | 28 (699) | 43 (1099) | |
| Panel Height (G) inches (mm) | | | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | 67 (1696) | 75 (1896) | 75 (1896) | 75 (1896) | |
| **Part No.** | **Type 304** | 1 | **8454.600** | **8456.600** | **8457.600** | **8455.600** | **8453.600** | **8452.600** | **8450.600** | **8451.600** | |
| | **Type 316L** | 1 | **8454.500** | **8456.500** | **8457.500** | **8455.500** | **8453.500** | **8452.500** | **8450.500** | **8451.500** | |
| Door(s) | | | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Weight lb (kg) | | | 112.9 | 170.4 | 92.5 | 116.3 | 174.9 | 104.4 | 129.7 | 194.7 | |
| **Walls** | | | | | | | | | | | |
| Sidewalls | Type 304 | 2 | 8700.840 | 8700.840 | 8700.850 | 8700.850 | 8700.850 | 8700.060 | 8700.060 | 8700.060 | 202 |
| | Type 316L | 2 | 8705.840 | 8705.840 | 8705.850 | 8705.850 | 8705.850 | 8705.060 | 8705.060 | 8705.060 | 202 |
| Divider panel | | 1 | 8609.840 | 8609.840 | 8609.850 | 8609.850 | 8609.850 | 8609.060 | 8609.060 | 8609.060 | 204 |
| Divider panel for module plates | | 1 | – | – | 8609.100 | 8609.100 | 8609.100 | 8609.130 | 8609.130 | 8609.130 | 205 |
| **Base/plinth** | | | | | | | | | | | |
| Components front and rear | Height 4" (100 mm) | 1 set | 8701.800 | 8701.200 | 8701.600 | 8701.800 | 8701.200 | 8701.600 | 8701.800 | 8701.200 | 195 |
| | Height 8" (200 mm) | 1 set | 8702.800 | 8702.200 | 8702.600 | 8702.800 | 8702.200 | 8702.600 | 8702.800 | 8702.200 | 195 |
| Trim panels (sides) | Height 4" (100 mm) | 1 set | 8701.040 | 8701.040 | 8701.050 | 8701.050 | 8701.050 | 8701.060 | 8701.060 | 8701.060 | 195 |
| | Height 8" (200 mm) | 1 set | 8702.040 | 8702.040 | 8702.050 | 8702.050 | 8702.050 | 8702.060 | 8702.060 | 8702.060 | 195 |
| Base/plinth trim, modular | | 4 | 2907.000 | 2907.000 | 2908.000 | 2908.000 | 2908.000 | 2913.000 | 2913.000 | 2913.000 | – |
| **Accessories** | | | | | | | | | | | |
| Cable clamp rails | | 2 | 4192.000 | 4196.000 | 4191.000 | 4192.000 | 4196.000 | 4191.000 | 4192.000 | 4196.000 | 256 |
| Cable entry plates | | 2 | 8700.800 | 8700.120[1] | 8700.600 | 8700.800 | 8700.120[1] | 8700.600 | 8700.800 | 8700.120[1] | 258 |
| Wiring plan pocket, sheet steel | | 1 | 4118.000 | 4116.000 | 4116.000 | 4118.000 | 4116.000 | 4116.000 | 4118.000 | 4116.000 | 227 |
| **Lock systems** | | | | | | | | | | | |
| Standard double-bit lock insert may be exchanged for type F lock inserts and comfort handle, see page 220. | | | | | | | | | | | |

[1] Packs of 4

Inch and pound measurements are rounded to the nearest whole number.

# TS8 UL Type 4X - Freestanding

## Height: 79" (2000 mm), Depth: 24" (600 mm)



**Material:**
Type 304 stainless steel
Enclosure frame, roof, base, rear wall: 16 ga (1.5 mm)
Door: 14 ga (2.0 mm)
Mounting panel: 11 ga (3.0 mm)

**Finish:**
Enclosure frame: Type 304 stainless steel
Door, roof, base, rear wall: Brushed
Mounting panel: Zinc-plated carbon steel

**Protection Ratings:**
UL Type 4X
(IP 66 to EN 60 529)

UL/cUL

UL file: E76083

**Configuration:**
Enclosure frame with door, roof/base plate, rear wall, mounting panel.

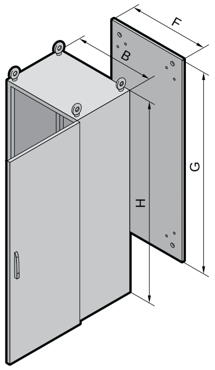
**For additional technical information, please visit www.rittal-corp.com**

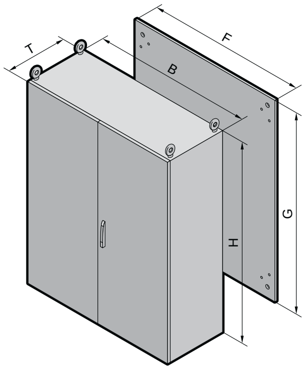
| **Height** (H1) inches (mm) | | PU | 79 (2000) | Page |
|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 32 (800) | |
| **Depth** (T1) inches (mm) | | | 24 (600) | |
| Panel Height (G1) inches (mm) | | | 75 (1896) | |
| Panel Width (F1) inches (mm) | | | 28 (699) | |
| **Part No.** | | 1 | **8450.680** | |
| Door(s) | | | 1 | |
| **Required Accessories** | | | | |
| Sidewalls IP 66/UL Type 4X | | 2 | 8700.680 | – |
| Baying frame IP 66/UL Type 4X | | 1 | 8700.064 | – |
| **Base/plinth** | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8701.800 | 195 |
| | Height 8 (200) | 1 set | 8702.800 | 195 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8701.060 | 195 |
| | Height 8 (200) | 1 set | 8702.060 | 195 |
| Base/plinth trim, modular | | 4 | 2913.000 | – |
| **Accessories** | | | | |
| Cable clamp rails | | 2 | 4192.000 | 256 |
| System support rails | | 2 | 4362.000 | – |
| Support rails for door | | 20 | 4598.000 | 236 |
| Print pocket, sheet steel | | 1 | 4116.000 | 227 |
| **Lock systems** | | | | |
| Standard double-bit lock insert may be exchanged for other lock inserts and comfort handle, see pages 217-220. | | | | |
| Additional sizes available upon request. | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# ES - Freestanding

## Height: 63 - 79" (1600 - 2000 mm), Depth: 16 - 24" (400 - 600 mm)





**Material:**
Stainless steel
Enclosure: 15 ga (1.8 mm)
Door(s): 14 ga (2.0 mm)
Rear panel: 16 ga (1.5 mm)
Mounting panel: 11 ga (3.0 mm)

**Finish:**
Enclosure, rear panel and doors: Brushed, grain size 240
Mounting panel: Zinc-plated carbon steel

**Protection Ratings:**
Single door enclosures:
UL Type 12
(IP 56 to EN 60 529/09.2000)

Double door enclosure:
UL Type 12
(IP 55 to EN 60 529/09.2000)

UL file number: E76083

**Configuration:**
Enclosure, closed top and sides, removable rear panel, right hand door hinge, can be changed to opposite side, except 5455.600; 130° hinges, mounting panel, three-part gland plates.

**Note:**
Due to the hardness of the material, we recommend using metal multi-tooth screw 2486.300, see page 240, for the interior installation.

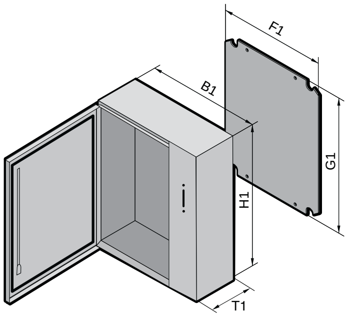
**For additional technical information, please visit www.rittal-corp.com**

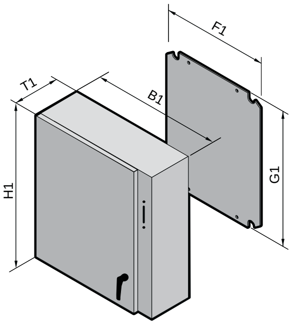
| | | PU | | | | | | | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Height** (H) inches (mm) | | PU | 63 (1600) | 71 (1800) | 71 (1800) | 71 (1800) | 79 (2000) | 79 (2000) | Page |
| **Width** (B) inches (mm) | | | 24 (600) | 40 (1000) | 24 (600) | 32 (800) | 47 (1200) | 32 (800) | |
| **Depth** (T) inches (mm) | | | 16 (400) | 16 (400) | 20 (500) | 20 (500) | 20 (500) | 24 (600) | |
| Panel Width (F) inches (mm) | | | 20 (499) | 35 (899) | 20 (499) | 28 (699) | 43 (1099) | 28 (699) | |
| Panel Height (G) inches (mm) | | | 59 (1496) | 67 (1696) | 67 (1696) | 67 (1696) | 75 (1896) | 75 (1896) | |
| **Part No.** | **Type 304** | 1 | **5450.600** | **5454.600** | **5451.600** | **5452.600** | **5455.600** | **5453.600** | |
| | **Type 316L** | 1 | **5450.500** | **5454.500** | **5451.500** | **5452.500** | **5455.500** | **5453.500** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 2 | 1 | |
| Eyebolts | | | 2 | 4 | 2 | 2 | 4 | 2 | |
| Weight lb (kg) | | | 93 | 147 | 170 | 132 | 206 | 154 | |
| **Accessories** | | | | | | | | | |
| Base/plinth inches (mm) | Height 4" (100 mm) | 1 set | 2865.000 | 2867.000 | 2868.000 | 2866.000 | 2860.000 | 2856.000 | 196 |
| | Height 8" (200 mm) | 1 set | 2875.000 | 2885.000 | 2876.000 | 2879.000 | 2887.000 | 2880.000 | 196 |
| Base/plinth trim, modular | | 4 | 2907.000 | 2907.000 | 2908.000 | 2908.000 | 2908.000 | 2913.000 | – |
| System support rails | | 2 | 4361.000 | 4347.000 | 4361.000 | 4362.000 | 4363.000 | 4362.000 | – |
| Cable clamp rails | | 2 | 4191.000 | 4336.000 | 4191.000 | 4192.000 | 4196.000 | 4192.000 | 256 |
| Mounting bars | | 20 | 4596.000 | 4599.000 | 4596.000 | 4598.000 | 4596.000 | 4598.000 | 236 |
| Utility shelf | | 1 | 4638.600 | – | 4638.600 | 4638.800 | 4638.600 | 4638.800 | 227 |
| Print pocket, sheet steel | | 1 | 4116.000 | 4124.000 | 4116.000 | 4118.000 | 4116.000 | 4118.000 | 227 |
| **Lock systems** | | | | | | | | | |
| Standard double-bit lock insert may be exchanged for 1" (27 mm) lock inserts, type A, and Ergoform-S lock system, see page 218. | | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# WM Disconnect - Wallmount

## Depth: 8 - 16" (210 - 400 mm), Height: 24 - 60" (600 - 1500 mm)





**Material:**
Type 304 or 316L stainless steel
Enclosure and door:
14 ga body/ 14 ga door
except for 24 x 26 - 16 ga body/
14 ga door

**For additional technical information, please visit www.rittal-corp.com**

**Finish:**
Enclosure
#4 Brushed
Mounting panel:
Zinc-plated carbon steel

**Protection Ratings:**
UL/cUL Type 12
(IP 55 to EN 60 529/10.91)
UL/cUL Type 3R
UL/cUL Type 4
(IP 66 to EN 60 529/10.91)
UL/cUL Type 4X
(IP 66 to EN 60 529/10.91)

**Configuration:**
Left-hand hinge
Universal disconnect cut-out
One-piece enclosure body
2 or 3-point locking L-handle
Mounting panel
Wall-mounting blind nuts
Foamed-in-place gasket

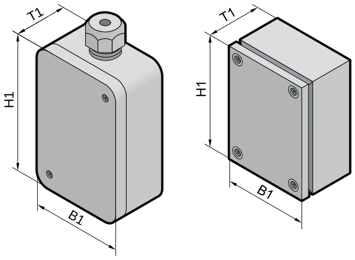
| **Height** (H1) inches (mm) | | PU | 24 (600) | 36 (900) | 36 (900) | 60 (1500) | 36 (900) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 26 (650) | 32 (825) | 32 (825) | 38 (975) | 32 (825) | |
| **Depth** (T1) inches (mm) | | | 8 (210) | 8 (210) | 10 (250) | 10 (250) | 12 (300) | |
| Panel Height (G1) inches (mm) | | | 22 (570) | 34 (870) | 34 (870) | 57 (1455) | 34 (870) | |
| Panel Width (F1) inches (mm) | | | 22 (549) | 28 (704) | 28 (704) | 33 (840) | 28 (704) | |
| **Part No.** | **Type 304** | 1 | **WM242608X4** | **WM363208X4** | **WM363210X4** | **WM603810X4** | **WM363212X4** | |
| | **Type 316L** | 1 | **WM242608X6** | **WM363208X6** | **WM363210X6** | **WM603810X6** | **WM363212X6** | |
| Door(s) | | | 1 | 1 | 1 | 1 | 1 | |
| Locking handle points | | | 2 | 2 | 2 | 3 | 2 | |
| Weight lb (kg) | | | 97 (26) | 113 (51) | 118 (54) | 225 (103) | 124 (56) | |
| **Accessories** | | | | | | | | |
| Handle | | 1 | WMLHKLS6 | | | | | 220 |
| Wallmount bracket for Type 304 | | 4 | 2433.000 | | | | | 253 |
| Wallmount bracket for Type 316L | | 4 | 2433.500 | | | | | 253 |

| **Height** (H1) inches (mm) | | PU | 42 (1050) | 48 (1200) | 60 (1500) | 48 (1200) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 32 (825) | 38 (975) | 38 (975) | 38 (975) | |
| **Depth** (T1) inches (mm) | | | 12 (300) | 12 (300) | 12 (300) | 16 (400) | |
| Panel Height (G1) inches (mm) | | | 40 (120) | 45 (1155) | 57 (1455) | 46 (1155) | |
| Panel Width (F1) inches (mm) | | | 33 (840) | 33 (840) | 33 (840) | 33 (840) | |
| **Part No.** | **Type 304** | 1 | **WM423212X4** | **WM483812X4** | **WM603812X4** | **WM483816X4** | |
| | **Type 316L** | 1 | **WM423212X6** | **WM483812X6** | **WM603812X6** | **WM483816X6** | |
| Door(s) | | | 1 | 1 | 1 | 1 | |
| Locking handle points | | | 3 | 3 | 3 | 3 | |
| Weight lb (kg) | | | 162 (74) | 191 (87) | 231 (105) | 205 (94) | |
| **Accessories** | | | | | | | |
| Handle | | 1 | WMLHKLS6 | | | | 220 |
| Wallmount bracket for Type 304 | | 4 | 2433.000 | | | | 253 |
| Wallmount bracket for Type 316L | | 4 | 2433.500 | | | | 253 |

Inch and pound measurements are rounded to the nearest whole number.

# PK Screw Cover - Junction Box

## Depth: 1 - 4" (35 - 99 mm), Height: 2 - 5" (52 - 130 mm)



**Material:**
Enclosure and cover (version XXXX.000) from fiberglass reinforced polycarbonate, transparent cover (XXXX.100) from polycarbonate, cover screws from polyamide, insulating plugs from polyethylene.

**Color:**
RAL 7035 (light gray)

**Protection Ratings:**
NEMA 4X
(IP 66 to EN 60 529/10.91)

**Configuration:**
Enclosure and cover, cover screws, insulating plug for wallmount screws (not with 9530.000 and 9531.000), foamed-on polyurethane seal around the perimeter.

**For additional technical information, please visit www.rittal-corp.com**

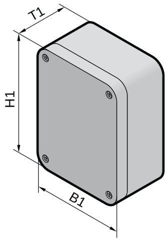
| **Height** (H1) inches (mm) | 2.0 (52) | 2.6 (65) | 2.6 (65) | 2.6 (65) | 2.6 (65) | 2.6 (65) | 3.7 (94) | 3.7 (94) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | 2.0 (50) | 2.0 (50) | 2.6 (65) | 2.6 (65) | 3.7 (94) | 3.7 (94) | 3.7 (94) | 3.7 (94) | |
| **Depth** (T1) inches (mm) | 1.4 (35) | 1.4 (35) | 2.2 (57) | 3.2 (81) | 2.2 (57) | 3.2 (81) | 2.2 (57) | 3.2 (81) | |
| **Part No. with cable gland** | **9530.000** | **9531.000** | – | – | – | – | – | – | |
| **Part No. with solid cover** | – | – | **9500.000** | **9501.000** | **9502.000** | **9503.000** | **9504.000** | **9505.000** | |
| PU | 10 | 10 | 12 | 12 | 8 | 8 | 6 | 6 | |
| **Accessories** | | | | | | | | | |
| Mounting panel | – | | | | 9541.000 | | 9542.000 | | 229 |
| PU | 10 | | 12 | | | | | | |
| Support rail (PU 12) | | | | | | | | | |
| TS 35/7.5 Installation in the height | – | | | | | | 9564.000 | | 238 |
| TS 35/7.5 Installation in the width | – | | | | | | 9564.000 | | 238 |

| **Height** (H1) inches (mm) | 3.7 (94) | 3.7 (94) | 3.7 (94) | 3.7 (94) | 4.3 (110) | 4.3 (110) | 5.1 (130) | 5.1 (130) | Page |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | 5.1 (130) | 5.1 (130) | 7.1 (180) | 7.1 (180) | 4.3 (110) | 4.3 (110) | 5.1 (130) | 5.1 (130) | |
| **Depth** (T1) inches (mm) | 2.2 (57) | 3.2 (81) | 2.2 (57) | 3.2 (81) | 2.6 (66) | 3.5 (90) | 3.0 (75) | 3.9 (99) | |
| **Part No. with solid cover** | **9508.000** | **9509.000** | **9512.000** | **9513.000** | **9506.000** | **9507.000** | **9510.000** | **9511.000** | |
| **Part No. with transparent cover** | **9508.100** | **9509.100** | **9512.100** | **9513.100** | – | – | **9510.100** | **9511.100** | |
| PU | 4 | 4 | 2 | 2 | 6 | 6 | 4 | 4 | |
| **Accessories** | | | | | | | | | |
| Mounting panel | 9544.000 | | 9546.000 | | 9543.000 | | 9545.000 | | 229 |
| PU | 12 | | 10 | | 12 | | 10 | | |
| Support rail (PU 12) | | | | | | | | | |
| TS 35/7.5 Installation in the height | 9564.000 | | | | | | 9565.000 | | 238 |
| TS 35/7.5 Installation in the width | 9565.000 | | 9566.000 | | 9564.000 | | 9565.000 | | 238 |

Inch and pound measurements are rounded to the nearest whole number.

# PK Screw Cover - Junction Box

## Depth: 4 - 7" (90 - 165 mm), Height: 4 - 10" (110 - 254 mm)



**Material:**
Enclosure and cover (version XXXX.000) from fiberglass reinforced polycarbonate, transparent cover (XXXX.100) from polycarbonate, cover screws from polyamide, insulating plugs from polyethylene.

**Color:**
RAL 7035 (light gray)

**Protection Ratings:**
NEMA 4X
(IP 66 to EN 60 529/10.91)

**Configuration:**
Enclosure and cover, cover screws, insulating plug for wallmount screws (not with 9530.000 and 9531.000), foamed-on polyurethane seal around the perimeter.

**For additional technical information, please visit www.rittal-corp.com**

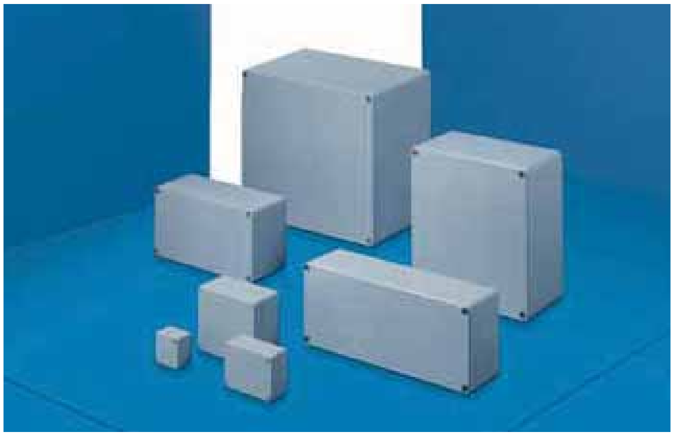
| | | | | | | | | Page |
|---|---|---|---|---|---|---|---|---|
| **Height** (H1) inches (mm) | | 4.3 (110) | 4.3 (110) | 4.3 (110) | 7.1 (180) | 7.1 (180) | 7.1 (180) | |
| **Width** (B1) inches (mm) | | 7.1 (180) | 7.1 (180) | 7.1 (180) | 7.2 (182) | 7.2 (182) | 7.2 (182) | |
| **Depth** (T1) inches (mm) | | 3.5 (90) | 4.4 (111) | 6.5 (165) | 3.5 (90) | 4.4 (111) | 6.5 (165) | |
| **Part No. with solid cover** | | **9514.000** | **9515.000** | **9516.000** | **9517.000** | **9518.000** | **9519.000** | |
| **Part No. with transparent cover** | | **9514.100** | **9515.100** | **9516.100** | **9517.100** | **9518.100** | **9519.100** | |
| PU | | 2 | 2 | 2 | 1 | 1 | 1 | |
| **Accessories** | | | | | | | | |
| Mounting panel | | 9547.000 | | | 9548.000 | | | 229 |
| PU | | 10 | | | 10 | | | |
| Support rail TS 35/7.5 (PU 12) | Installation in the height | 9564.000 | | | 9566.000 | | | 238 |
| | Installation in the width | 9566.000 | | | 9566.000 | | | 238 |

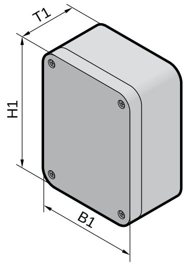
| | | | | | | | Page |
|---|---|---|---|---|---|---|---|
| **Height** (H1) inches (mm) | | 7.1 (180) | 7.1 (180) | 7.1 (180) | 10.0 (254) | 10.0 (254) | |
| **Width** (B1) inches (mm) | | 10.0 (254) | 10.0 (254) | 10.0 (254) | 14.2 (360) | 14.2 (360) | |
| **Depth** (T1) inches (mm) | | 3.5 (90) | 4.4 (111) | 6.5 (165) | 4.4 (111) | 6.5 (165) | |
| **Part No. with solid cover** | | **9520.000** | **9521.000** | **9522.000** | **9523.000** | **9524.000** | |
| **Part No. with transparent cover** | | **9520.100** | **9521.100** | **9522.100** | **9523.100** | **9524.100** | |
| PU | | 1 | 1 | 1 | 1 | 1 | |
| **Accessories** | | | | | | | |
| Mounting panel | | 9549.000 | | | 9550.000 | | 229 |
| PU | | 8 | | | 4 | | |
| Support rail TS 35/7.5 (PU 12) | Installation in the height | 9566.000 | | 9567.000 | | | 238 |
| | Installation in the width | 9567.000 | | 9568.000 | | | 238 |

Inch and pound measurements are rounded to the nearest whole number.

# GA Screw Cover - Junction Box

## Depth: 1 - 7" (30 - 180 mm), Height: 2 - 9" (45 - 230 mm)





**Material:**
Enclosure and lid made from cast aluminium, lid with neoprene cord seal.

**Finish:**
Textured enamel similar to RAL 7001 (silver gray)

**Protection Ratings:**
NEMA 4
(IP 66 to EN 60 529/09.2000)

**Configuration:**
2 or 4 cover screws, captive mounted, 2 or 4 screws for the attachment of support rails, mounting panels etc., 1 screw for connection of the PE conductor.

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | 1.8 (45) | 2.5 (64) | 2.5 (64) | 2.5 (64) | 3.2 (80) | 3.2 (80) | 3.2 (80) | 3.2 (80) | 4.7 (120) |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | 2.0 (50) | 2.3 (58) | 3.9 (98) | 5.9 (150) | 3.0 (75) | 4.9 (125) | 6.9 (175) | 9.8 (250) | 4.8 (122) |
| **Depth** (T1) inches (mm) | 1.2 (30) | 1.4 (36) | 1.4 (36) | 1.4 (36) | 2.3 (57) | 2.3 (57) | 2.3 (57) | 2.3 (57) | 3.2 (80) |
| **Part No.** | **9100.210** | **9101.210** | **9102.210** | **9103.210** | **9104.210** | **9105.210** | **9106.210** | **9107.210** | **9108.210** |
| PU | 6 | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 1 |
| **Accessories** | | | | | | | | | |
| Mounting panel | – | | | | | 9105.700 | – | | 9108.700 |
| PU | – | | | | | 10 | – | | 2 |
| Support rail[1] TS 15/5.5 (PU 10) | – | | | | | 9105.150 | – | | |
| Support rail[1] TS 35/7.5 (PU 5) | – | | | | | | | | 9108.350 |
| Wall mounting brackets (PU 2) | – | | | | | | | | 9121.122 |
| Exterior hinge (PU 2) | – | | | | | | | | 9123.000 |

| **Height** (H1) inches (mm) | 4.7 (120) | 4.8 (122) | 6.3 (160) | 6.3 (160) | 6.3 (160) | 9.1 (230) | 9.1 (230) | 9.1 (230) | 9.1 (230) |
|---|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | 8.7 (220) | 14.2 (360) | 6.3 (160) | 10.2 (260) | 14.2 (360) | 7.9 (200) | 11.0 (280) | 13.0 (330) | 13.0 (330) |
| **Depth** (T1) inches (mm) | 3.5 (90) | 3.2 (80) | 3.5 (90) | 3.5 (90) | 3.5 (90) | 4.3 (110) | 4.3 (110) | 4.3 (110) | 7.1 (180) |
| **Part No.** | **9110.210** | **9111.210** | **9112.210** | **9113.210** | **9114.210** | **9116.210** | **9117.210** | **9118.210** | **9119.210** |
| PU | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Accessories** | | | | | | | | | |
| Mounting panel | 9110.700 | – | 9112.700 | 9113.700 | 9114.700 | 9116.700 | 9117.700 | 9118.700 | 9118.700 |
| PU | 2 | – | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| Support rail[1] TS 35/7.5 (PU 5) | 9110.350 | – | 9112.350 | – | | | | | |
| Wall mounting brackets (PU 2) | 9121.122 | | 9121.160 | | | 9121.230 | | | |
| Exterior hinge (PU 2) | 9123.000 | | | | | | | | |

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[1] Installation in the width

Inch and pound measurements are rounded to the nearest whole number.

# Screw Cover - Junction Box

## Depth: 4 - 9" (108 - 224 mm), Height: 8 - 22" (191 - 559 mm)

**Protection Ratings:**
UL Type 1, 12, 4X, 6P
UL/cUL, CSA

UL file: E170282

**Configuration:**
Lift-off cover
Stainless steel screw/retention chain
Molded-in mounting provisions
Rounded corners
Overhang cover
Foamed-in-place polyurethane gasketing

**For additional technical information, please visit www.rittal-corp.com**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Height** inches (mm) | 12 (295) | 8 (191) | 8 (191) | 10 (244) | 14 (344) | 16 (394) | 18 (445) | 20 (498) | 22 (559) |
| **Width** inches (mm) | 9 (239) | 5 (138) | 8 (191) | 8 (191) | 11 (290) | 14 (343) | 16 (393) | 18 (447) | 18 (449) |
| **Depth** inches (mm) | 4 (108) | 5 (121) | 5 (121) | 5 (121) | 5 (132) | 6 (159) | 6 (158) | 9 (224) | 9 (224) |
| Mounting center height inches (mm)* | 11 (273) | 7 (171) | 7 (171) | 9 (226) | 13 (324) | 15 (371) | 17 (425) | 19 (480) | 21 (540) |
| Mounting center width inches (mm)* | 6 (152) | 2 (51) | 4 (102) | 4 (102) | 8 (203) | 10 (254) | 12 (305) | 12 (305) | 10 (254) |
| **Part No.** | **L-FJ1008NFSC** | **L-FJ604NFSC** | **L-FJ606NFSC** | **L-FJ806NFSC** | **L-FJ1210NFSC** | **L-FJ1412NFSC** | **L-FJ1614NFSC** | **L-FJ1816NFSC** | **L-FJ2016NFSC** |
| **Accessories** | | | | | | | | | |
| Mounting panel | L-MPL108CS | L-MPL64CS | L-MPL66CS | L-MPL86CS | L-MPL1210CS | L-MPL1412CS | L-MPL1614CS | L-MPL1816CS | L-MPLJ2016CS |

* Center to center distance between wallmount holes.

Inch and pound measurements are rounded to the nearest whole number.

# Screw Cover - Junction Box

## Depth: 3 - 4" (75 - 99 mm), Height: 4 - 11" (94 - 283 mm)

**Protection Ratings:**
UL Type 1,12, 4X, 6P
UL/cUL, CSA

UL file: E170282

**Configuration:**
Lift-off cover
Continuous polyurethane cover gasket
Small raised beveled cover flush with enclosure sides
Recessed captive stainless steel screws
External mounting brackets available
Foamed-in-place polyurethane gasketing

**For additional technical information, please visit www.rittal-corp.com**

| **Height** inches (mm) | PU | 4 (94) | 6 (152) | 7 (168) | 9 (226) | 11 (283) |
|---|---|---|---|---|---|---|
| **Width** inches (mm) | | 4 (92) | 4 (92) | 4 (97) | 4 (97) | 4 (97) |
| **Depth** inches (mm) | | 3 (75) | 3 (80) | 4 (99) | 4 (99) | 4 (99) |
| **Part No.** | 1 | **L-FJ332HB** | **L-FJ532HB** | **L-FJ644HB** | **L-FJ844HB** | **L-FJ1144HB** |
| **Accessories** | | | | | | |
| External mounting brackets | 1 | L-FIMTGFTKIT | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# Hinged Screw Cover - Junction Box

## Depth: 4 - 11" (108 - 270 mm), Height: 8 - 22" (191 - 559 mm)

**Protection Ratings:**
UL Type 1, 12, 4X, 6P
UL/cUL, CSA

UL file: E170282

**Configuration:**
Full length stainless steel hinged cover
Stainless steel screws
180° door opening
Part numbers ending in "X" come with extended depth cover
Foamed-in-place polyurethane gasketing

**For additional technical information, please visit www.rittal-corp.com**

| **Height** inches (mm) | PU | 12 (295) | 8 (191) | 8 (191) | 10 (244) | 14 (344) | 8 (191) |
|---|---|---|---|---|---|---|---|
| **Width** inches (mm) | | 9 (239) | 6 (138) | 8 (191) | 8 (191) | 11 (289) | 6 (139) |
| **Depth** inches (mm) | | 4 (108) | 5 (121) | 5 (121) | 5 (121) | 5 (132) | 6 (158) |
| Mounting center height inches (mm)* | | 11 (273) | 7 (171) | 7 (171) | 9 (226) | 13 (324) | 7 (171) |
| Mounting center width inches (mm)* | | 6 (152) | 2 (51) | 4 (102) | 4 (102) | 8 (203) | 2 (51) |
| **Part No.** | 1 | **L-FJ1008CHNFSC** | **L-FJ604CHNFSC** | **L-FJ606CHNFSC** | **L-FJ806CHNFSC** | **L-FJ1210CHNFSC** | **L-FJ604CHNFSCX** |
| **Accessories** | | | | | | | |
| Mounting panel | 1 | L-MPL108CS | L-MPL64CS | L-MPL66CS | L-MPL86CS | L-MPL1210CS | L-MPL64CS |

| **Height** inches (mm) | PU | 8 (191) | 10 (244) | 18 (445) | 16 (394) | 12 (295) | 14 (344) |
|---|---|---|---|---|---|---|---|
| **Width** inches (mm) | | 8 (191) | 8 (189) | 16 (393) | 14 (343) | 9 (238) | 11 (289) |
| **Depth** inches (mm) | | 6 (158) | 6 (158) | 6 (158) | 6 (159) | 7 (168) | 7 (168) |
| Mounting center height inches (mm)* | | 7 (171) | 9 (226) | 17 (425) | 15 (371) | 11 (273) | 13 (324) |
| Mounting center width inches (mm)* | | 4 (102) | 4 (102) | 12 (305) | 10 (254) | 6 (152) | 8 (203) |
| **Part No.** | 1 | **L-FJ606CHNFSCX** | **L-FJ806CHNFSCX** | **L-FJ1614CHNFSC** | **L-FJ1412CHNFSC** | **L-FJ1008CHNFSCX** | **L-FJ1210CHNFSCX** |
| **Accessories** | | | | | | | |
| Mounting panel | 1 | L-MPL64CS | L-MPL86CS | L-MPL1614CS | L-MPL1412CS | L-MPL108CS | L-MPL1210CS |

| **Height** inches (mm) | PU | 16 (394) | 18 (445) | 20 (498) | 22 (559) | 20 (498) | 22 (559) |
|---|---|---|---|---|---|---|---|
| **Width** inches (mm) | | 13 (340) | 15 (392) | 18 (447) | 18 (449) | 18 (444) | 18 (446) |
| **Depth** inches (mm) | | 8 (195) | 8 (196) | 9 (224) | 9 (224) | 11 (270) | 11 (270) |
| Mounting center height inches (mm)* | | 15 (371) | 17 (425) | 19 (480) | 21 (540) | 19 (480) | 21 (540) |
| Mounting center width inches (mm)* | | 10 (254) | 12 (305) | 12 (305) | 10 (254) | 12 (305) | 10 (254) |
| **Part No.** | 1 | **L-FJ1412CHNFSCX** | **L-FJ1614CHNFSCX** | **L-FJ1816CHNFSC** | **L-FJ2016CHNFSC** | **L-FJ1816CHNFSCX** | **L-FJ2016CHNFSCX** |
| **Accessories** | | | | | | | |
| Mounting panel | | L-MPL1412CS | L-MPL1614CS | L-MPL1816CS | L-MPLJ2016CS | L-MPL1816CS | L-MPLJ2016CS |

* Center to center distance between wallmount holes.

Inch and pound measurements are rounded to the nearest whole number.

# Lockable Quick Release - Junction Box

## Depth: 4 - 11" (108 - 270 mm), Height: 8 - 22" (191 - 559 mm)

**Protection Ratings:**
UL Type 1, 12, 4X, 6P
UL/cUL, CSA

UL file: E170282

**Configuration:**
Quick-release clamps with secure loop for padlock provisions (padlock not included)
Can be lifted and released with ease
180° door opening
Part numbers ending in "X" come with extended depth cover
Foamed-in-place polyurethane gasketing

**For additional technical information, please visit www.rittal-corp.com**

| | | | | | | |
|---|---|---|---|---|---|---|
| **Height** inches (mm) | 12 (295) | 8 (191) | 8 (191) | 10 (244) | 14 (344) | 8 (191) |
| **Width** inches (mm) | 9 (239) | 5 (138) | 8 (191) | 8 (191) | 11 (290) | 8 (191) |
| **Depth** inches (mm) | 4 (108) | 5 (121) | 5 (121) | 5 (121) | 5 (132) | 6 (158) |
| Mounting center height inches (mm)* | 11 (273) | 7 (171) | 7 (171) | 9 (226) | 13 (324) | 7 (171) |
| Mounting center width inches (mm)* | 6 (152) | 2 (51) | 4 (102) | 4 (102) | 8 (203) | 4 (102) |
| **Part No.** | **L-FJ1008CHNFQ** | **L-FJ604CHNFQ** | **L-FJ606CHNFQ** | **L-FJ806CHNFQ** | **L-FJ1210CHNFQ** | **L-FJ606CHNFQX** |
| **Accessories** | | | | | | |
| Mounting panel | L-MPL108CS | L-MPL64CS | L-MPL66CS | L-MPL86CS | L-MPL1210CS | L-MPL64CS |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Height** inches (mm) | 8 (191) | 10 (244) | 18 (445) | 15 (394) | 12 (295) | 14 (344) |
| **Width** inches (mm) | 6 (139) | 8 (189) | 16 (393) | 14 (343) | 9 (238) | 11 (289) |
| **Depth** inches (mm) | 6 (158) | 6 (158) | 6 (158) | 6 (159) | 7 (168) | 7 (168) |
| Mounting center height inches (mm)* | 7 (171) | 9 (226) | 17 (425) | 15 (371) | 11 (273) | 13 (324) |
| Mounting center width inches (mm)* | 2 (51) | 4 (102) | 12 (305) | 10 (254) | 6 (152) | 8 (203) |
| **Part No.** | **L-FJ604CHNFQX** | **L-FJ806CHNFQX** | **L-FJ1614CHNFQ** | **L-FJ1412CHNFQ** | **L-FJ1008CHNFQX** | **L-FJ1210CHNFQX** |
| **Accessories** | | | | | | |
| Mounting panel | L-MPL64CS | L-MPL86CS | L-MPL1614CS | L-MPL1412CS | L-MPL108CS | L-MPL1210CS |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Height** inches (mm) | 16 (394) | 18 (445) | 22 (559) | 20 (498) | 20 (498) | 22 (559) |
| **Width** inches (mm) | 13 (340) | 15 (392) | 18 (449) | 18 (444) | 18 (444) | 18 (446) |
| **Depth** inches (mm) | 8 (195) | 8 (196) | 9 (224) | 9 (224) | 11 (270) | 11 (270) |
| Mounting center height inches (mm)* | 15 (371) | 17 (425) | 21 (540) | 19 (480) | 19 (480) | 21 (540) |
| Mounting center width inches (mm)* | 10 (254) | 12 (305) | 10 (254) | 12 (305) | 12 (305) | 10 (254) |
| **Part No.** | **L-FJ1412CHNFQX** | **L-FJ1614CHNFQX** | **L-FJ2016CHNFQ** | **L-FJ1816CHNFQ** | **L-FJ1816CHNFQX** | **L-FJ2016CHNFQX** |
| **Accessories** | | | | | | |
| Mounting panel | L-MPL1412CS | L-MPL1614CS | L-MPLJ2016CS | L-MPL1816CS | L-MPL1816CS | L-MPLJ2016CS |

* Center to center distance between wallmount holes.

Inch and pound measurements are rounded to the nearest whole number.

# Flush Viewing Window - Junction Box

## Depth: 4 - 9" (108 - 224 mm), Height: 10 - 22" (244 - 559 mm)

**Protection Ratings:**
UL Type 1, 12, 4X, 6P (except for L-FJ1816CHNFQW, L-FJ2016CHNFQW is not UL Type 6P)
UL/cUL, CSA

UL file: E170282

**Configuration:**
Scratch and abrasion resistant UVA acrylic flush viewing window
Quick-release clamps with secure loop for padlock provisions (padlock not included)
Can be lifted and released with ease
180° door opening
Foamed-in-place polyurethane gasketing

**For additional technical information, please visit www.rittal-corp.com**

| **Height** inches (mm) | PU | 12 (295) | 10 (244) | 14 (344) | 16 (394) |
|---|---|---|---|---|---|
| **Width** inches (mm) | | 9 (239) | 8 (191) | 11 (290) | 14 (343) |
| **Depth** inches (mm) | | 4 (108) | 5 (120) | 5 (132) | 6 (159) |
| Mounting center height inches (mm)* | | 11 (273) | 9 (226) | 13 (324) | 15 (371) |
| Mounting center width inches (mm)* | | 6 (152) | 4 (102) | 8 (203) | 10 (254) |
| **Part No.** | 1 | **L-FJ1008CHNFQW** | **L-FJ806CHNFQW** | **L-FJ1210CHNFQW** | **L-FJ1412CHNFQW** |
| **Accessories** | | | | | |
| Mounting panel | 1 | L-MPL108CS | L-MPL86CS | L-MPL1210CS | L-MPL1412CS |

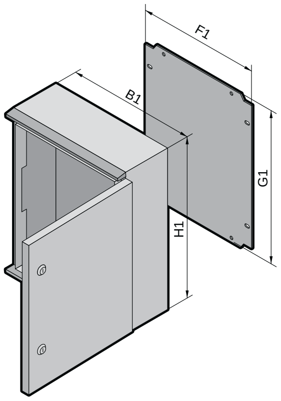
| **Height** inches (mm) | PU | 18 (445) | 20 (498) | 22 (559) |
|---|---|---|---|---|
| **Width** inches (mm) | | 16 (393) | 18 (447) | 18 (449) |
| **Depth** inches (mm) | | 6 (158) | 9 (224) | 9 (224) |
| Mounting center height inches (mm)* | | 17 (425) | 19 (480) | 21 (540) |
| Mounting center width inches (mm)* | | 12 (305) | 12 (305) | 10 (254) |
| **Part No.** | 1 | **L-FJ1614CHNFQW** | **L-FJ1816CHNFQW** | **L-FJ2016CHNFQW** |
| **Accessories** | | | | |
| Mounting panel | 1 | L-MPL1614CS | L-MPL1816CS | L-MPLJ2016CS |

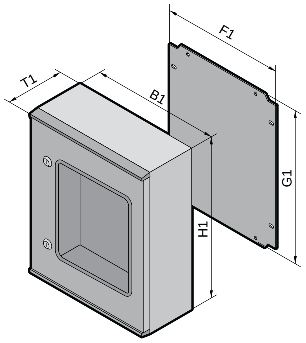
* Center to center distance between wallmount holes.

Inch and pound measurements are rounded to the nearest whole number.

# KS - Wallmount

## Depth: 6 - 8" (150 - 200 mm), Height: 12 - 24" (300 - 600 mm)





**Material:**
Enclosure and door:
Fiberglass-reinforced unsaturated polyester

**Mounting panel:**
Sheet steel

**For KS with viewing window:**
Impact resistant viewing acrylic, 11 ga (3.0 mm) with rubber gasket around the perimeter

**Finish:**
Enclosure and door:
Dyed fiberglass, similar to RAL 7035 (light gray)
Mounting panel: Zinc-plated

**Protection Ratings:**
**KS without viewing window:**
UL Type 4X
(IP 66 to EN 60 529/10.91)

**KS with viewing window:**
UL Type 12
(IP 56 to EN 60 529/10.91)

UL file: E76083

**Maximum ambient temperature:**
-22 - 167° F (-30 - 75° C)

**Configuration:**
Enclosure of unibody construction, right-hand door hinge, door hinge may be changed to the opposite side by rotating the enclosure, mounting panel, foamed-on polyurethane seal around the perimeter of the door, twin seal on the top and bottom edges of the door (integrated rain protection strip), press-fitted C sections at the sides for infinitely variable mounting panel depth adjustment (with bracket 1481.000).

**For additional technical information, please visit www.rittal-corp.com**

**Note:**
Long-term exposure to UV radiation (sunlight) in conjunction with wind and rain may change the finish visually. The fiberglass strands may become visible on unprotected surfaces. This does not impair the protection of the installed electrical components in any way. All other finishes may also be altered by ultraviolet radiation.
If the enclosure cannot be protected from UV radiation with a sun canopy we recommend that the surface be painted with a PUR paint. Older enclosures where the finish already reveals visible fiberglass portions can also be painted after thorough cleaning.
All enclosures can be supplied painted in RAL colors. For outdoor applications, we recommend pale color shades.

| **Height** (H1) inches (mm) | | PU | 12 (300) | 14 (350) | 16 (400) | 16 (400) | 24 (600) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 8 (200) | 10 (250) | 12 (300) | 16 (400) | 16 (400) | |
| **Depth** (T1) inches (mm) | | | 6 (150) | 6 (150) | 8 (200) | 8 (200) | 8 (200) | |
| Panel height (G1) inches (mm) | | | 10 (250) | 12 (300) | 14 (350) | 14 (350) | 22 (550) | |
| Panel width (F1) inches (mm) | | | 6 (145) | 8 (195) | 10 (245) | 14 (345) | 14 (345) | |
| Panel thickness ga (mm) | | | 14 (2.0) | 14 (2.0) | 14 (2.0) | 12 (2.5) | 12 (2.5) | |
| **Part No.** | **Without viewing window** | 1 | **1423.500** | **1432.500** | **1434.500** | **1444.500** | **1446.500** | |
| | **With viewing window** | 1 | **-** | **-** | **-** | **1448.500** | **1449.500** | |
| Door(s) | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight lb (kg) | | | 7 (3) | 9 (4) | 13 (6) | 17 (8) | 25 (12) | |
| **Accessories** | | | | | | | | |
| Mounting panel adjustment bracket | | 4 | 1481.000 | | | | | 232 |
| Wallmount bracket | | 4 | 1483.010 | | | | | 253 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for Type E lock inserts (see page 220) and 1490.010 ergoform lock system (see page 218) | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# KS - Wallmount

## Depth: 8 - 12" (200 - 300 mm), Height: 20 - 39" (500 - 1000 mm)

| **Height** (H1) inches (mm) | | PU | 24 (600) | 20 (500) | 32 (800) | 39 (1000) | 39 (1000) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 24 (600) | 20 (500) | 24 (600) | 32 (800) | 39 (1000) | |
| **Depth** (T1) inches (mm) | | | 8 (200) | 12 (300) | 12 (300) | 12 (300) | 12 (300) | |
| Panel height (G1) inches (mm) | | | 22 (550) | 18 (450) | 30 (750) | 37 (950) | 37 (950) | |
| Panel width (F1) inches (mm) | | | 22 (545) | 16 (417) | 20 (517) | 28 (717) | 36 (917) | |
| Panel thickness ga (mm) | | | 12 (2.5) | 12 (2.5) | 11 (3) | 11 (3) | 11 (3) | |
| **Part No.** | **Without viewing window** | 1 | **1466.500** | **1453.500** | **1468.500** | **1480.500** | **1400.500** | |
| | **With viewing window** | 1 | **1467.500** | **1454.500** | **1469.500** | **1479.500** | **–** | |
| Door(s) | | 1 | 1 | | 1 | 2 | | |
| Weight lb (kg) | | | 35 (16) | 28 (13) | 57 (26) | 86 (39) | 110 (50) | |
| **Accessories** | | | | | | | | |
| Mounting panel adjustment bracket | | 4 | 1481.000 | | | | | 232 |
| Wallmount bracket | | 4 | 1483.010 | | | | | 253 |
| **Lock systems** | | | | | | | | |
| Standard double-bit lock insert may be exchanged for Type E lock inserts (see page 220) and 1490.010 ergoform lock system (see page 218) | | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# Hinged Latch Cover - Wallmount

## Depth: 9 - 18" (224 - 455 mm), Height: 27 - 51" (686 - 1303 mm)

**Protection Ratings:**
UL/cUL, CSA Type 1, 12, 3R, 4X

UL file: E170282

**Configuration:**
Rigid body construction and watertight seal
Foamed-in-place polyurethane gasketing
Integral mounting brackets
Molded in panel mounting inserts
Built-in padlock hasp

**For additional technical information, please visit www.rittal-corp.com**

| **Height** inches (mm) | PU | 33 (849) | 27 (686) | 33 (835) | 27 (686) | 33 (849) | 39 (998) |
|---|---|---|---|---|---|---|---|
| **Width** inches (mm) | | 26 (669) | 21 (539) | 21 (533) | 25 (641) | 26 (669) | 33 (826) |
| **Depth** inches (mm) | | 9 (224) | 10 (251) | 10 (251) | 12 (302) | 12 (304) | 12 (306) |
| Mounting center height inches (mm)* | | 32 (819) | 26 (654) | 32 (806) | 26 (654) | 32 (819) | 38 (969) |
| Mounting center width inches (mm)* | | 19 (470) | 14 (356) | 14 (362) | 18 (454) | 19 (470) | 24 (607) |
| **Part No.** | 1 | **L-FW30H2407** | **L-FW24H2008** | **L-FW30H2008** | **L-FW24H2410** | **L-FW30H2410** | **L-FW36H3010** |
| **Accessories** | | | | | | | |
| Mounting panel | 1 | L-MPL3024CS | L-MPL2420CS | L-MPL3020CS | L-MPL2424CS | L-MPL3024CS | L-MPL3630CS |

| **Height** inches (mm) | PU | 27 (686) | 23 (578) | 39 (998) | 51 (1303) | 51 (1303) |
|---|---|---|---|---|---|---|
| **Width** inches (mm) | | 25 (641) | 17 (428) | 33 (826) | 37 (930) | 37 (930) |
| **Depth** inches (mm) | | 14 (353) | 14 (350) | 14 (357) | 14 (354) | 18 (455) |
| Mounting center height inches (mm)* | | 26 (654) | 22 (546) | 38 (969) | 50 (1273) | 50 (1273) |
| Mounting center width inches (mm)* | | 18 (454) | 10 (257) | 24 (607) | 29 (743) | 29 (743) |
| **Part No.** | 1 | **L-FW24H2412** | **L-FW20H1612** | **L-FW36H3012** | **L-FW48H3612** | **L-FW48H3616** |
| **Accessories** | | | | | | |
| Mounting panel | 1 | L-MPL2424CS | L-MPL2016CS | L-MPL3630CS | L-MPL4836CS | L-MPL4836CS |

* Center to center distance between wallmount holes.

Inch and pound measurements are rounded to the nearest whole number.

# Hinged Latch Cover - Wallmount

## Depth: 10 - 18" (251 - 468 mm), Height: 23 - 51" (578 - 1303 mm)

**Configuration:**
Rainshield top for water protection
Rigid body construction and watertight seal
Integral mounting feet for ease of installation
Molded in panel mounting inserts
Built-in padlock hasp

**Protection Ratings:**
UL/cUL, CSA Type 1, 3R

UL file: E170282

**For additional technical information, please visit www.rittal-corp.com**

| **Height** inches (mm) | PU | 27 (686) | 27 (686) | 33 (849) | 39 (998) |
|---|---|---|---|---|---|
| **Width** inches (mm) | | 21 (539) | 25 (641) | 26 (669) | 33 (826) |
| **Depth** inches (mm) | | 10 (251) | 12 (302) | 12 (304) | 12 (306) |
| Mounting center height inches (mm)* | | 26 (654) | 26 (654) | 32 (819) | 38 (969) |
| Mounting center width inches (mm)* | | 14 (356) | 18 (454) | 19 (470) | 24 (607) |
| **Part No.** | 1 | **L-FW24R2008HCR** | **L-FW24R2410HCR** | **L-FW30R2410HCR** | **L-FW36R3010HCR** |
| **Accessories** | | | | | |
| Mounting panel | 1 | L-MPL2420CS | L-MPL2424CS | L-MPL3024CS | L-MPL3630CS |

| **Height** inches (mm) | PU | 23 (578) | 33 (849) | 39 (998) | 51 (1303) | 51 (1303) |
|---|---|---|---|---|---|---|
| **Width** inches (mm) | | 17 (428) | 26 (669) | 33 (826) | 37 (930) | 37 (930) |
| **Depth** inches (mm) | | 14 (362) | 14 (350) | 14 (357) | 14 (367) | 18 (468) |
| Mounting center height inches (mm)* | | 22 (546) | 32 (819) | 38 (969) | 50 (1273) | 50 (1273) |
| Mounting center width inches (mm)* | | 10 (257) | 19 (470) | 24 (607) | 24 (607) | 24 (607) |
| **Part No.** | 1 | **L-FW20R1612HCR** | **L-FW30R2412HCR** | **L-FW36R3012HCR** | **L-FW48R3612HCR** | **L-FW48R3616HCR** |
| **Accessories** | | | | | | |
| Mounting panel | 1 | L-MPL2016CS | L-MPL3024CS | L-MPL3630CS | L-MPL4836CS | L-MPL4836CS |

* Center to center distance between wallmount holes.

Inch and pound measurements are rounded to the nearest whole number.

# Hinged Latch Cover - Wallmount

## Depth: 14 - 18" (359 - 460 mm), Height: 64" (1613 mm)

**Material:**
Fiberglass reinforced polyester

**Protection Ratings:**
UL Type 1, 12, 3R, 4X
UL/cUL, CSA

UL file: E170282

**Configuration:**
Rigid body construction and water resistant seal
Foamed-in-place polyurethane gasketing
Wallmount or freestanding models available
Molded in panel mounting inserts or studs
Eyebolts and crossbar construction
Built-in padlock hasp
Stainless steel hardware

**For additional technical information, please visit www.rittal-corp.com**

| **Height** inches (mm) | PU | 64 (1613) | 64 (1613) |
|---|---|---|---|
| **Width** inches (mm) | | 37 (927) | 37 (927) |
| **Depth** inches (mm) | | 14 (359) | 18 (460) |
| *Mounting center height inches (mm) | | 62 (1581) | 62 (1581) |
| *Mounting center width inches | | 29 (724) | 29 (724) |
| **Part No.** | 1 | **L-F60H3612** | **L-F60H3616** |
| **Accessories** | | | |
| Mounting panel | 1 | L-MPL6036CS | L-MPL6036CS |

* Center to center distance between wallmounting holes.

Inch and pound measurements are rounded to the nearest whole number.

# Hinged Latch Cover - Freestanding

## Depth: 26" (670 mm), Height: 73" (1842 mm)

**Material:**
Fiberglass reinforced polyester

**Protection Ratings:**
UL Type 1, 12, 3R, 4X
UL/cUL, CSA

UL file: E170282

**Configuration:**
Rigid body construction and water resistant seal
Foamed-in-place polyurethane gasketing
Molded in panel mounting inserts or studs
Eyebolts and crossbar construction
Built-in padlock hasp
Stainless steel hardware

**For additional technical information, please visit www.rittal-corp.com**

| **Height** inches (mm) | PU | 73 (1842) | 73 (1842) |
|---|---|---|---|
| **Width** inches (mm) | | 26 (648) | 50 (1257) |
| **Depth** inches (mm) | | 26 (670) | 26 (670) |
| **Part No.** | 1 | **L-F72H2525FS** | **L-F72H4925FSDD** |
| **Accessories** | | | |
| Mounting panel | 1 | L-MPL7225CS | L-MPL7249CS |

Inch and pound measurements are rounded to the nearest whole number.

# Disconnect - Wallmount

## Depth: 10 - 13" (260 - 338 mm), Height: 19 - 39" (476 - 998 mm)

**Protection Ratings:**
UL Type 1, 12, 3R, 4X
UL/cUL, CSA

UL file: E170282

**Configuration:**
Environmentally sealed disconnect
Foamed-in-place polyurethane gasketing
Rigid body construction and watertight seal
Molded in panel mounting inserts
Integral mounting brackets for ease of installation
Disconnect handle included

**For additional technical information, please visit www.rittal-corp.com**

| **Height** inches (mm) | PU | 19 (476) | 23 (578) | 27 (686) | 33 (849) | 39 (998) |
|---|---|---|---|---|---|---|
| **Width** inches (mm) | | 11 (278) | 17 (428) | 25 (641) | 26 (669) | 33 (826) |
| **Depth** inches (mm) | | 10 (260) | 11 (279) | 13 (335) | 13 (335) | 13 (338) |
| Mounting center height inches (mm)* | | 17 (445) | 21 (546) | 25 (654) | 32 (819) | 38 (969) |
| Mounting center width inches (mm)* | | 7 (178) | 10 (257) | 18 (454) | 19 (470) | 24 (607) |
| **Part No.** | 1 | **L-F16HS10** | **L-F20HS16** | **L-F24HS24** | **L-F30HS24** | **L-F36HS30** |
| **Accessories** | | | | | | |
| Mounting panel | 1 | L-MPL1610CD | L-MPL2016CD | L-MPL2424CD | L-MPL3024CD | L-MPL3630CD |

Disconnect, fuse block, breaker, yoke, switches, or other components are not furnished with enclosure.
* Center to center distance between wallmounting holes.

Inch and pound measurements are rounded to the nearest whole number.

# Operator Interface

# Pushbutton Box

## Understanding the Part Number

**PB** **01** **305** **S** **1** **C**

**PB** – **Product Type**

**01** – **Number of Holes**

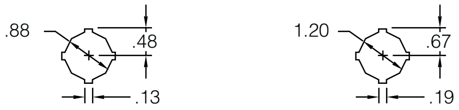
**305** – **Hole Size**
305 = 30.5 mm
225 = 22.5 mm

**S** – **Box Type**
S = Standard
X = Extra Deep
T = Slope Top
L = Slim
C = Continuous Hinge
M = Miniature
E = Extra Large

**1** – **Number of Columns**

**C** – **Material**
C = Carbon Steel
4 = 304 Stainless Steel
6 = 316 Stainless Steel

**Standard 4-Way Keyed Pushbutton Hole Detail**



**Hole Arrangement Centered On Cover**

**Carbon Steel Pushbutton Boxes:** These UL Type boxes are designed to house pushbuttons, selector switches, pilot lights, and help protect such equipment against dirt, dust, water, oil or coolant.

- Accepts 0.8 and 1.2" (22.5 and 30.5 mm) devices
- Available in sizes from a single position to 42 hole positions.

**Designed For Versatility:** The standard holes in these boxes accept all brands of 0.8 and 1.2" (22.5 and 30.5 mm), 4-way, oil-tight pushbuttons, switches and pilot lights. Several of these enclosures can be mounted onto a Rittal column and base for use as an operator station. Additionally, external mounting brackets and captive, plated cover screws make installation quick and easy.

**Technical Specifications:**

- Enclosures and covers are made from 14-gauge carbon steel for strength and durability
- Interior and exterior finish is a polyester-urethane powder coat over phosphatized surface, color is RAL 7035 (light gray)

**Protection Ratings:**
UL Type 12, 13, 4
UL/cUL
UL file: E118617

For Hole Seals see page 200.

**For additional technical information, please visit www.rittal-corp.com**

**Carbon Steel – Standard**

**Hole Size 30.5 mm**

| Description | Part No. |
|---|---|
| 1 Hole | **PB01305S1C** |
| 2 Hole | **PB02305S1C** |
| 3 Hole | **PB03305S1C** |
| 4 Hole | **PB04305S1C** |
| 4 Hole | **PB04305S2C** |
| 5 Hole | **PB05305S1C** |
| 6 Hole | **PB06305S2C** |
| 6 Hole | **PB06305S1C** |
| 8 Hole | **PB08305S1C** |
| 9 Hole | **PB09305S3C** |
| 10 Hole | **PB10305S1C** |
| 12 Hole | **PB12305S3C** |
| 16 Hole | **PB16305S4C** |

**Carbon Steel – Slim**

**Hole Size 30.5 mm**

| Description | Part No. |
|---|---|
| 1 Hole | **PB01305L1C** |
| 2 Hole | **PB02305L1C** |
| 3 Hole | **PB03305L1C** |
| 4 Hole | **PB04305L1C** |
| 5 Hole | **PB05305L1C** |
| 6 Hole | **PB06305L1C** |

**Carbon Steel – Miniature**

**Hole Size 22.5 mm**

| | |
|---|---|
| 1 Hole | **PB01225M1C** |
| 2 Hole | **PB02225M1C** |
| 3 Hole | **PB03225M1C** |
| 4 Hole | **PB04225M1C** |
| 6 Hole | **PB06225M2C** |
| 9 Hole | **PB09225M3C** |

### Carbon Steel – Miniature (continued)

### Hole Size 22.5 mm

| Description | Part No. |
|---|---|
| 12 Hole | **PB12225M3C** |
| 16 Hole | **PB16225M4C** |
| 20 Hole | **PB20225M5C** |
| 25 Hole | **PB25225M5C** |
| 30 Hole | **PB30225M5C** |
| **Carbon Steel – Extra Large*** | |
| **Hole Size 22.5 mm** | |
| 4 Hole | **PB04225E2C** |
| 6 Hole | **PB06225E2C** |
| 9 Hole | **PB09225E3C** |
| 12 Hole | **PB12225E3C** |
| 16 Hole | **PB16225E4C** |
| 20 Hole | **PB20225E4C** |
| 25 Hole | **PB25225E5C** |
| 30 Hole | **PB30225E5C** |
| 36 Hole | **PB36225E6C** |
| 42 Hole | **PB42225E6C** |
| **Carbon Steel – Extra Deep** | |
| **Hole Size 30.5 mm** | |
| 1 Hole | **PB01305X1C** |
| 2 Hole | **PB02305X1C** |
| 3 Hole | **PB03305X1C** |
| 4 Hole | **PB04305X1C** |
| 4 Hole | **PB04305X2C** |
| 6 Hole | **PB06305X2C** |
| 9 Hole | **PB09305X3C** |
| 10 Hole | **PB10305X2C** |
| 12 Hole | **PB12305X3C** |
| 16 Hole | **PB16305X4C** |
| 16 Hole | **PB16305X2C** |
| 20 Hole | **PB20305X4C** |
| 25 Hole | **PB25305X5C** |

### Carbon Steel – Slope Top

### Hole Size 30.5 mm

| Description | Part No. |
|---|---|
| 1 Hole | **PB01305T1C** |
| 2 Hole | **PB02305T2C** |
| 3 Hole | **PB03305T3C** |
| 4 Hole | **PB04305T4C** |
| 4 Hole | **PB04305T2C** |
| 6 Hole | **PB06305T3C** |
| 8 Hole | **PB08305T4C** |
| 9 Hole | **PB09305T3C** |
| 10 Hole | **PB10305T5C** |
| 12 Hole | **PB12305T6C** |
| 12 Hole | **PB12305T3C** |
| 16 Hole | **PB16305T4C** |
| 16 Hole | **PB16305T8C** |
| 20 Hole | **PB20305T5C** |
| 25 Hole | **PB25305T5C** |
| 30 Hole | **PB30305T5C** |

*Carbon Steel Extra Large PB enclosures have a continuous hinge cover and include a galvanized mounting panel (2 mm thick, 14-gauge). All other PB enclosures on these pages use a screw-cover and do not contain a mounting panel.

# Pushbutton Box

## Understanding the Part Number

**PB** 01 305 S 1 C

**PB** – **Product Type**

**01** – **Number of Holes**

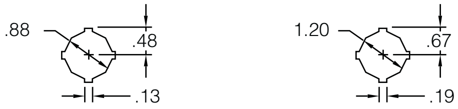
**305** – **Hole Size**
305 = 30.5 mm
225 = 22.5 mm

**S** – **Box Type**
S = Standard
X = Extra Deep
T = Slope Top
L = Slim
C = Continuous Hinge
M = Miniature
E = Extra Large

**1** – **Number of Columns**

**C** – **Material**
C = Carbon Steel
4 = 304 Stainless Steel
6 = 316 Stainless Steel

**Standard 4-Way Keyed Pushbutton Hole Detail**



**Hole Arrangement Centered On Cover**

**Stainless Steel Pushbutton Boxes:**
These UL Type boxes are designed to house pushbuttons, selector switches, pilot lights, and help protect such equipment against dirt, dust, water, oil or coolant.

- Accepts 0.9 and 1.2" (22.5 and 30.5 mm) devices
- Available in sizes from a single position to 42 hole positions

**Rugged And Versatile:**
The standard holes in these boxes accept all brands of 0.9 or 1.2" (22.5 and 30.5 mm), 4-way, oil-tight pushbuttons, switches and pilot lights. Several of these enclosures can be mounted onto a Rittal column and base for use as an operator station. Additionally, external mounting brackets and captive, stainless steel cover screws make installation quick and easy.

**Technical Specifications:**

- Enclosures and covers are made from 14-gauge Type 304 and 316L stainless steel
- Interior and exterior surfaces have a #4 brushed finish

**Protection Ratings:**
UL Type 12, 13, 4 & 4X

UL/cUL

UL file: E118617

For Hole Seals see page 200.

**For additional technical information, please visit www.rittal-corp.com**

| **Stainless Steel Type 304 – Standard** | |
|---|---|
| **Hole Size 30.5 mm** | |
| **Description** | **Part No.** |
| 1 Hole | **PB01305S14** |
| 2 Hole | **PB02305S14** |
| 3 Hole | **PB03305S14** |
| 4 Hole | **PB04305S14** |
| 4 Hole | **PB04305S24** |
| 5 Hole | **PB05305S14** |
| 6 Hole | **PB06305S24** |
| 9 Hole | **PB09305S34** |
| 12 Hole | **PB12305S34** |
| **Stainless Steel Type 304 – Slim/Miniature** | |
| **Hole Size 22.5/30.5 mm** | |
| 1 Hole | **PB01305L14** |
| 1 Hole | **PB01225M14** |
| 2 Hole | **PB02305L14** |
| 2 Hole | **PB02225M14** |
| 3 Hole | **PB03225M14** |

| **Stainless Steel Type 304 – Slim/Miniature (cont.)** | |
|---|---|
| **Hole Size 22.5 mm** | |
| **Description** | **Part No.** |
| 4 Hole | **PB04225M14** |
| 6 Hole | **PB06225M24** |
| 9 Hole | **PB09225M34** |
| 12 Hole | **PB12225M34** |
| **Stainless Steel Type 304 – Extra Deep** | |
| **Hole Size 30.5 mm** | |
| 1 Hole | **PB01305X14** |
| 2 Hole | **PB02305X14** |
| 3 Hole | **PB03305X14** |
| 4 Hole | **PB04305X14** |
| 4 Hole | **PB04305X24** |
| 6 Hole | **PB06305X24** |
| 9 Hole | **PB09305X34** |
| 10 Hole | **PB10305X24** |
| 12 Hole | **PB12305X34** |

| Stainless Steel Type 304 #4 Brushed Finish – Extra Deep (continued) | |
|---|---|
| **Hole Size 30.5 mm** | |
| **Description** | **Part No.** |
| 16 Hole | **PB16305X44** |
| 16 Hole | **PB16305X24** |
| 20 Hole | **PB20305X44** |
| 25 Hole | **PB25305X54** |
| **Stainless Steel Type 316L #4 Brushed Finish – Standard** | |
| **Hole Size 30.5 mm** | |
| 1 Hole | **PB01305S16** |
| 2 Hole | **PB02305S16** |
| 3 Hole | **PB03305S16** |
| 4 Hole | **PB04305S16** |
| 4 Hole | **PB04305S26** |
| 5 Hole | **PB05305S16** |
| 6 Hole | **PB06305S26** |
| 9 Hole | **PB09305S36** |
| 12 Hole | **PB12305S36** |
| **Stainless Steel Type 316L #4 Brushed Finish – Miniature** | |
| **Hole Size 22.5 mm** | |
| 1 Hole | **PB01225M16** |
| 2 Hole | **PB02225M16** |
| 3 Hole | **PB03225M16** |
| 4 Hole | **PB04225M16** |
| 6 Hole | **PB06225M26** |
| 9 Hole | **PB09225M36** |
| 12 Hole | **PB12225M36** |

| Stainless Steel Type 316L #4 Brushed Finish – Extra Deep | |
|---|---|
| **Hole Size 30.5 mm** | |
| **Description** | **Part No.** |
| 1 Hole | **PB01305X16** |
| 2 Hole | **PB02305X16** |
| 3 Hole | **PB03305X16** |
| 4 Hole | **PB04305X16** |
| 4 Hole | **PB04305X26** |
| 6 Hole | **PB06305X26** |
| 9 Hole | **PB09305X36** |
| 10 Hole | **PB10305X26** |
| 12 Hole | **PB12305X36** |
| 16 Hole | **PB16305X46** |
| 16 Hole | **PB16305X26** |
| 20 Hole | **PB20305X46** |
| 25 Hole | **PB25305X56** |

# Pushbutton Box

## Depth: 3 - 4" (80 - 99 mm), Height: 7 - 14" (168 - 350 mm)

**Fiberglass Pushbutton Boxes:**
Lift-off cover
Recessed captive stainless steel screws to hold cover
Notched key hole design
Metal grounding strap provided
Foamed-in-place polyurethane gasketing

**Protection Ratings:**
UL Type 1, 12, 4X, 6P
UL/cUL and CSA

UL file: E170282

**For additional technical information, please visit www.rittal-corp.com**

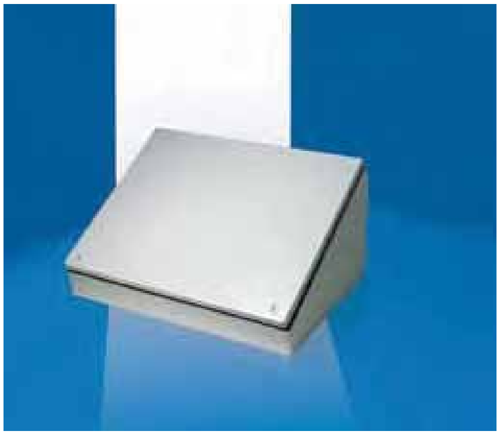
| **Height** inches (mm) | | 14 (350) | 7 (168) | 7 (168) | 7 (168) | 9 (226) | 11 (283) | Page |
|---|---|---|---|---|---|---|---|---|
| **Width** inches (mm) | | 4 (92) | 4 (97) | 4 (97) | 4 (97) | 4 (97) | 4 (97) | |
| **Depth** inches (mm) | | 3 (80) | 4 (99) | 4 (99) | 4 (99) | 4 (99) | 4 (99) | |
| **Part No.** | **30.5 mm** | **L-F5PB** | **L-F1PB** | **L-F2PB** | **-** | **L-F3PB** | **L-F4PB** | |
| | **25.5 mm** | **-** | **L-F1PBGM** | **L-F2PBGM** | **L-F3PBGM** | **L-F4PBGM** | **L-F5PBGM** | |
| Weight lb (kg) | | 2 (0.9) | 2 (0.9) | 2 (0.9) | 2 (0.9) | 2 (0.9) | 2 (0.9) | |

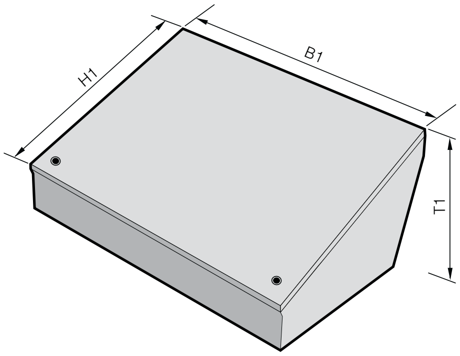
| **Accessories** | | | |
|---|---|---|---|
| Oiltight hole seals | 30.5 mm | OHSMPB6 | 200 |
| | 25.5 mm | OHSSPB6 | 200 |
| External mounting brackets | | L-FIMTGFTKIT | |

Inch and pound measurements are rounded to the nearest whole number.

# Consolet

## Depth: 7 - 13" (180 - 332 mm), Height: 8 - 20" (203 - 508 mm)





**Material:**
Sheet steel
Enclosure: 14 ga (2 mm)
Door: 14 ga (2 mm)

**Finish:**
Enclosure and door:
Dipcoat-primed,
powder coated textured RAL
7035 (light gray)

**Protection Ratings:**
UL Type 12/13
(IP 55 to EN 60 529)
UL/cUL

UL file: 118617

**Configuration:**
Hinged screw cover,
foamed-in-place gasketing,
control panel slants 30 or 60°

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | | PU | 8 (203) | 8 (203) | 8 (203) | 8 (203) | 12 (305) | 12 (305) |
|---|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 8 (203) | 12 (305) | 16 (406) | 20 (508) | 12 (305) | 16 (406) |
| **Depth** (T1) inches (mm) | | | 7 (180) | 7 (180) | 7 (180) | 7 (180) | 9 (231) | 9 (231) |
| **Part No.** | | 1 | **C080807HC** | **C081207HC** | **C081607HC** | **C082007HC** | **C121209HC** | **C121609HC** |
| Weight lb (kg) | | | 8 (3.5) | 10 (4.7) | 13 (5.8) | 15 (7.0) | 14 (6.5) | 18 (8.0) |
| **Accessories** | | | | | | | | |
| Base | 18 x 18 x 1 (457 x 457 x 25) | 1 | C18SBASEC | | | | | |
| Column | 4 x 4 x 35 (102 x 102 x 889) | 1 | C44SCOLC | | | | | |

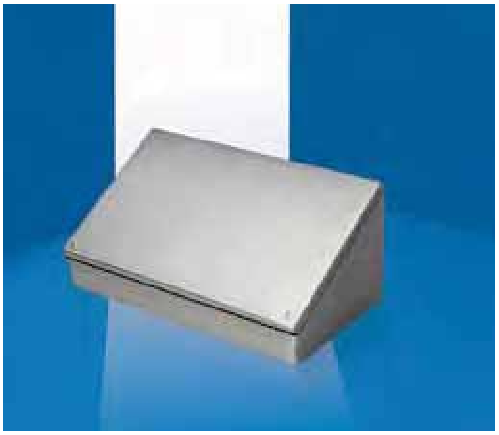
| **Height** (H1) inches (mm) | | PU | 12 (305) | 12 (305) | 16 (406) | 16 (406) | 16 (406) |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 20 (508) | 24 (610) | 16 (406) | 20 (508) | 24 (610) |
| **Depth** (T1) inches (mm) | | | 9 (231) | 9 (231) | 11 (282) | 11 (282) | 11 (282) |
| **Part No.** | | 1 | **C122009HC** | **C122409HC** | **C161611HC** | **C162011HC** | **C162411HC** |
| Weight lb (kg) | | | 21 (9.6) | 24 (11.1) | 23 (10.4) | 27 (12.3) | 32 (14.3) |
| **Accessories** | | | | | | | |
| Base | 18 x 18 x 1 (457 x 457 x 25) | 1 | C18SBASEC | - | C18SBASEC | - | |
| | 24 x 24 x 1 (610 x 610 x 25) | 1 | - | C24SBASEC | - | C24SBASEC | |
| Column | 4 x 4 x 35 (102 x 102 x 889) | 1 | C44SCOLC | - | C44SCOLC | - | |
| | 6 x 6 x 35 (152 x 152 x 889) | 1 | - | C66SCOLC | - | C66SCOLC | |

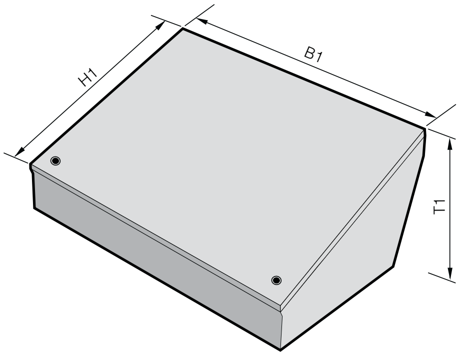
| **Height** (H1) inches (mm) | | PU | 16 (406) | 16 (406) | 20 (508) | 20 (508) | 20 (508) |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 30 (762) | 36 (914) | 20 (508) | 24 (610) | 30 (762) |
| **Depth** (T1) inches (mm) | | | 11 (282) | 11 (282) | 13 (332) | 13 (332) | 13 (332) |
| **Part No.** | | 1 | **C163011HC** | **C163611HC** | **C202013HC** | **C202413HC** | **C203013HC** |
| Weight lb (kg) | | | 38 (17.0) | 44 (19.9) | 34 (15.2) | 34 (17.5) | 46 (20.9) |
| **Accessories** | | | | | | | |
| Base | 24 x 24 x 1 (610 x 610 x 25) | 1 | C24SBASEC | | | | |
| Column | 6 x 6 x 35 (152 x 152 x 889) | 1 | C66SCOLC | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# Consolet

## Depth: 7 - 13" (180 - 332 mm), Height: 8 - 20" (203 - 508 mm)





**Material:**
Type 304 stainless steel
Enclosure: 14 ga (2 mm)
Door: 14 ga (2 mm)

**Finish:**
Enclosure and door: #4 Brushed

**Protection Ratings:**
UL Type 12/13
(IP 55 to EN 60 529)
UL/cUL

UL file: 118617

**Configuration:**
Hinged screw cover, foamed-in-place gasketing, control panel slants 30 or 60°

**For additional technical information, please visit www.rittal-corp.com**

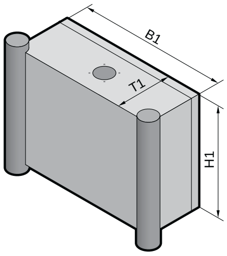
| **Height** (H1) inches (mm) | PU | 8 (203) | 8 (203) | 8 (203) | 8 (203) | 12 (305) | 12 (305) |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 8 (203) | 12 (305) | 16 (406) | 20 (508) | 12 (305) | 16 (406) |
| **Depth** (T1) inches (mm) | | 7 (180) | 7 (180) | 7 (180) | 7 (180) | 9 (231) | 9 (231) |
| **Part No.** | 1 | **C080807H4** | **C081207H4** | **C081607H4** | **C082007H4** | **C121209H4** | **C121609H4** |
| Weight lb (kg) | | 8 (3.5) | 10 (4.7) | 13 (5.8) | 15 (7.0) | 14 (6.5) | 18 (8.0) |
| **Accessories** | | | | | | | |
| Base 18 x 18 x 1 (457 x 457 x 25) | 1 | C18SBASE4 | | | | | |
| Column 4 x 4 x 35 (102 x 102 x 889) | 1 | C44SCOL4 | | | | | |

| **Height** (H1) inches (mm) | PU | 12 (305) | 12 (305) | 16 (406) | 16 (406) | 16 (406) |
|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 20 (508) | 24 (610) | 16 (406) | 20 (508) | 24 (610) |
| **Depth** (T1) inches (mm) | | 9 (231) | 9 (231) | 11 (282) | 11 (282) | 11 (282) |
| **Part No.** | 1 | **C122009H4** | **C122409H4** | **C161611H4** | **C162011H4** | **C162411H4** |
| Weight lb (kg) | | 21 (9.6) | 24 (11.1) | 23 (10.4) | 27 (12.3) | 32 (14.3) |
| **Accessories** | | | | | | |
| Base 18 x 18 x 1 (457 x 457 x 25) | 1 | C18SBASE4 | - | C18SBASE4 | - | |
| 24 x 24 x 1 (610 x 610 x 25) | 1 | - | C24SBASE4 | - | C24SBASE4 | |
| Column 4 x 4 x 35 (102 x 102 x 889) | 1 | C44SCOL4 | - | C44SCOL4 | - | |
| 6 x 6 x 35 (152 x 152 x 889) | 1 | - | C66SCOL4 | - | C66SCOL4 | |

| **Height** (H1) inches (mm) | PU | 16 (406) | 16 (406) | 20 (508) | 20 (508) | 20 (508) |
|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 30 (762) | 36 (914) | 20 (508) | 24 (610) | 30 (762) |
| **Depth** (T1) inches (mm) | | 11 (282) | 11 (282) | 13 (332) | 13 (332) | 13 (332) |
| **Part No.** | 1 | **C163011H4** | **C163611H4** | **C202013H4** | **C202413H4** | **C203013H4** |
| Weight lb (kg) | | 38 (17.0) | 44 (19.9) | 34 (15.2) | 39 (17.5) | 46 (20.9) |
| **Accessories** | | | | | | |
| Base 24 x 24 x 1 (610 x 610 x 25) | 1 | C24SBASE4 | | | | |
| Column 6 x 6 x 35 (152 x 152 x 889) | 1 | C66SCOL4 | | | | |

Inch and pound measurements are rounded to the nearest whole number.

## Depth: 6 - 8" (155 - 210 mm), Height: 8 - 20" (200 - 500 mm)



**Material/Finish**
Enclosure and door:
Sheet steel, dipcoat-primed and powder coated in textured RAL 7035 (light gray)
Handle strips:
Aluminum in RAL 7030
Cover caps:
Plastic, RAL 7030

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529)
UL, CSA

UL file: E76083

**Configuration:**
Enclosure with cut-out and reinforcement, prepared for support arm system CP-L Ø 5" (130 mm) and with mounting angles spot welded at the sides. Front with maximum cut-out, covered with easily machinable 11 ga. (3 mm) aluminum front panel and side handle strips with end caps.
Rear with door.

**Note:**
The support arm connection and door hinge may be swapped over by rotating the enclosure.

**For additional technical information, please visit www.rittal-corp.com**

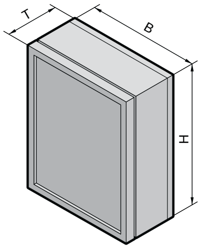
| **Height** (H1) inches (mm) | PU | 8 (200) | 12 (300) | 15 (380) | 15 (380) | 20 (500) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | 12 (300) | 15 (380) | 15 (380) | 24 (600) | 20 (500) | |
| **Depth** (T1) inches (mm) | | 6 (155) | 8 (210) | 8 (210) | 8 (210) | 8 (210) | |
| **Part No.** | 1 | **6540.200**[1] | **6531.200** | **6530.200** | **6533.200** | **6532.200** | |
| Weight lb (kg) | | 11 (4.9) | 20 (9.3) | 22 (10.2) | 32 (14.6) | 34 (15.4) | |
| **Accessories** | | | | | | | |
| Support strips for attaching to the mounting angles of the side panel | 20 | – | | 4594.000 | | 4309.000 | 236 |
| **Lock systems** | | | | | | | |
| Standard double-bit lock insert may be exchanged for 1" (27 mm) lock inserts, type A, lock cylinder, plastic handles and T-handles, type B, see page 218. | | | | | | | |

[1] Support arm connection and door hinge at the bottom.

Inch and pound measurements are rounded to the nearest whole number.

# Command Panel

## Depth: 10" (249 mm), Height: 15 - 24" (380 - 600 mm)



**Material/Finish**
Enclosure and door:
Sheet steel, dipcoat-primed and powder coated in textured RAL 7035 (light gray)
Frame and front panel:
Aluminum, natural-anodized.

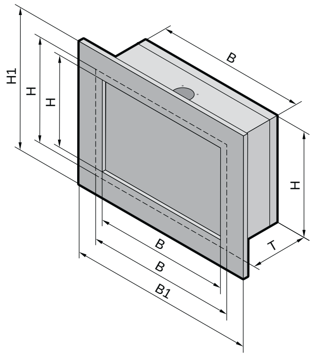
**Protection Ratings:**
NEMA 12
(IP 54 to EN 60 529)

**Configuration:**
Based on AE Wallmount, with display panel front. Enclosure without support arm connection with mounting angles spot-welded at the sides. With maximum cut-out at the front and fitted, easily machinable 11 ga (3 mm) front panel with aluminum frame, with right hand hinge, screw-fastened from the inside. Rear door, right hand hinge, with two cam locks (6442.500 has only one lock).

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H) inches (mm) | PU | 15 (380) | 20 (500) | 24 (600) | 24 (600) | Page |
|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | 15 (380) | 20 (500) | 15 (380) | 24 (600) | |
| **Depth** (T) inches (mm) | | 10 (249) | 10 (249) | 10 (249) | 10 (249) | |
| **Part No.** | 1 | **6442.500** | **6552.500** | **6462.500** | **6662.500** | |
| Weight lb (kg) | | 21 (9.5) | 40 (18) | 29 (13.4) | 43 (19.6) | |
| **Accessories** | | | | | | |
| Reinforcement plate with CP-L support arm cut-out | 1 | 6143.210 | 6143.210 | 6143.210 | – | 165 |
| Enclosure reinforcement with CP-L support arm cut-out | 1 | – | – | – | 6503.000 | 165 |
| **Lock systems** | | | | | | |
| Standard double-bit lock insert may be exchanged for 1" (27 mm) lock inserts, type A, lock cylinder, plastic handles and T-handles, type B, see page 218. | | | | | | |
| To order Command Panels in RAL 7032, please add extension .200 to the Part No. Delivery times available upon request. | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.



**Height dimensions:**
H = enclosure height
H1 = H + 79 mm, overall height
H2 = H – 42 mm, clearance between the front frames
H3 = H – 5 mm, front panel height

**Width dimensions:**
B = enclosure width
B1 = B + 79 mm, overall width
B2 = B – 42 mm, clearance between the front frames
B3 = B – 5 mm, front panel width

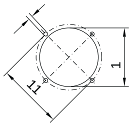
**Depth dimensions:**
T = enclosure depth

**Material/Finish**
Enclosure and door:
Sheet steel, dipcoat-primed and powder coated in textured RAL 7035 (light gray)
Front plate:
11 ga (3 mm) aluminum, natural-anodized

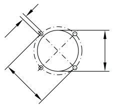
Frame section:
Aluminum, powder coated in RAL 7035 (light gray)
Frame corner pieces:
Die-cast zinc, powder coated in RAL 7035 (light gray)

**Protection Ratings:**
NEMA 12 (IP 56 to EN 60 529)

**Configuration:**
Enclosure with integral roof or base reinforcement and connection for CP-L or CP-XL support arm systems. Aluminum front plate and front frame supplied loose, door at rear. Upon request, the AE compact enclosure can be equipped with a stylish VIP 6000 frame mounted on the rear panel. The large AE door provides easy access for servicing.



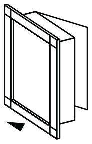
Support arm connection for CP-XL systems



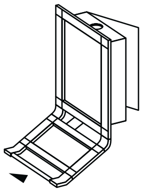
Support arm cut-out for Ø 5" (130 mm) CP-L system

| Command Panel with wide VIP 6000 frame in the dimensions of AE compact enclosures or in custom dimensions | Basic Part No. | Design code number | | |
|---|---|---|---|---|
| | **6541.009** | | | |
| **Support arm connection for support arm system** | | | | |
| Without | 6541.009 | **0** | | |
| CP-XL top | 6541.009 | **1** | | |
| CP-XL bottom | 6541.009 | **2** | | |
| CP-L, Ø 5" (130 mm), top | 6541.009 | **3** | | |
| CP-L, Ø 5" (130 mm), bottom | 6541.009 | **4** | | |
| **Cable tube connection** | | | | |
| Without | 6541.009 | X | **0** | |
| Bottom | 6541.009 | X | **1** | |
| **Dimensions** | | | | |
| Custom sizes inches (mm) | 6541.009 | X | X | H x W x D |
| Like AE compact enclosure (see above) | 6541.009 | X | X | AE Part No. |
| **Lock systems** | | | | |
| Standard double-bit lock insert may be exchanged for 1" (27 mm) lock inserts, type A, lock cylinder, plastic handles and T-handles, type B, see page 218. | | | | |

| | | | | |
|---|---|---|---|---|
| **Order example** | 6541.009 | **4** | **1** | H x W x D |



Order example
Part No. 6541.009
Design code numbers:
- Support arm connection CP-L, Ø 5" (130 mm), bottom (4)
- Cable tube connection at the bottom (1)
- Custom dimensions: H x W x D: 14 x 21 x 14" (352 x 537 x 350 mm)

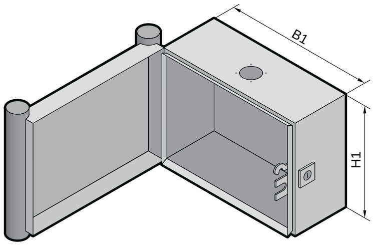


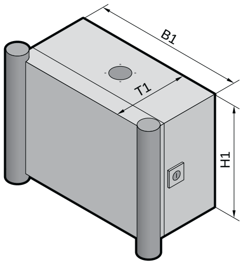
Additional mounting of a VIP 6000 keyboard housing is possible via the design code number (see page 109).
The front panel width refers to an enclosure width B – 2" (54 mm) and is achieved via a frame connector, which is included with the supply of the keyboard housing.

Inch and pound measurements are rounded to the nearest whole number.

# Command Panel

## Depth: 6" (150 mm), Height: 12 - 16" (300 - 400 mm)





**Material:**
Enclosure and door:
Stainless steel
Handle strips: Plastic-approved for use with foodstuffs, similar to RAL 5002 (ultramarine blue).

**Finish:**
Brushed, grain 240

**Protection Ratings:**
NEMA 4X
(IP 66 to EN 60 529/09.2000)

**Configuration:**
Based on AE Wallmount, housing with door. Enclosure sealed all-round, with cut-out and reinforcement for support arm system, fastener with guide plate. Door with sealing frame and side handle strips. The support arm connection and door hinge may be swapped over by rotating the enclosure.
Mounting panel provisions included. Use mounting panel from AE enclosure of corresponding size (see “Matching mounting panel” in table below).

**Rittal Service:**
Separate keyboard housing, other sizes, modified support arm connection or door hinge, drilled holes and cut-outs for switches and operator panels available on request.

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H1) inches (mm) | | PU | 12 (300) | 12 (300) | 16 (400) | 16 (400) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 12 (300) | 16 (400) | 16 (400) | 24 (600) | |
| **Depth** (T1) inches (mm) | | | 6 (150) | 6 (150) | 6 (150) | 6 (150) | |
| **Part No.** | **Type 304** | 1 | **6535.010** | **6536.010** | **6538.010** | **6539.010** | |
| | **Type 316L** | 1 | **6535.510** | **6536.510** | **6538.510** | **6539.510** | |
| Weight lb (kg) | | | 14 (6.3) | 17 (7.5) | 19 (8.8) | 27 (12.1) | |
| **Accessories** | | | | | | | |
| Matching mounting panel | AE type | | 1033.500 | 1030.500 | 1380.500 | 1039.500 | 13 |
| Support rails[1] | **Part No.** | 10 | 2316.000 | 2317.000 | 2317.000 | 2319.000 | – |
| **Lock systems** | | | | | | | |
| Standard double-bit lock insert may be exchanged for 2" (41 mm) lock inserts, plastic handle and T handle, type C, see www.rittal-corp.com. | | | | | | | |

[1] Only with vertical attachment of punched rail 0.9" x 0.9" (23 x 23 mm), see page 237.

Inch and pound measurements are rounded to the nearest whole number.

# Comfort Panel

## Features

The Rittal Comfort Panel builds upon the successful Command Panel platform with lightweight aluminum construction, enhanced flexibility and available design options that allow you to configure the ideal operator interface enclosure for your application.

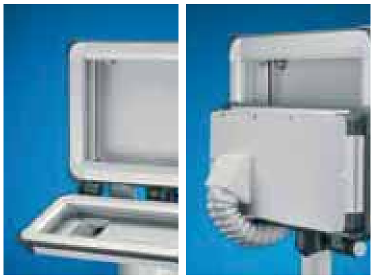
### Design and protection

**Soft profile**
minimizes the risk of injury.

**Design profile**
Variant for individual design according to customer requirements.

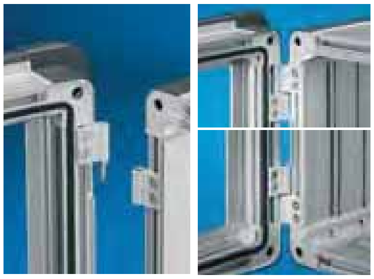
**Designer handle**
as an accessory.

### Perfect in every detail



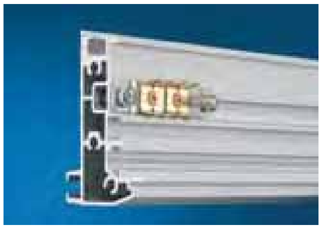
**Keyboard housing**
vertically hinged via frame connector. Also suitable for retrofitting.

**Flat front frame section**
Optimum access to integral drives.



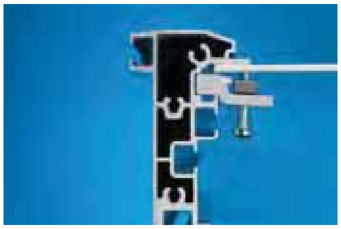
**Hinges on the outside –**
Two functions supported:
1. Front frame for removal in case of servicing.
2. Door protection due to symmetrical arrangement of the hinges.

### Assembly made easy



**Uniform mounting channels**
External and internal mounting of accessories with easy grounding.

Plate or mousepad support with the use of spring nuts in the mounting channels.



**Front panel installation** from the rear via screw/grub screw.

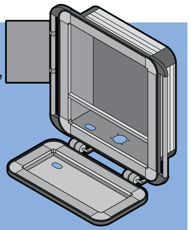
# Comfort Panel

## Configuration Examples

### Customized Protection

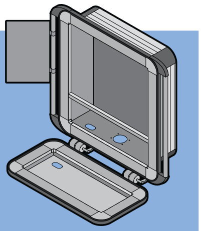
The Rittal Comfort Panel provides the levels of customization needed for you to create a solution that delivers the protection you need for your equipment in a user-friendly way that can help to improve productivity.

**Example A**



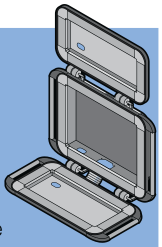
- Operator housing, 6.0" (152 mm) deep
- Keyboard housing, 1.4" (35 mm) deep, with cable tube
- Frame connector, adjustable
- Handle set, vertical and display board with wall bracket
- With horizontal cross member
- Support arm connection CP-L bottom, Ø 5.1" (130 mm)

**Example B**



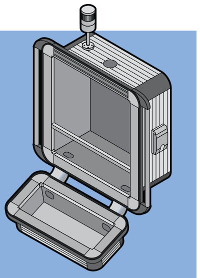
- Operator housing, 7.5" (191 mm) deep
- With spacing panel and built-in trim panel
- Clipboard
- Utility bars, vertically hinged
- With horizontal cross member
- Support arm connection CP-L top, 5.1" (130 mm) diameter

**Example C**



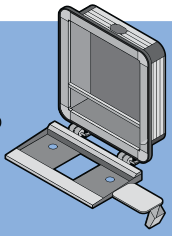
- Operator housing, 2.9" (74 mm) deep
- Handle set, vertical
- Keyboard housing top, 1.4" (35 mm) deep, frame connector adjustable
- Keyboard housing bottom,1.4" (35 mm) deep, frame connector adjustable
- Cable tube, flexible
- Support arm connection CP-L, ▭ 4.7 x 2.6" (120 x 65 mm), top and bottom with cover plate supplied loose

**Example D**



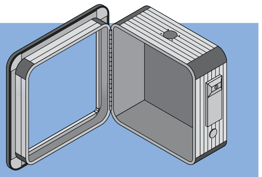
- Operator housing, 9.1" (230 mm) deep
- Keyboard housing, 4.4" (113 mm) deep
- Design strip, top
- Enclosure duct connector
- Handle set, vertical
- Interface flap
- Signal light
- Support arm connection, CP-L top, Ø 5.1" (130 mm)

**Example E**



- Operator housing, 5.1" (113 mm) deep
- Support for keyboards with cable entry grommet
- Frame connector, adjustable
- With cross member
- Support for mousepad, vertically hinged
- Holder for mouse
- Support arm connection CP-L, ▭ 4.7 x 2.6" (120 x 65 mm), top

**Example F**



- Operator housing, 4.7" (119 mm) deep, hinged
- Interface flap
- USB extension
- Support arm connection, CP-L top, Ø 5.1" (130 mm)

## Installation Criteria

### 1. Panel dimensions

**For operator and keyboard housings**
For your own sizes/variants, please state the height (H) x width (B) x depth (T) of the control components and the manufacturer/Part on the enquiry/order form.

### Checking the installation criteria

Subject to compliance with criteria 1 to 4, front panels/panels may be mounted directly with the appropriate mounting kits. If these criteria are not met, installation via an adaptor panel is possible – see 2.2, version code 3.

**B** **Width of front panel**
Different widths of operating and keyboard housings are possible (whereby only the keyboard housing may be wider than the operating housing). For minimum size, refer to minimum front panel width under technical details, see www.rittal-corp.com.

**H** **Height of front panel**

**Note:**
Load information for installed equipment, see www.rittal-corp.com.

**1** **Distance from center**
of hole/bolt to outer edge of front panel 0.3 to 0.6" (8.5 to 15 mm)

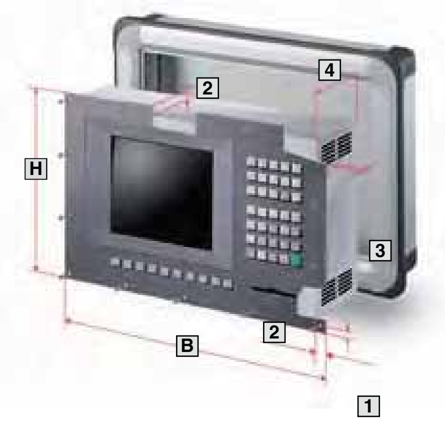
**2** **Front panel projection**
– on sides with attachment, see drawing below
– from seal at least 0.3" (6.5 mm)

**3** **Front panel thickness**

**4** **Installation depth**
Operator housing =
2.9, 4.5, 6.0, 7.5[1], 1.2[1],10.6[1], 2.1[1],13.7[1], 15.2[1],16.7[1], 18.3"[1]
(74, 113, 152, 191, 230, 269, 308, 347, 386, 425, 464 mm)
Keyboard housing =
1.4, 2.9, 4.5" (35, 74, 113 mm)

[1] Also with hinged front frames. For versions with a hinged rear panel and cam lock, the maximum installation depth is reduced by 1.1" (27 mm) in the vicinity of the lock.

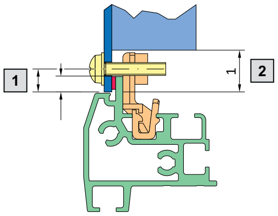
**A.**



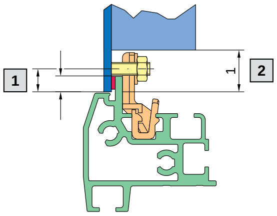
**B.**

## A. Front panel/Panel installation:

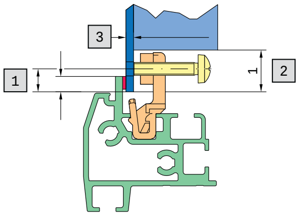
**From the front via screw**



**From the front via studs**



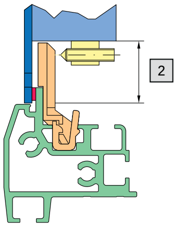
**From the front via screw/grub screw**



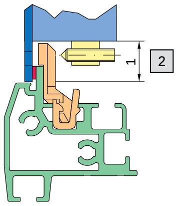
🟩 Frame section
🟦 Front panel
🟥 Seal
🟨 Screw clamp
🟧 Retaining claw
🟦 Enclosure/controller

## B. Front panel/Panel installation from the front via screw clamp:

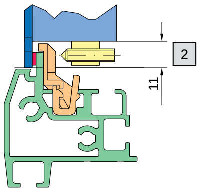
**Long retaining claw**
e.g., Siemens Sinumerik OP 012[2]



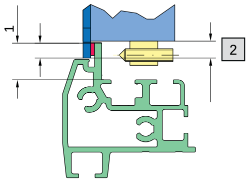
**Medium retaining claw**
e.g., Siemens Simatic MP 377 12" keys, horizontal[2]



**Short retaining claw**
e.g., Siemens Simatic MP 377 12" keys, vertical[2]
B&R Automation Panel, Panel PC[2]



**Without retaining claw**
e.g., Phoenix Contact PPC 5115



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[2] For more panels suitable for installation, see www.rittal-corp.com.

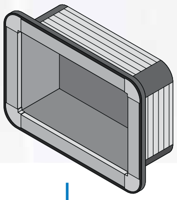
## Selection: Operator Housing/Keyboard Housing

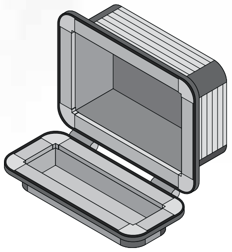
### Configuring your ideal enclosure

**We need the following three pieces of information process your order:**

- Part No.: 6372.009
- The dimensions and number of panels/front panels to be installed in the keyboard/Operator housing
- Design code number

| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
|---|---|---|---|---|---|---|---|
| ▨ | | | | | | | |





### Operator/keyboard housing

**Part No.**

6372.009

**Material:**
Enclosure:
Extruded Aluminum section
Corner pieces:
Die-cast zinc
Corner protectors:
Plastic, self-extinguishing

**Finish:**
Enclosure: Natural-anodized
Corner pieces:
Powder coated in finely-textured RAL 7035 (light gray)
Corner protectors:
Dyed similar to RAL 7024 (graphite gray)

**Protection Ratings:**
NEMA 4
(IP 65 to EN 60 529/09.2000)
(if the openings in the enclosure are covered or sealed in accordance with the protection ratings).

## Selection: Operator Housing/Keyboard Housing

### 2.1 Installation depth

**Note:**
Support arm connection see 2.5. Drawing view from above. Right hand hinge is also available.

**For additional technical information, please visit www.rittal-corp.com**

[1] Secured = As delivered

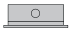
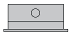
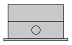
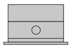
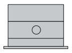
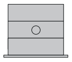
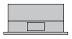
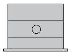
Removable = Replace C with D in the code number

[2] Prepared for support arm connection ▭ CP-L 5 x 3" (120 x 65 mm)

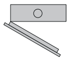
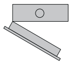
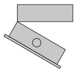
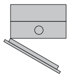
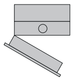
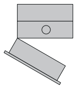
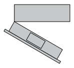
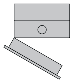
**One-piece**

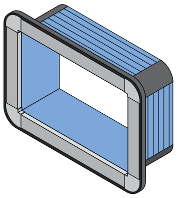
| Installation depth | | Code |
|---|---|---|
| Installation depth 2.9" (74 mm)[2] | | 2.1<br>A.1 |
| Installation depth 6.0" (152 mm) | | 2.1<br>A.2 |
| Installation depth 4.4" (113 mm)[2] | | 2.1<br>A.3 |

**Screw-fastened**

| Installation depth | | Code |
|---|---|---|
| Installation depth 7.5" (191 mm) |  | 2.1<br>B.1 |
| Installation depth 9.1" (230 mm) |  | 2.1<br>B.2 |
| Installation depth 12.1" (308 mm) |  | 2.1<br>B.3 |
| Installation depth 13.7" (347 mm) |  | 2.1<br>B.4 |
| Installation depth 15.2" (386 mm) |  | 2.1<br>B.5 |
| Installation depth 18.3" (464 mm) |  | 2.1<br>B.6 |
| Installation depth 10.1" (269 mm)[2] |  | 2.1<br>B.7 |
| Installation depth 16.7" (425 mm) |  | 2.1<br>B.8 |

**Hinged**[1]

| Installation depth | | Code |
|---|---|---|
| Installation depth 7.5" (191 mm) |  | 2.1<br>C.1 |
| Installation depth 9.1" (230 mm) |  | 2.1<br>C.2 |
| Installation depth 12.1" (308 mm) |  | 2.1<br>C.3 |
| Installation depth 13.7" (347 mm) |  | 2.1<br>C.4 |
| Installation depth 15.2" (386 mm) |  | 2.1<br>C.5 |
| Installation depth 18.3" (464 mm) |  | 2.1<br>C.6 |
| Installation depth 10.1" (269 mm)[2] |  | 2.1<br>C.7 |
| Installation depth 16.7" (425 mm) |  | 2.1<br>C.8 |

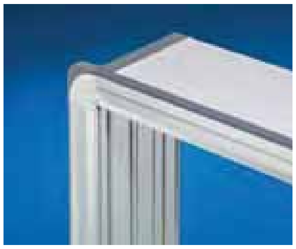


| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
|---|---|---|---|---|---|---|---|
| ■ | | | | | | | |

## 2.2 Front design

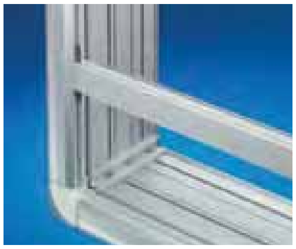
**Also required:**
Mounting kit for installing front panels, operator panels and keyboards in operator and keyboard housings.

**For additional technical information, please visit www.rittal-corp.com**



**Without cross member**

2.2
0

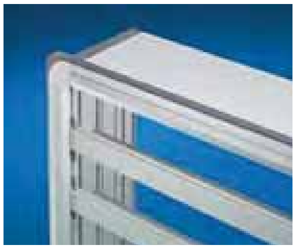


**With one cross member**

2.2
1

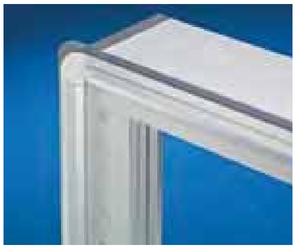
For horizontal and/or vertical division of the Command Panel front. With mounting channel on both sides to accommodate mounting kits, see www.rittal-corp.com.

**Material:**
Extruded Aluminum section, natural-anodized



**With two cross members**

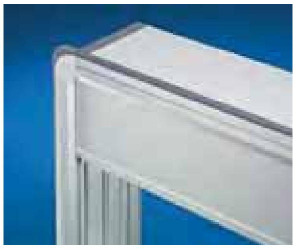
2.2
2



**With an adaptor plate** (to specification)

2.2
3

**Material thickness:**
0.1" (3 mm) Aluminum, natural-anodized. Please specify the dimensions for the front panel and the desired holes and cut-outs.

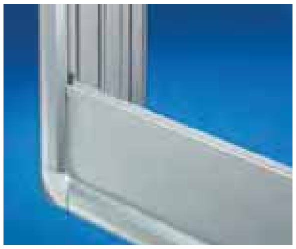


**With spacing and built-in trim panel, at the top**

2.2
4

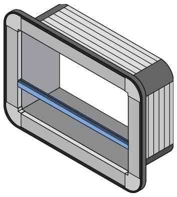
For additional space for cable entry and for installing switches/indicator lights, emergency off/key switches, CD-ROM/disk drives, interfaces, interface flaps, etc.

**Material:**
Extruded Aluminum section, natural-anodized



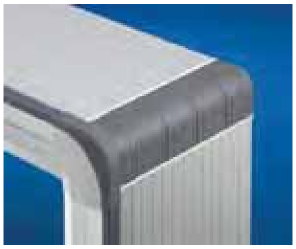
**With spacing and built-in trim panel, at the bottom**

2.2
5



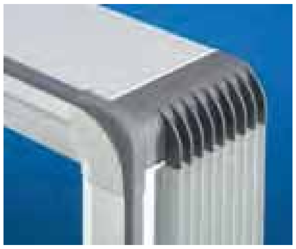
| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
|---|---|---|---|---|---|---|---|
|  | ▨ |  |  |  |  |  |  |

## 2.3 Cooling fins



**No fins**

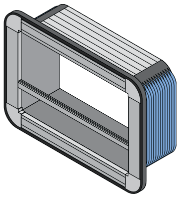
2.3
0



**Fins on sides**

2.3
1

To boost the dissipated heat loss with an installation depth of 2.9" (74 mm) or more. Guidelines for dissipatable heat loss, see www.rittal-corp.com.



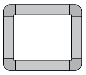
| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
|---|---|---|---|---|---|---|---|
|  |  | ▨ |  |  |  |  |  |

## 2.4 Design strip

**Material:**
Transparent plastic

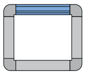
**Note:**
Label/color-coded strips:
Your dimensions:
max. H = 0.6" (14.5 mm)
and thickness = 0.03" (0.8 mm)

**For additional technical information, please visit www.rittal-corp.com**



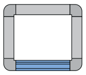
**Without**

2.4
0



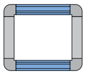
**Top**

2.4
1



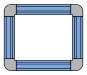
**Bottom**

2.4
2



**Top and Bottom**

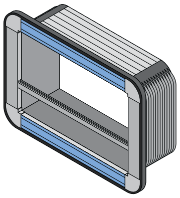
2.4
3



**All-round**
Without cooling fins

With cooling fins for 7.5 and 13.7" (191 and 347 mm) installation depths

2.4
4



| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

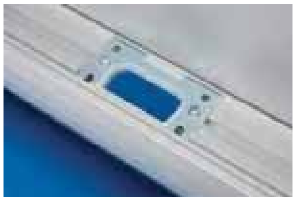
## 2.5 Support arm and pedestal connection

Users may choose from 4 different support arm systems, see page 118-159, and a variety of stand systems, see page 160-164.

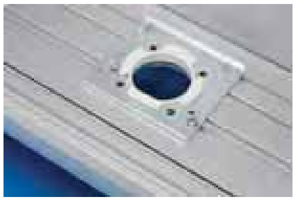
[1] Including a cover plate for sealing the unused section.

[2] Support arm connection

**Without support arm connection**



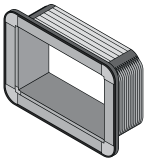
**CP-L ▭ 4.7 x 2.6" (120 x 65 mm)**
Installation depth 2.9, 4.4, 10.6" (74, 113, 269 mm) CP-L, see page 132/1.4 CP-S, see page 120/3.3



**CP-L Ø 5.1" (130 mm)**
Installation depth 6.0" (152 mm) and above
CP-L, see page 132/1.1
CP-XL, see page 150/1.3

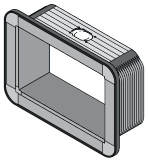
**Without connection**

2.5
0



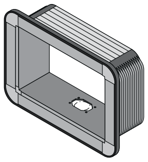
**Connection top**

2.5
1



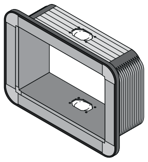
**Connection bottom**

2.5
2



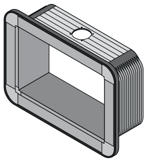
**Connection top and bottom[1]**

2.5
3



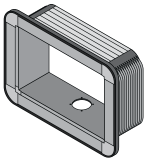
**Connection top[2]**

2.5
4



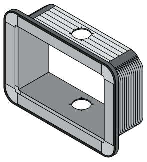
**Connection bottom**

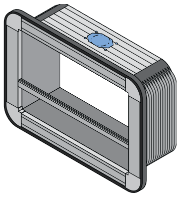
2.5
5



**Connection top and bottom[1] [2]**

2.5
6





| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

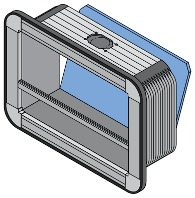
## Selection: Operator Housing/Keyboard Housing

### 2.6 Rear panel

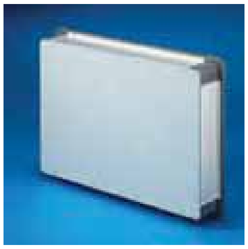
**Material:**
Aluminum, natural-anodized.

[1] When installing the pull-out keyboard 6002.1X0 (see www.rittal-corp.com) in the Comfort Panel, design variant 2.1, no. A2 the cooling fins and screw channels protruding 0.4" (11 mm) into the enclosure may be milled off in this area. Please state the installation position when ordering.

[2] On the longest side (right/bottom), cam with double-bit insert, may be exchanged for lock inserts 1.6" (41 mm), type C, plastic handles and T handles, type C, see www.rittal-corp.com. The max. installation depth in the vicinity of the lock is reduced by 1.1" (27 mm).

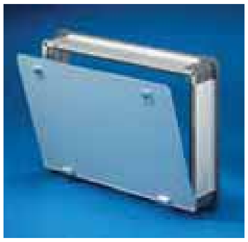


| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
|---|---|---|---|---|---|---|---|
| | | | | | ▨ | | |



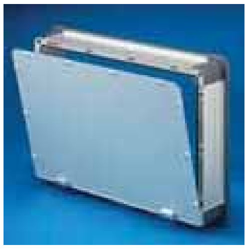
**Screw-fastened**

2.6
1



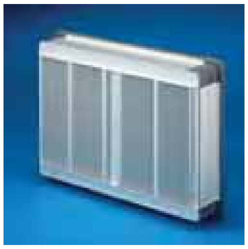
**Hinged on the longest edge[2]**

2.6
2



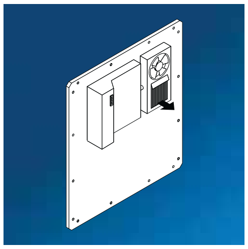
**Hinged with quick-release fasteners**

2.6
3



**Rear cooling panel, modular[1]**
Increases the dissipation of heat loss from the enclosure by approx. 10 %.

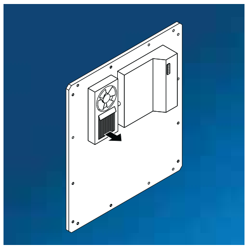
2.6
4



**Screw-fastened with built-in VIP small cooling unit, condenser assembly at the top left**
Recommended Operator housing design (see 2.1 from an installation depth of 7.5" [191 mm])

2.6
5

**Material:**
Aluminum, natural-anodized



**Condenser assembly, top right**

2.6
6

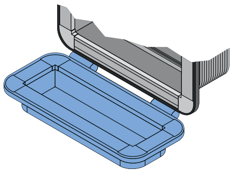
### 2.7 Keyboard housing

Width independent from the Operator housing. The swivel bracket is adjustable from +88° to -136° from the horizontal in 8° increments.

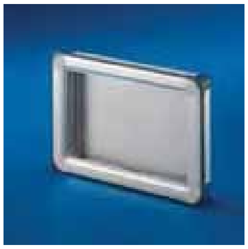
[1] Mounting kit for installing front panels, operator panels and keyboards in operator and keyboard housings.

[2] Alternatively, the bars may be inserted to the rear with the support arm connection at the bottom.

[3] By labeling with index A: Rigid connection via enclosure duct connector (6006.000). With the support arm connection at the bottom, this must be checked in each individual case.

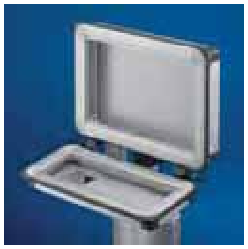


| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
|---|---|---|---|---|---|---|---|
| | | | | | | ▨ | |



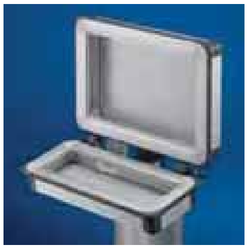
**Without keyboard housing**

2.7
0



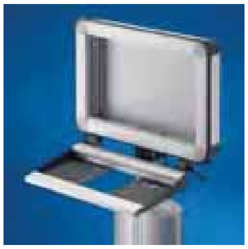
**With keyboard housing and cable tube**
Installation depth 1.4" (35 mm)[1]

2.7
1



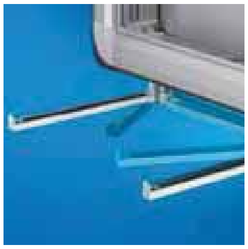
**With keyboard housing and cable tube**
Installation depth 2.9" (74 mm)[1] [3]

2.7
2



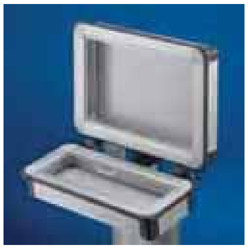
**With support for keyboards**
and cable entry grommet. Specify keyboard dimensions

2.7
3



**Utility bars, vertically hinged**
and cable grommet[2]

2.7
4



2.7
5

## 2.8 Integration of accessories

In addition to the design code, you should also indicate the position or enclose a sketch.

[1] Interface inserts may be found on page 225, these may also be fitted by specifying the Part No. and position.

**Without accessories**

**2.8**
**0**

**Interface flap, single, with plastic flap**[1]
from installation depth 4.4" (113 mm)

**2.8**
**1**

**Interface flap, double, with plastic flap**[1]
only possible in the front panel, spacer and built-in trim panel or rear panel

**2.8**
**2**

**Interface flap, single, with metal flap**[1]
from installation depth 4.4" (113 mm)

**2.8**
**3**

**Interface flap, double, with metal flap**[1]
only possible in the front panel, spacer and built-in trim panel or rear panel

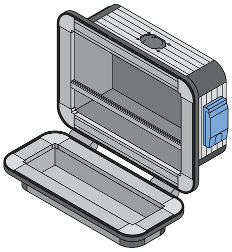
**2.8**
**4**

**USB/RJ 45 extension**
For order information, refer to page 226.

**2.8**
**5**

**Mounting preparations for signal pillars, modular**
Mounting component, Signal pillars, modular, see www-rittal-corp.com.

**2.8**
**6**



| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |

## Selection: Operator Housing/Keyboard Housing

### Example

The picture opposite shows the solution we have chosen, together with its corresponding design code number. The following key explains how the code number in our example is created.

### Operator/ keyboard housing

**Part No.: 6372.009**

**Design code number:**

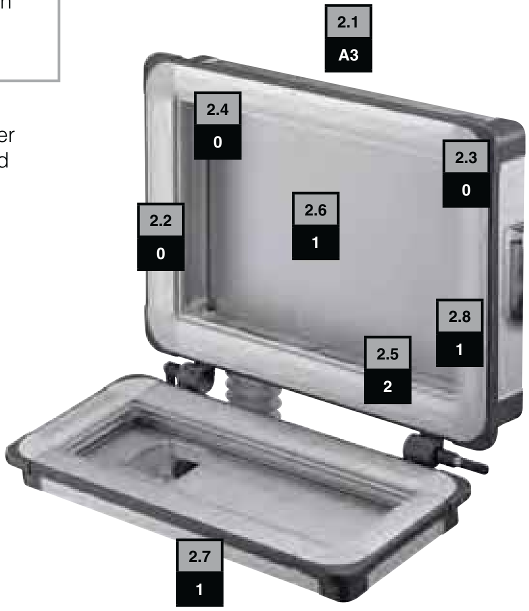
| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
|---|---|---|---|---|---|---|---|
| A3 | 0 | 0 | 0 | 2 | 1 | 1 | 1 |

| | | |
|---|---|---|
| 2.1 | A3 | Operator housing, installation depth 4.5" (113 mm) |
| 2.2 | 0 | Without cross member |
| 2.3 | 0 | No fins |
| 2.4 | 0 | Without design strip |
| 2.5 | 2 | Support arm connection, CP-L ▭ 4.7 x 2.6" (120 x 65 mm), bottom |
| 2.6 | 1 | Rear panel, screw-fastened |
| 2.7 | 1 | With keyboard housing, Installation depth 1.4" (35 mm) |
| 2.8 | 1 | Fitted interface flap |

**We need the following three pieces of information to process your order:**

- Part No.: 6372.009
- The dimensions and number of panels/front panels to be installed in the keyboard/Operator housing
- Design code number

**Note:**
If the design code number does not cover your requirements, please enter an X and enclose a written explanation.



**Rigid keyboard connection**
Selection see design code 2.7.

# Optipanel

## Features

The stylish, customized solution with lightweight aluminum design.

Three installation depths: 2.0, 3.9, 5.9" (50, 100, 150 mm)

Hinged rear panels facilitate easy servicing.

Customized to order or in standard sizes off the shelf.

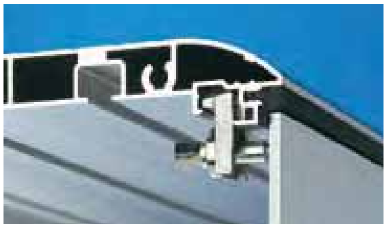
**Property rights:**
German patent no. 41 09 695
European patent no. 0 505 681
with validity for CH, FR, GB, IT
Jap. patent no. 3221506
German patent no. 199 02 174
German registered design
no. 400 02 955

IR reg. des. No. DM/055 168
with validity for CH, FR, IT
US design patent no. D 456,403
European patent no. 1 269 067
with validity for CH, DE, FR, IT

### Always within reach

Tailored precisely to the operator's requirements, various handle sets may be fitted in accordance with ergonomic requirements.

All-round spring groove channels for flexible interior installation and for mounting accessories.



Superior seal helps to achieve Protection Ratings IP 65. For installations flush with the frame section with a front panel thickness of approx. 10 ga (3.5 mm).

### Keyboard housing/rear panels

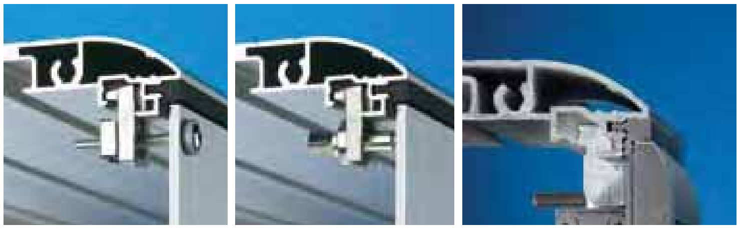
Choose a suitable keyboard housing. There are two installation depths available, along with the keyboard support.

Choose the rear panel:
- Screw-fastened
- Hinged with cam lock

- Hinged with quick-release fasteners

### All-round attachment

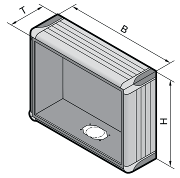
**Every attachment point is accessible on all sides!**

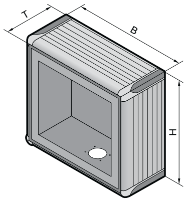


Movable retaining claws create sufficient play to accommodate virtually all hole spacings – distance from the panel's outer edge 0.3 – 0.5" (7 – 13 mm). Panels with screw fastening from the front, with studs or screw clamps, may be used.

# Optipanel

## Standard Sizes and for Desktop TFT Up to 20.1"





**Material:**
Enclosure:
Extruded Aluminum section
Corner pieces:
Die-cast zinc
Corner protectors:
Plastic, self-extinguishing
Sealing trim:
Flexible plastic section

For 6380.050:
Front panel:
Aluminum, natural-anodized
Viewing window:
Toughened safety glass 0.2" (4 mm)

**Finish:**
Enclosure:
Natural-anodized
Corner pieces:
Powder coated in finely-textured RAL 7035 (light gray)
Corner protectors and sealing trim:
Dyed similar to RAL 7024 (graphite gray)

**Protection Ratings:**
NEMA 4
(IP 65 to EN 60 529/09.2000) (if the openings in the enclosure are covered or sealed in accordance with the Protection Ratings).

**For additional technical information, please visit www.rittal-corp.com**

| To fit front panels1) Width x height inches (mm) | | PU | Standard sizes | | | | Optipanel for desktop TFT up to 20.1" |
|---|---|---|---|---|---|---|---|
| | | | 11 x 9 (270 x 234) | 19 x 12 (482.6 x 310.3) | 17 x 14 (430 x 343) | 19 x 20 (482.6 x 354.8) | – |
| To fit TFT monitor | | | – | – | 6450.010/<br>6450.030/<br>6450.070/<br>6450.120/<br>6450.150 | 6450.020/<br>6450.040/<br>6450.080/<br>6450.130/<br>6450.160 | – |
| **Height** (H) inches (mm) | | | 11 (278) | 14 (354) | 15 (387) | 16 (399) | 19 (484.5) |
| **Width** (B) inches (mm) | | | 12 (314) | 21 (527) | 19 (475) | 21 (527) | 23 (574.5) |
| **Depth** (T) inches (mm) | | | 2 (60) | 4 (110) | 4 (110) | 4 (110) | 6 (160) |
| **Part No.** | | 1 | **6380.100** | **6380.000** | **6380.020** | **6380.040** | **6380.050**7) |
| Rear panel, hinged | Quick-release fastener for screwdriver | | ■ | – | – | – | – |
| | Cam with double-bit insert3) | | – | ■ | ■ | ■ | ■ |
| Support arm connection4) | | | CP-S VESA 755) | CP-L ▭ 4.7 x 2.6" (120 x 65 mm) | CP-L ▭ 4.7 x 2.6" (120 x 65 mm) | CP-L ▭ 4.7 x 2.6" (120 x 65 mm) | CP-L Ø 5.1" (130 mm) |
| Weight lb (kg) | | | 6 (2.8) | 14 (6.2) | 12 (5.28) | 15 (6.6) | 31 (14.2) |

1) Installation criteria required for direct mounting of the panels, see page 96.
2) For depth 2.4" (60 mm) the power pack must be mounted externally for reasons of space, e. g., in IW Station.
3) Standard double-bit lock insert may be exchanged for 1.6" (41 mm) lock inserts, type C, plastic handles and T handles, type C, see www.rittal-corp.com.
4) Support arm connection at the top or bottom, by rotating the enclosure.
5) Additional marked points for drilling holes, for the external mounting of:
Assembly components with drilling pattern to VESA 75 = Enclosure attachment, tiltable 6902.670
Support arm system CP-L, ▭ 4.7 x 2.6" (120 x 65 mm), Support arm system CP-S.
6) Extended delivery times.
7) Screw-fasten the TFT to the mounting panel, slide into the enclosure from behind and secure.

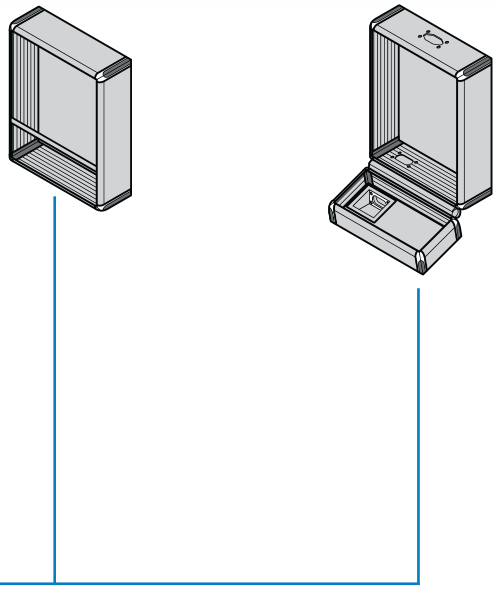
Inch and pound measurements are rounded to the nearest whole number.

## Selection: Operator Housing/Keyboard Housing

## Configuring your ideal enclosure

**We need the following three pieces of information process your order:**

- Part No.: 6382.009
- The dimensions and number of panels/ front panels to be installed in the keyboard/Operator housing
- Design code number



## Operator/keyboard housing

**Part No.**

**6 3 8 2 . 0 0 9**

**Material:**
Enclosure:
Extruded Aluminum section
Corner pieces:
Die-cast zinc
Corner protectors:
Plastic, self-extinguishing
Sealing trim: Flexible plastic section

**Finish:**
Enclosure: Natural-anodized
Corner pieces:
Powder coated in finely-textured RAL 7035 (light gray)
Corner protectors and sealing trim:
Dyed similar to RAL 7024 (graphite gray)

For larger orders, other colors similar to RAL
- 5018 (turquoise)
- 5005 (bright blue)

are also available.

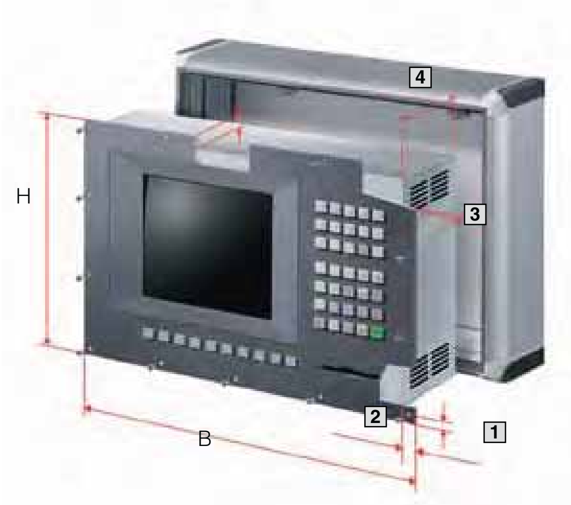
**Protection Ratings:**
NEMA 4 (IP 65 to EN 60 529/09.2000) (if the openings in the enclosure are covered or sealed in accordance with the Protection Ratings).

## Selection: Operator Housing/Keyboard Housing

### 1. Panel dimensions

**1.1 For Operator housings and**
**1.2 For keyboard housings**

On the order form, please state the Height (H) x Width (B) x Depth (T) of the control components and the manufacturer/part. (See installation criteria).



### Checking the installation criteria

Please check whether your operator panel may be installed directly into the Optipanel. Subject to compliance with the criteria, front panels/panels may be mounted directly with the appropriate mounting kits, see www.rittal-corp.com. Otherwise, an adaptor panel will be required, see 2.2, design code 2. The dimensions of the operating and keyboard housing are derived from the dimensions of your panel and the number of cross members.

**Note:**
Different widths of operator and keyboard housings are possible (whereby only the keyboard housing may be wider than the Operator housing). For minimum size, refer to minimum front panel width under technical details, at www.rittal-corp.com.

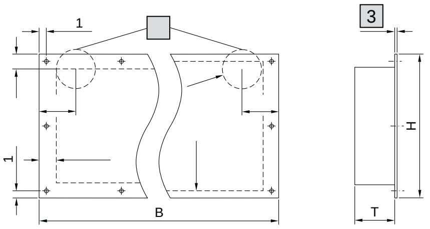
1 **0.3 to 0.5" (7 to 13 mm) edge spacing** of the mounting holes or bolts.

2 **Front panel projection** on sides with mounting holes and bolts at least 0.7" (17 mm), on sides without attachments at least 0.2" (6 mm).

3 **Front panels up to 0.2" (5 mm)** From a thickness of approx. 0.1" (3.5 mm) the front panel is flush with the sealing trim and the enclosure front.

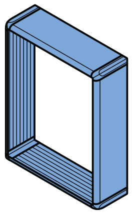
4 **Installation depths:** Operator housing = 2.0, 3.9, 5.9" (50, 100, 150 mm). Keyboard housing = 2.0, 3.9" (50, 100 mm).

5 For versions with a hinged rear panel with cam fastener, the maximum installation depth is reduced by 1.1" (27 mm in the vicinity of the lock).



**For additional technical information, please visit www.rittal-corp.com**

### 2.1 Installation depth



| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 |
|---|---|---|---|---|---|
| | | | | | |

2.0" (50 mm)

| 2.1 |
|---|
| 1 |

3.9" (100 mm)

| 2.1 |
|---|
| 2 |

5.9" (150 mm)

| 2.1 |
|---|
| 3 |

## 2.2 Front design

**Also required:**
Mounting kit for installing front panels, operator panels and keyboards in operator and keyboard housings.

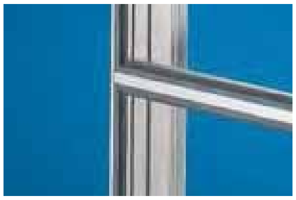
[1] Suitable quantity for sealing the individual separation points. For example: 3 front panels in Operator housing = 2 separation points = 2 cross members/sealing bars included with the supply.
Other combinations available on request.

[2] Screw-fastened from the inside, with cam or l/h hinge on request.

[3] Detailed drawing, see www.rittal-corp.com.

**Without cross member**

2.2
0



**With cross member[1]**
For horizontal and/or vertical division of the Operator housing front.
With mounting channel on both sides to accommodate mounting kits, see www.rittal-corp.com

2.2
1

**Material:**
Extruded Aluminum section, natural-anodized

**With an adaptor plate**
(to specification)

2.2
2

**Material thickness:**
0.1" (3 mm) Aluminum, natural-anodized.

Please specify the dimensions for the front panel and the desired holes and cut-outs.

**With spacing and built-in trim panel[3], at the top**
For additional space for cable entry and for installing switches/indicator lights, emergency off/key switches, CD-ROM/disk drives, interfaces, etc.

2.2
3

**Material:**
Extruded Aluminum section, natural-anodized

**With spacing and built-in trim panel[3], at the bottom***
For additional space for cable entry and for installing switches/indicator lights, emergency off/key switches, CD-ROM/disk drives, interfaces, etc.

2.2
4

**Material:**
Extruded Aluminum section, natural-anodized

**With sealing bar[1]**
For horizontal and/or vertical division of Operator housings.
The "slot-free" division produces a height gain of 0.9" (22 mm).

2.2
5

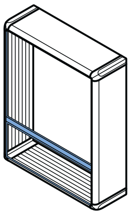
**Material:**
Extruded Aluminum section 0.3 x 0.8" (8 x 20 mm), natural-anodized

**With front panel hinged[2]**
For example, if a disk drive built into the operator panel requires such free access, see www.rittal-corp.com.

2.2
6

**Standard design:**
- Screw-fastened from the outside
- Right hand hinge

**Material:**
Front panel: 0.2" (3 mm) Aluminum, natural-anodized.
Extruded Aluminum section: Natural-anodized



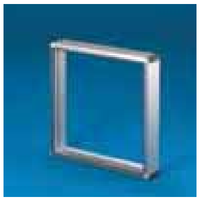
| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 |
|---|---|---|---|---|---|
| | | | | | |

## Selection: Operator Housing/Keyboard Housing

### 2.3 Support arm wall and pedestal connection

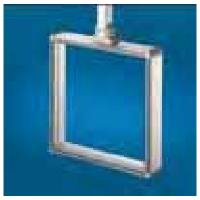
**Also required:**
Support arm components for connection of the Optipanel to the support arm system CP-S[1], CP-L, see page 116.
Stand systems, see page 160-164.

**For additional technical information, please visit www.rittal-corp.com**



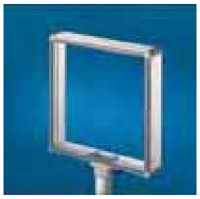
**Without connection**

2.3
0



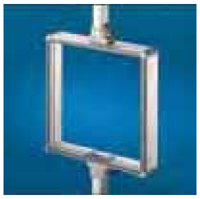
**Connection top[1]**

2.3
1



**Connection bottom[1]**

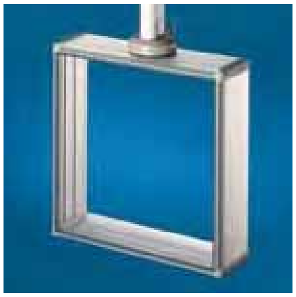
2.3
2



**Connection top and bottom[1]**

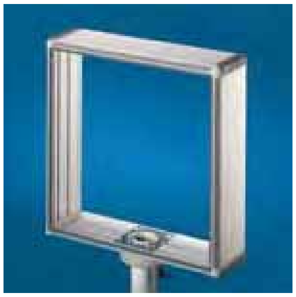
2.3
3

**CP-L ▭ 4.7 x 2.6" (120 x 65 mm) for**
housing coupling 6525.110,
enclosure attachment 6525.610,
housing coupling CP-S, 6501.130
**only applies to installation depth 3.9" (100 mm)**



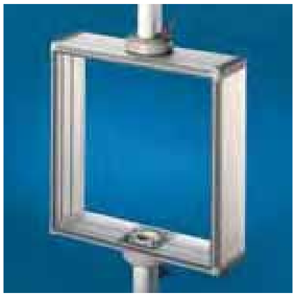
**Connection top[1] [4]**

2.3
4



**Connection bottom[1] [4]**

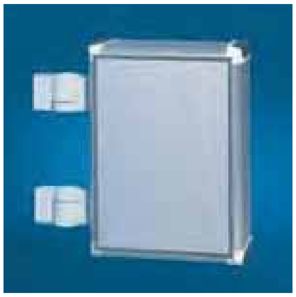
2.3
5



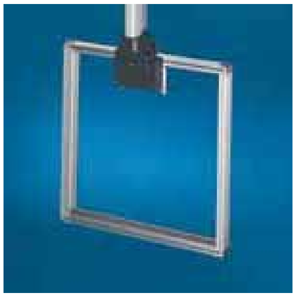
**Connection top and bottom[1] [2] [4]**

2.3
6

**CP-L Ø 5.1" (130 mm) for**
housing coupling 6525.110,
enclosure attachment 6525.610,
angle coupling 6526.010
**only applies to installation depth 5.9" (150 mm)**

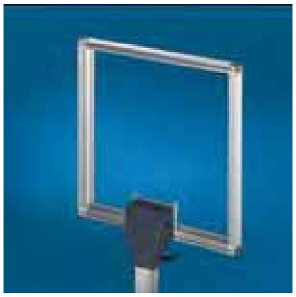


**Note:**
Wall mounting possible: hinged with 6016.200, see www.rittal-corp.com.



**Connection rear, top[3]**

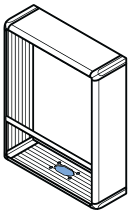
2.3
7



**Connection rear, bottom[3]**

2.3
8

**CP-L ▭ 4.7 x 2.6" (120 x 65 mm) for**
housing coupling 6525.110,
enclosure attachment 6525.610,
enclosure attachment, tilting 6902.640/.670,
housing coupling CP-S, 6501.130
**only applies to installation depth 2.0" (50 mm)**



| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 |
|---|---|---|---|---|---|
|  |  |  |  |  |  |

---

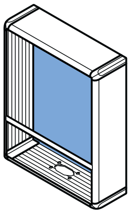
[1] For support arm system CP-S, steel, for installation depth 3.9" (100 mm) and 5.9" (150 mm), please add an S after the design code number.

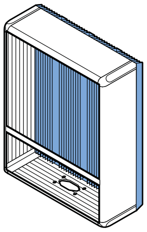
[2] Including a cover plate for sealing the unused section.

[3] Unless otherwise specified, will be supplied in RAL 7024 (graphite gray)

[4] Support arm connection

## 2.4 Rear panels





**Note:**
1) With a support arm connection at the rear, only possible on the side opposite the support arm connection.
2) Standard double-bit lock insert may be exchanged for 1.6" (41 mm) lock inserts, type C, plastic handles and lever handles, type C, see www.rittal-corp.com.
3) With a hinged rear panel, the maximum installation depth in the vicinity of the lock is reduced by 1.1" (27 mm) (see page 96, drawing point "5").

**Rear panel screw-fastened**

**2.4**
**1**

**Rear panel hinged on the longest edge**
Viewed from the rear, hinged on the right or at the bottom1) 2) 3).

**2.4**
**2**

**Example of the versatility of the enclosure: Mounting on doors**
With all operator/keyboard housings, the rear panel may be supplied prepared for external mounting on flat surfaces on request.

**Also required:**
Enclosure duct connector 6006.000, see www.rittal-corp.com. For mounting and cable entry.

**Rear cooling panel, modular**
Increases the dissipation of heat loss from the enclosure by approx. 10%.
Guidelines for dissipatable heat loss, see www.rittal-corp.com.

**2.4**
**3**

**Material:**
Extruded Aluminum section

**Note:**
When installing the pull-out keyboard 6002.110 in an Optipanel, design variant 2.1, no. 3, the cooling fins and screw channels protruding 0.4" (11 mm) into the enclosure may be milled off in this area – please specify when ordering.

**For additional technical information, please visit www.rittal-corp.com**

**Rear panel hinged with quick-release fasteners1)**

**2.4**
**4**

1)

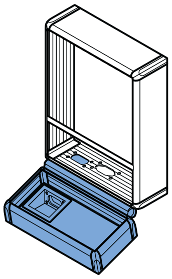
| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 |
|---|---|---|---|---|---|
| | | | | | |

## Selection: Operator Housing/Keyboard Housing

### 2.5 Keyboard housing

**Also required:**
[1] Mounting kit for installing front panels, operator panels and keyboards in operator and keyboard housings.

**For additional technical information, please visit www.rittal-corp.com**



| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 |
|---|---|---|---|---|---|
| | | | | | |

**Without keyboard housing**

2.5
0

**With keyboard housing installation depth 2.0" (50mm)[1]**

2.5
1

**With keyboard housing installation depth 3.9" (100 mm)[1]**

2.5
2

[2] With a support arm connection at the bottom, from depth 5.9" (150 mm), swivelling is only supported in conjunction with enclosure attachment CP-S (6501.070), enclosure attachment CP-L for support arm connection 4.7 x 2.6" (120 x 65 mm) (6525.610). When mounting beneath surfaces, the bars may alternatively be pushed towards the rear.

**With support for keyboards**

2.5
3

**Utility bars, vertically hinged With cable entry grommet[2]**

2.5
4

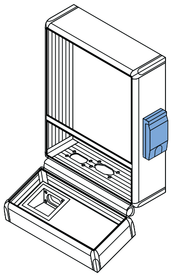
### 2.6 Integration of accessories

In addition to the design code, you should also indicate the position or enclose a sketch.

[1] Interface inserts may be found on page 225, these may also be fitted by specifying the Part No. and position.

**Without accessories**

2.6
0



| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 |
|---|---|---|---|---|---|
| | | | | | |

**Interface flap, single, with plastic flap[1]**
from installation depth of 3.9" (100 mm).

2.6
1

**Interface flap, double, with plastic flap[1]**
only possible in the front panel, spacer and built-in trim panel or rear panel.

2.6
2

**Interface flap, single, with metal flap[1]**
from installation depth of 3.9" (100 mm).

2.6
3

**Interface flap, double, with metal flap[1]**
only possible in the front panel, spacer and built-in trim panel or rear panel.

2.6
4

**USB/RJ 45 extension**
For order information, refer to page 226.

2.6
5

**Mounting preparations for signal pillars**
Mounting component, Signal pillars, modular, see www.rittal-corp.com.

2.6
6

## Selection: Operator Housing/Keyboard Housing

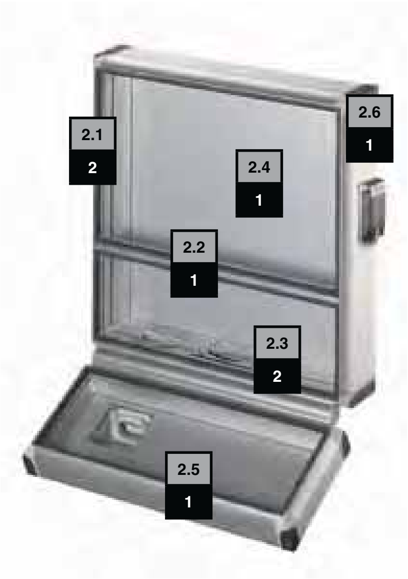
### Example

The picture opposite shows the solution we have chosen, together with its corresponding design code number. The following key explains how the code number in our example is made up.

**We need the following three pieces of information to process your order:**

- Part No.: 6372.009
- The dimensions and number of panels/front panels to be installed in the keyboard/Operator housing
- Design code number

**Note:**
If the design code number does not cover your requirements, please enter an X and enclose a written explanation.



### Operating/ keyboard housing

**Part No.: 6372.009**

**Design code number:**

| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 |
|---|---|---|---|---|---|
| 2 | 1 | 2 | 1 | 1 | 1 |

| | | |
|---|---|---|
| 2.1 | 2 | Operator housing, installation depth 3.9" (100 mm) |
| 2.2 | 1 | With one cross member |
| 2.3 | 2 | Support arm connection, CP-L ▭ 4.7 x 2.6" (120 x 65 mm), bottom |
| 2.4 | 1 | Rear panel, screw fastened |
| 2.5 | 1 | With keyboard housing, Installation depth 2.0" (50 mm) |
| 2.6 | 1 | Fitted interface flap |

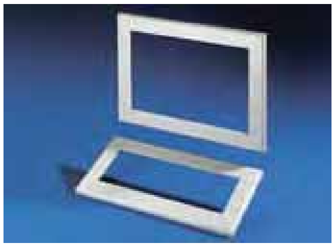
# Command Panel VIP 6000

## Features

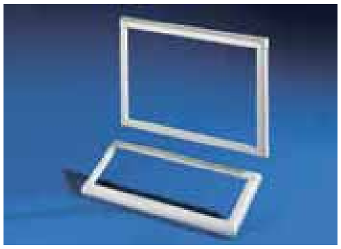
The VIP 6000 is available in three customizable designs that give you the ability to tailor the design of your operator interface enclosure exactly to your requirements.

**Property rights for frames:**
German patent
no. 195 25 8 76
German patent
no. P 41 09 695
European patent no. 0 505 681
with validity for DE, FR, GB, IT
European patent no. 0 839 299
with validity for FR, GB, IT
Jap. patent no. 3199745
Jap. patent no. 3221506
South Korean patent
no. 97-70 77 12
US patent no. 5,921,050
German registered design
no. M 94 02 325
IR reg. design no. DM/053 168
with validity for BE, CH, FR,
IT, NL
Austral. reg. des. no. 125352
Japan. reg. design no. 983 783
Austrian registered design
no. 17467
Swedish registered design
no. 58 996
UK reg. des. no. 2047055
US design patent
no. des. 375,726
Brazilian design pattern
no. DI 5500 709-0
Approvals,
see www.rittal-corp.com.

### Customized design lines



**Wide frame**
A frame and handle in one; the ideal choice where enclosures with fins all round are used for better heat dissipation.



**Narrow frame**
An eye-catching design with its stylish lines, particularly for small enclosures

### Enclosure/rear panels

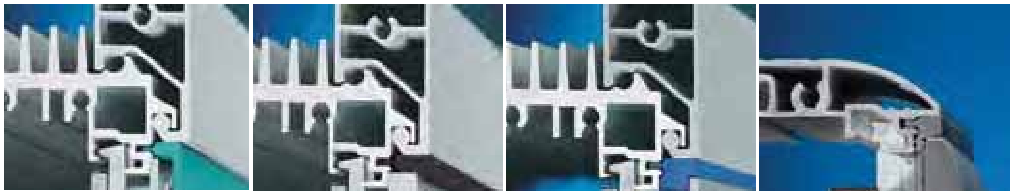
There is a choice of five installation depths – 6.1, 7.3, 11.6, 12.9 and 17.2" (155, 185, 295, 328 and 438 mm). Either screw fastened or hinged, depending on requirements.

Because it is equipped with cooling fins, the VIP 6000 enclosure often eliminates the need for active cooling components.

Screw-fastened or vertically/horizontally hinged – choose the rear panel to suit your servicing requirements.

Each attachment point all round is achieved with sliding retaining claws.

### Attachment/trim



The screw heads disappear stylishly beneath the cover trim (A). Front panels with threaded bolts may also be combined with the end trim (B) or spacer trim (C). Panels with screw clamp (D) are mounted with the end trim.

## Configuration Examples

### Explore the Possibilities

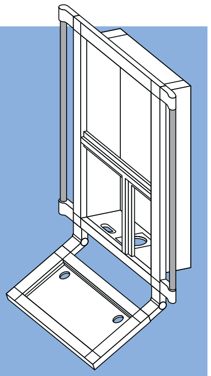
Choose from a variety of different styles and configurations and add your unique customizations to design the perfect enclosure.

### Wide Frame

Attractive and functional, a wide frame is important for enclosures that incorporate cooling fins.

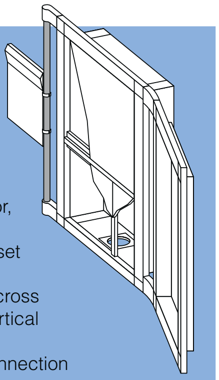
**Example A**

- Operator housing, 6.1" (155 mm) deep
- Support for keyboards with cable entry grommet
- Frame connector, adjustable
- Vertical handle set
- With vertical and horizontal cross member
- Support arm connection at the bottom



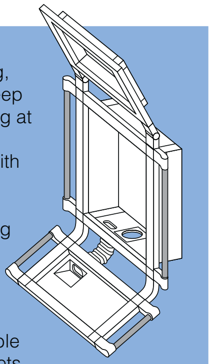
**Example B**

- Operator housing, 6.1" (155 mm) deep
- Side keyboard housing, 1.7" (44 mm) deep
- Frame connector, rigid
- Vertical handle set with clipboard
- With horizontal cross member and vertical sealing bar
- Support arm connection at the bottom



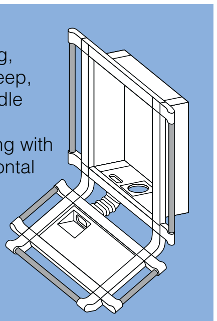
**Example C**

- Operator housing, 6.1" (155 mm) deep
- Keyboard housing at top, 1.7" (44 mm) deep, with frame connector, adjustable
- Keyboard housing at bottom, 1.7" (44 mm) deep, with frame connector, rigid
- Cable tube, flexible
- Vertical handle sets
- Support arm connection at the bottom



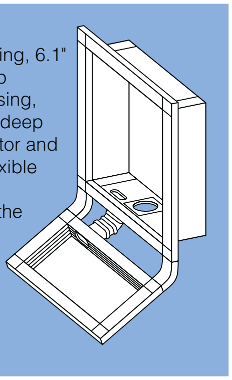
**Example D**

- Operator housing, 6.1" (155 mm) deep, with vertical handle set
- Keyboard housing with handle set horizontal and vertical
- Cable tube, flexible
- Support arm connection at the bottom



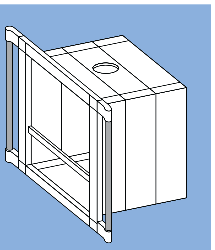
**Example E**

- Operator housing, 6.1" (155 mm) deep
- Keyboard housing, 4.1" (105 mm) deep
- Frame connector and cable tube, flexible
- Support arm connection at the bottom



**Example F**

- Operator housing, 17.2" (438 mm) deep, e. g., for color screen
- With vertical handle set
- With horizontal sealing bar
- Support arm connection, top



# Command Panel VIP 6000

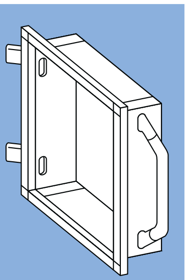
## Configuration Examples

### Narrow Frame

Aesthetic design suitable for smaller enclosures and those without cooling fins.

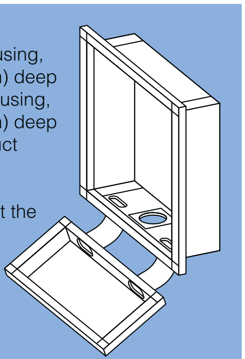
**Example G**

- Operator housing, 6.1" (155 mm) deep
- With U handle, vertical
- Enclosure connector, adjustable, on the left-hand side for vertically hinged wall mounting



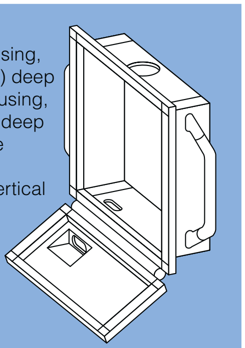
**Example H**

- Operator housing, 6.1" (155 mm) deep
- Keyboard housing, 4.1" (105 mm) deep
- Enclosure duct connector
- Support arm connection at the bottom



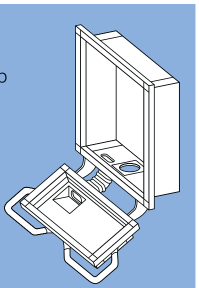
**Example I**

- Operator housing, 6.1" (155 mm) deep
- Keyboard housing, 1.7" (44 mm) deep
- Hinged frame connector
- U handles, vertical
- Cable tube, flexible
- Support arm connection, top



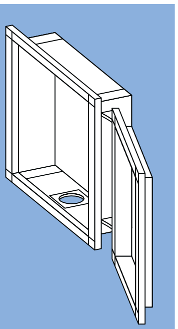
**Example J**

- Operator housing,
- 6.1" (155 mm) deep
- Keyboard housing,
- 1.7" (44 mm) deep
- With enclosure bar connector
- With corner handles
- Cable tube, flexible
- Support arm connection at the bottom



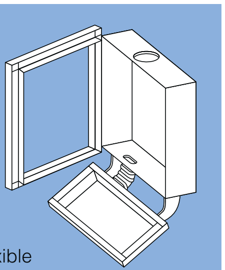
**Example K**

- Operator housing, 6.1" (155 mm) deep
- Keyboard housing, 1.7" (44 mm) deep
- Enclosure bar connector
- Support arm connection at the bottom



**Example L**

- Operator housing, 7.3" (185 mm) deep, hinged
- Keyboard housing, 1.7" (44 mm) deep
- Enclosure bar connector
- Cable tube, flexible
- Support arm connection, top



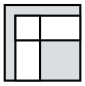
## Selection: Operator Housing/Keyboard Housing

**We need the following information in order to deal with your enquiry/order:**

- Part No. front frame: 6392.X09
- The dimensions and number of panels/front panels to be installed in the operating/ keyboard housing
- Design code number for the operator/keyboard housing

**Protection Ratings:**
NEMA 4 (IP 65) (if the opening in the enclosure is covered or sealed in accordance with the Protection Ratings).

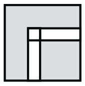
**.009**



**Wide frame** **0**
Extruded Aluminum section
Die-cast zinc corner pieces
Color: RAL 7035 (light gray)
Finely-textured

**Note:**
Other RAL colors available upon request.

**.209**



**Narrow frame** **2**
Extruded Aluminum section
Die-cast zinc corner pieces

**Note:**
For visual reasons, only enclosures without fins or with fins at the sides should be mounted here.

## 1. Front frame

Select the frame to match your requirements. It is automatically used for a keyboard housing as well.

**Part No.**
**Command Panel**

6392.☐09

**Part No.**
**Keyboard Housing**

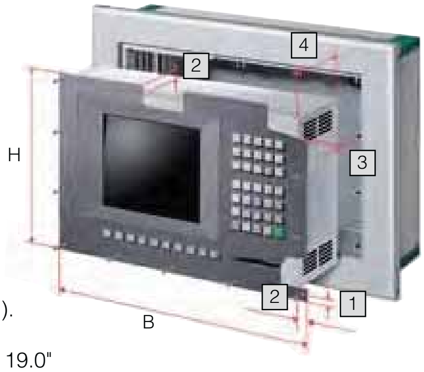
6351.☐09

---

## 2. Panel dimensions

### 2.1 For Operator housings 6392.X09 and
### 2.2 For keyboard housings 6351.X09

On the order form, please state the width (B) x height (H) x depth (T) of the control components and the manufacturer/Part, with due regard for the installation criteria (see below).



## Checking the installation criteria

Subject to compliance with criteria 1 – 4, front panels/ panels may be mounted directly with the appropriate mounting kits. Otherwise, an adaptor panel is needed – see 3.2, design code number "6", page 107. The dimensions of the operator panel and keyboard housing are derived from the dimensions of your panel and the number of cross members.

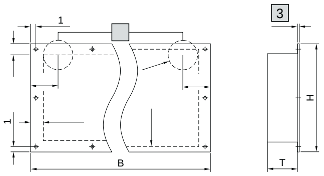
1 **0.3 to 0.5" (7 to 13 mm) edge spacing** of the mounting holes or bolts.

2 **Front panel projection** on sides with mounting holes or bolts **at least 0.7" (17 mm)**, on sides without attachments at least 0.2" (6 mm).

3 **Front panel thickness** varies according to the type of trim section, see page 108, version 3.4.

4 **Installation depths:**
Command Panels = 6.1, 7.3, 11.6, 12.9, 17.2" (155, 185, 295, 328, 438 mm).
Command Panels **with 1.77" (45 mm) deep rear panel**[1)] = 7.9, 9.1, 13.4, 14.7, 19.0" (200, 230, 340, 373, 483 mm).
Command Panels **with 9.7" (245 mm) deep rear panel**[1)] = 15.8, 16.9, 21.3, 22.6, 26.9" (400, 430, 540, 573, 683 mm).

5 For versions with a hinged rear panel, the maximum installation depth is reduced by 1.1" (27 mm) in the vicinity of the lock.



[1)] Other depths available on request.

**Note:** Load information for installed equipment, see www.rittal-corp.com.

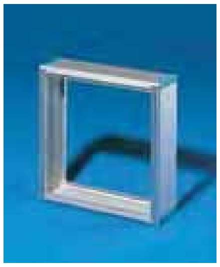
## Selection: Operator Housing

### 3.1 Installation depth

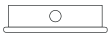
**Material:**
Enclosure:
Extruded Aluminum section
Corner protectors:
Plastic, self-extinguishing

**Finish:**
Enclosure: Natural anodized

**Note:**
Support arm connection see 3.6.
Drawing view from above.
Right hand hinge is also possible.

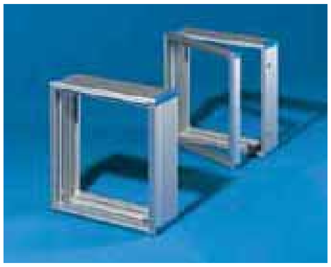


**Installation depth 6.1" (155 mm)**

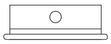


**screw-fastened**

**3.1** **1**

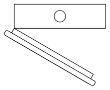


**Installation depth 7.3" (185 mm)**



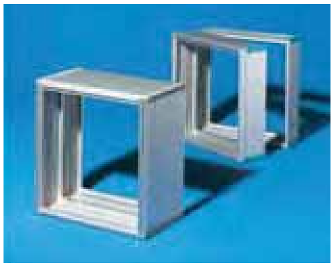
**screw-fastened**

**3.1** **2**

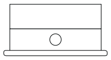


**hinged**[1]

**3.1** **3**

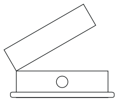


**Installation depth 11.6" (295 mm)**



**screw-fastened**

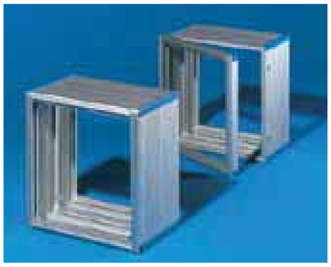
**3.1** **4**



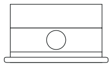
**hinged**[1]

**3.1** **5**

| | Installation depth 6.1" (155 mm) | Installation depth 7.3" (185 mm) | Installation depth 11.6" (295 mm) |
|---|---|---|---|
| **Support arm system CP-L** | prepared | prepared | prepared |
| **Support arm system CP-XL** | with adaptor 6528.510 | with adaptor 6528.510 | with adaptor 6528.510 |

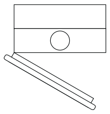


**Installation depth 12.9" (328 mm)**



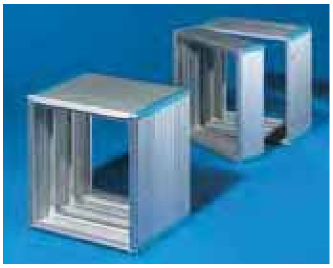
**screw-fastened**

**3.1** **6**

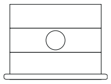


**hinged**[1]

**3.1** **7**

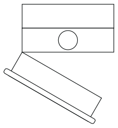


**Installation depth 17.2" (438 mm)**



**screw-fastened**

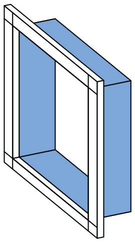
**3.1** **8**



**hinged**[1]

**3.1** **9**

| | Installation depth 12.9" (328 mm) | Installation depth 17.2" (438 mm) |
|---|---|---|
| **Support arm system CP-L** | prepared | prepared |
| **Support arm system CP-XL** | with adaptor 6528.510[2] | with adaptor 6528.510[2] |



| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
|---|---|---|---|---|---|---|---|---|
| ■ | | | | | | | | |

---

[1] Cam lock with double-bit lock insert, may be exchanged for 1.6" (41 mm) lock inserts, type C.

[2] Provided the admissible load capacity of the support arm system is adequate.

## 3.2 Front design

**Cross member**
For horizontal and/or vertical division. With channel on both sides for mounting kits.

**Material:**
Extruded Aluminum section, RAL 7035 (light gray)

**Sealing bar**
For horizontal and/or vertical division. The "slot-free" division produces a height gain of 1.1" (28 mm).

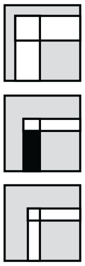
**Material:**
Extruded Aluminum section 0.3 x 0.8" (8 x 20 mm), natural anodized

**Adaptor plate**
**Material thickness:**
0.1" (3 mm) Aluminum, natural anodized.
Please specify the dimensions for the front panel and the desired holes and cut-outs.

**Spacing and built-in trim panel**
For additional space for cable entry and for installing switches/indicator lights, emergency off/key switches, CD-ROM drives, interfaces etc. With channel on one side for mounting kits, see www.rittal-corp.com.

**Material:**
Extruded Aluminum section, natural anodized.

**Also required:**
Mounting kit for the installation of front panels, operator panels and keyboards in command panels and keyboard housings.



**Without cross member**

3.2
0

**With one cross member**

3.2
1

**With one sealing bar**[1]

3.2
2

**With two cross members**

3.2
3

**With two sealing bars**[1]

3.2
4

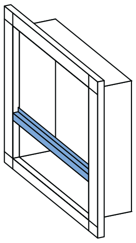
**With one cross member and one sealing bar**[1] [2]

3.2
5

**With one adaptor plate**

3.2
6

To specifications



| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |

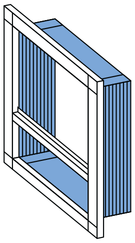
---

[1] Not possible with spacer trim (see 3.4).

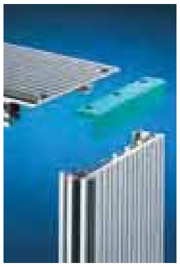
[2] Unless otherwise specified: Sealing bar at the top, cross member at the bottom.

## Selection: Operator Housing

### 3.3 Cooling fins

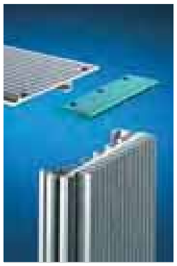


| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |



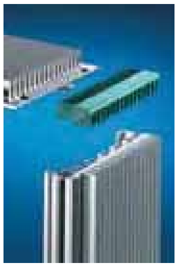
**No fins**

3.3
1



**Fins at sides**

3.3
2



**Fins all round**

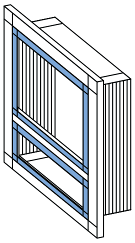
3.3
3

Fins are selected according to the heat loss to be dissipated.

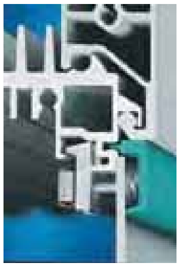
Enclosures in installation depth 7.3 and 12.9" (185 and 328 mm) are directly behind the front frame at a depth of 1.7" (44 mm), without fins. The color of the corner protectors matches the trim color selected under 3.5.

### 3.4 Trim types

**Detailed drawings,**
see www.rittal-corp.com.

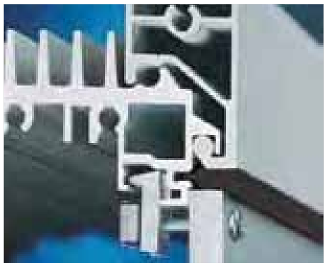


| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |



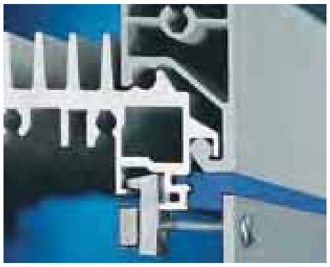
**Cover trim**
To conceal the front panel assembly screws. For front panel thickness up to 0.1" (3.5 mm.)

3.4
1



**End trim**
Attractively finishes off the space between the front panel and the frame section. For all front panel thicknesses. Only this trim may be selected when installing drawers.

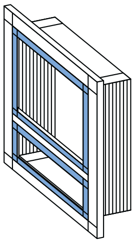
3.4
2



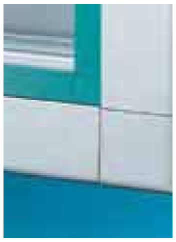
**Spacer trim**
For installed equipment flush with the frame section. For front panel thickness approx. 0.1" (3.5 mm).

3.4
3

### 3.5 Trim colors



| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |



**Turquoise**
(similar to RAL 5018)

3.5
1

**Bright blue**
(similar to RAL 5005)

3.5
2

**Graphite gray**
(similar to RAL 7024)

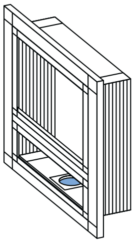
3.5
5

**Note:**
Enclosure corner protectors are likewise supplied in the chosen color. Other colors available on request with larger orders.

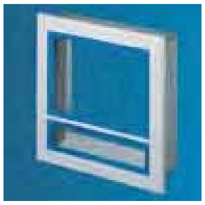
## 3.6 Support arm/ wall and pedestal connection

3 different support arm systems, see pages 118-159 and a variety of stand systems, see page 160-164.

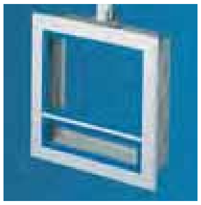
**Note:**
Support arm connection CP-S for small enclosures with an installation depth of 6.51" (155 mm) are selected by adding an "S" after the design code number.



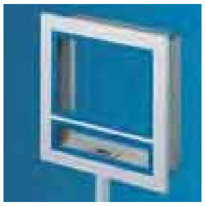
| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |



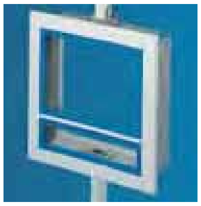
**Without connection** 3.6 0



**Connection top**[1] 3.6 1



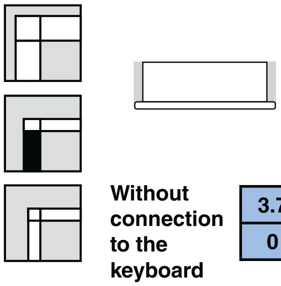
**Connection bottom**[1] 3.6 2

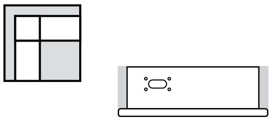


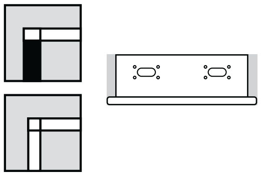
**Connection top and bottom**[1], one cover plate included 3.6 3

[1] Support arm connection for the narrow variant of connection plate 6528.420, housing coupling for desktop mounting 6528.400, by additionally specifying the code number: "A" for the wide variant of connection plate 6528.430, housing coupling for desktop mounting 6528.410, by additionally specifying the code number: "B"

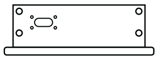
## 3.7 Preparation for mounting keyboard housings

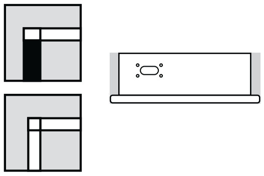


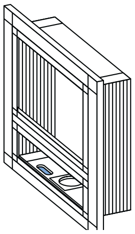




| | **Without connection to the keyboard housing** 3.7 0 | **Connection with hinged frame connector, rigid or adjustable** 3.7 1 | **Connection with enclosure duct connector** 3.7 2 |
|---|---|---|---|
| **To fit keyboard housing depth:** | –<br>–<br>– | 4.1 (105)<br>1.7 (44)<br>1.1 (27) | 4.1 (105)<br>–<br>– |
| **Connection of Operator housing to keyboard housing: (Selection 4.4, page 114)** | – | Frame connector, rigid/adjustable | Enclosure duct connector |
| **Cable tube: (Selection 4.5, page 115)** | – | rigid/flexible | Enclosure duct connector |







| | **Connection with enclosure bar connector** 3.7 3 | **Connection with hinged frame connector** 3.7 4 |
|---|---|---|
| **To fit keyboard housing depth:** | –<br>1.7 (44)<br>– | 4.1 (105)<br>1.7 (44)<br>Support for keyboards |
| **Connection of Operator housing to keyboard housing: (Selection 4.4, page 114)** | Enclosure bar connector | Hinged frame connector |
| **Cable tube: (Selection 4.5, page 115)** | flexible | flexible |

| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

# Command Panel VIP 6000

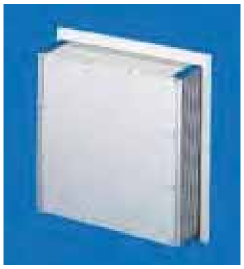
## Selection: Operator Housing

### 3.8 Rear panels

[1] On the longest side (right/bottom), cam with double-bit insert, may be exchanged for lock inserts 1.6" (41 mm), type C, plastic handles and T handles, type C, see www.rittal-corp.com.

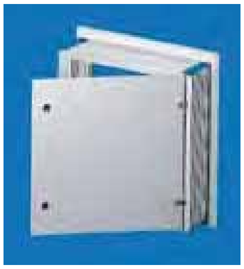
[2] For 19" (482.6 mm)/7 U concave

[3] When installing the pull-out keyboard 6002.1X0 in the VIP 6000, design variant 3.1, no. 1, the cooling fins and screw channels protruding 0.4" (11 mm) into the enclosure may be milled off in this area. Please state the installation position when ordering.



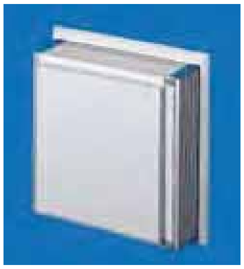
**Screw-fastened**
**Material:**
Aluminum,
natural anodized

3.8
1



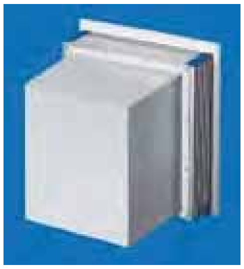
**Hinged**[1]
For rapid
service access
**Material:**
Aluminum,
natural anodized

3.8
2



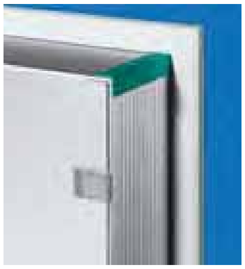
**Depth plus**
**1.8" (45 mm)**
hinged,
screw-fastening
**Material:**
Sheet steel, RAL 7035
(light gray)

3.8
3



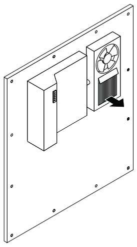
**Depth plus**
**9.6" (245 mm),**
square[2],
screw-fastened
**Material:**
Sheet steel, RAL 7035
(light gray)

3.8
4



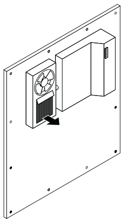
**Hinged**[1]
for heavy
installed
equipment
**Material:**
Aluminum,
natural-anodized

3.8
5



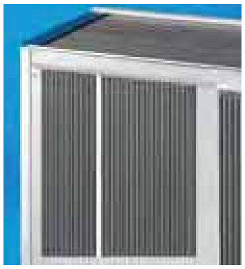
**Screw-fastened with built-in VIP SK small cooling unit, condenser assembly at the top left**
Recommended for
Operator housing
design (see 3.1 from an
installation depth of
7.3" [185 mm])
**Material:**
Aluminum,
natural-anodized

3.8
6



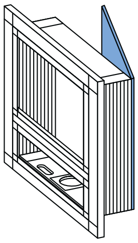
**Screw-fastened with built-in VIP SK small cooling unit, condenser assembly at the top right**
Recommended for
Operator housing
design (see 3.1 from an
installation depth of
7.3" [185 mm])
**Material:**
Aluminum,
natural-anodized
.

3.8
7



**Rear cooling panel, modular**[3]
Increases the
dissipation of heat loss
from the enclosure by
approx. 10%.
**Material:**
Extruded Aluminum
section,
natural-anodized

3.8
8



| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |

## 3.9 Integration of accessories

In addition to the design code, you should also indicate the position or enclose a sketch.

[1] Interface inserts may be found on page 225, these may also be fitted by specifying the Part No. and position.

**Without accessories**

3.9
0

**Interface flap, single, with plastic flap**[1]
from installation depth 4.4" (113 mm)

3.9
1

**Interface flap, double, with plastic flap**[1]
only possible in the front panel, spacer and built-in trim panel or rear panel

3.9
2

**Interface flap, single, with metal flap**[1]
from installation depth 4.4" (113 mm)

3.9
3

**Interface flap, double, with metal flap**[1]
only possible in the front panel, spacer and built-in trim panel or rear panel

3.9
4

**USB/RJ 45 extension**
For order information, refer to page 226.

3.9
5

**Mounting preparations for signal pillars, modular**
Mounting component, Signal pillars, modular, see www.rittal-corp.com

3.9
6

| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |

## Selection: Keyboard Housing

### 4.1 Keyboard housing

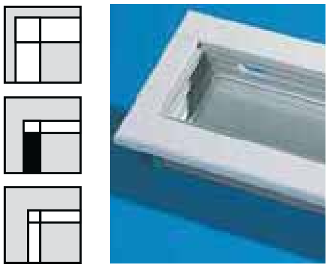
Without fins.
For the internal or surface mounting of keyboards.
All keyboard housings are custom-produced to your dimensions. When selecting the wide front frame, the width of the keyboard housing depends on the operating housing.

**Material:**
Extruded Aluminum section

**Detailed drawing,**
see www.rittal-corp.com

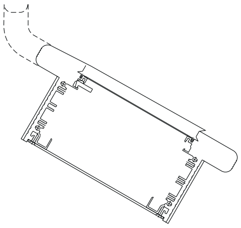
**Also required:**
Mounting kit for installing front panels, operator panels and keyboards in operator and keyboard housings.

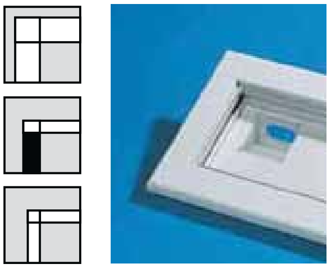
[1] Only in conjunction with hinged frame connector, see 4.4 design code number "5".



**Installation depth 4.1" (105 mm) for built-in keyboards**

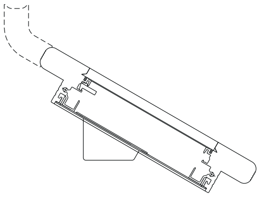
4.1
1

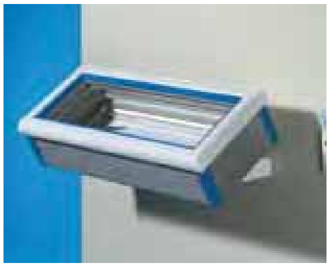




**Installation depth 1.7" (44 mm) for built-in keyboards**

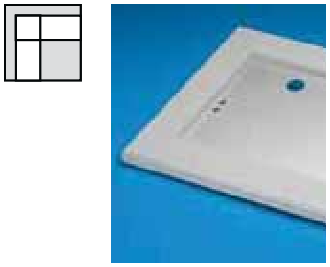
4.1
2





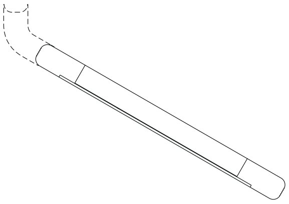
**Example of the versatility of the keyboard housing: Mounting on doors**
With all keyboard housings, the rear panel may be supplied prepared for external mounting on flat surfaces on request.

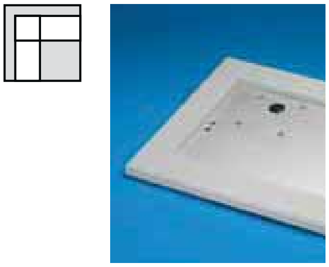
**Also required:**
Enclosure duct connector 6006.000, for mounting and cable entry.



**Support for keyboards with cable entry grommet**

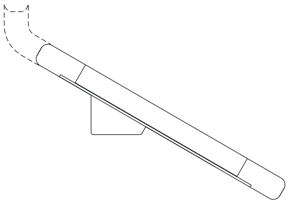
4.1
3

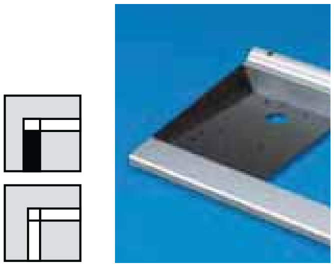




**Support for keyboards with cable tube, flexible**

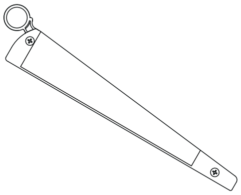
4.1
4

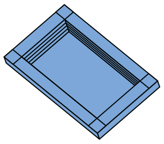




**Support for keyboards with cable entry grommet**[1]

4.1
5



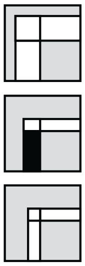


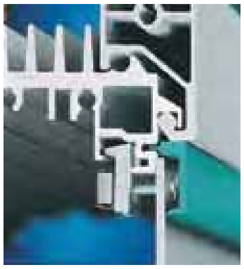
| 4.1 | 4.2 | 4.3 | 4.4 | 4.5 |
|---|---|---|---|---|
| ■ |  |  |  |  |

## 4.2 Trim types[1]

**Detailed drawing,**
see www.rittal-corp.com

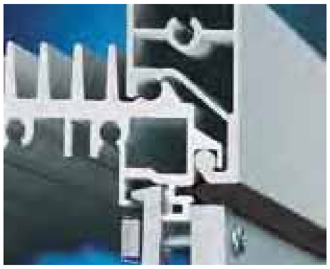
[1] Selection not possible with support for keyboards.
In such cases, please enter an "X".





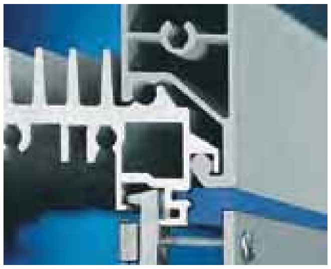
**Cover trim**
To cover the front panel assembly screws. For front panel thickness up to 0.1" (3.5 mm).

| 4.2 |
|---|
| 1 |



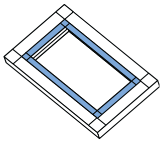
**End trim**
Attractively finishes off the space between the front panel and the frame section. For all front panel thicknesses.

| 4.2 |
|---|
| 2 |



**Spacer trim**
For installed equipment flush with the frame section. For front panel thickness approx. 0.1" (3.5 mm).

| 4.2 |
|---|
| 3 |



| 4.1 | 4.2 | 4.3 | 4.4 | 4.5 |
|---|---|---|---|---|
|  | ■ |  |  |  |

## 4.3 Trim colors[1]

Note: Enclosure corner protectors are likewise supplied in the chosen color. For larger orders, other colors are available on request.

[1] Selection not possible with support for keyboards.
In such cases, please enter an "X".

**Turquoise**
(similar to RAL 5018)

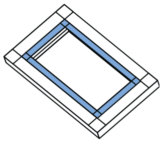
| 4.3 |
|---|
| 1 |

**Bright blue**
(similar to RAL 5005)

| 4.3 |
|---|
| 2 |

**Graphite gray**
(similar to RAL 7024)

| 4.3 |
|---|
| 6 |

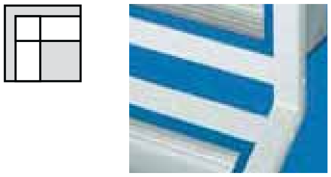


| 4.1 | 4.2 | 4.3 | 4.4 | 4.5 |
|---|---|---|---|---|
|  |  | ■ |  |  |

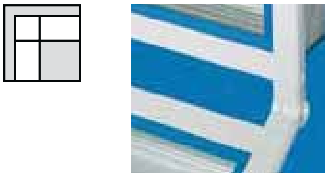
## Selection: Keyboard Housing

### 4.4 Keyboard housing connector

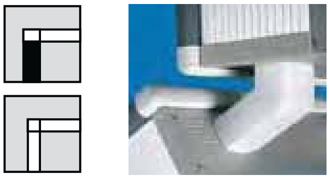
With keyboard housing, supplied loose to connect operator and keyboard housings.



**Frame Connector (rigid)** 4.4 1



**Frame Connector (adjustable)** 4.4 2



**Enclosure duct connector** 4.4 3

| | Frame Connector (rigid) 4.4 1 | Frame Connector (adjustable) 4.4 2 | Enclosure duct connector 4.4 3 |
|---|---|---|---|
| **Keyboard housing depth:** | 4.1" (105)<br>1.7" (44)<br>Support for keyboards | 4.1" (105)<br>–<br>– | 4.1" (105)<br>–<br>– |
| **Tilt** | 120°, rigid | 75 – 120°, adjustable in 7.5° increments | 120°, rigid |
| **Cable tube:** | See 4.5 | See 4.5 | Integral |

**4.4 1:** To fit operator and keyboard housings with a wide frame in the same width.

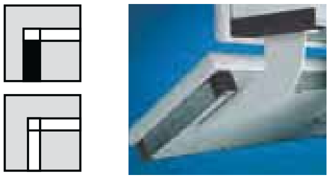
**Material:**
Die-cast zinc, RAL 7035 (light gray)

**4.4 2:** To fit operator and keyboard housings with a wide frame in the same width.

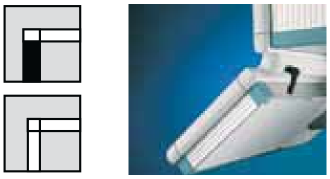
**Material:**
Die-cast zinc, RAL 7035 (light gray)

**4.4 3:** To fit operator housings with keyboard housings 4.1" (105 mm) deep, also available in different widths.

**Material:**
Aluminum, RAL 7035 (light gray)



**Enclosure bar connector** 4.4 4



**Hinged frame connector** 4.4 5

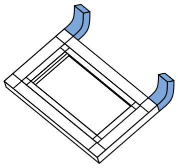
| | Enclosure bar connector 4.4 4 | Hinged frame connector 4.4 5 |
|---|---|---|
| **Keyboard housing depth:** | –<br>1.7" (44) | 1.7" (44)<br>4.1" (105) |
| **Tilt angle:** | 120°, rigid<br>infinitely adjustable | 75 - 120°,<br>infinitely adjustable |
| **Cable tube:** | See 4.5 | See 4.5 |

**4.4 4:** To fit operator housings with keyboard housings 1.7" (44 mm) deep, also available in different widths.

**Material:**
Sheet steel, RAL 7035 (light gray)

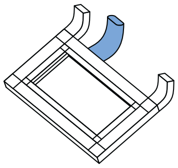
**4.4 5:** To fit operator housings with keyboard housings 1.7, 4.1" (44, 105 mm) deep and support for keyboards, also available in different widths.

**Material:**
Aluminum, RAL 7035 (light gray)

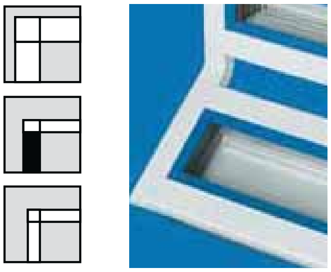


4.1 4.2 4.3 4.4 4.5

## 4.5 Cable tube

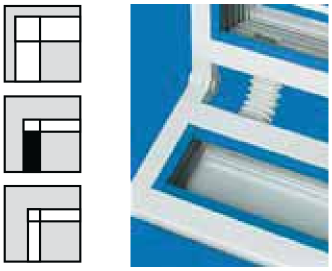


| 4.1 | 4.2 | 4.3 | 4.4 | 4.5 |
|---|---|---|---|---|
| | | | | ■ |



**Without cable tube**

| 4.5 |
|---|
| 0 |



**Cable tube, flexible**

| 4.5 |
|---|
| 2 |

Suitable for cable entry when using the frame connector, adjustable, hinged frame connector or enclosure bar connector. Mounting on keyboard housings with 4.1, 1.7 or 1.1" (105, 44 or 27 mm) deep.

**Material:**
Plastic, RAL 7035 (light gray)

**Note:**
Not possible with:
4.1 Keyboard housing,
design code numbers 3 and 5.

## Examples

The picture opposite shows the solution we have chosen, together with its corresponding design code number. The following key explains how the code number in our example is made up.

**We need the following three pieces of information to process your order:**

- Part No. front frame: 6392.X09[1]
- The dimensions and number of panels/front panels to be installed in the operator/keyboard housing
- Design code number for the operating/keyboard housing

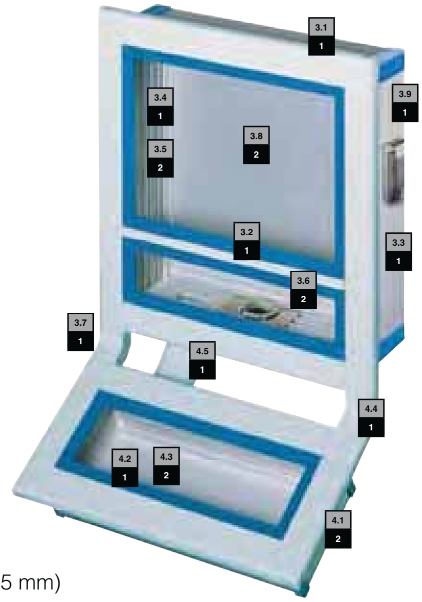
## Operator housing

**Part No.: 6392.009**

**Design code number:**

| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 |

| | | |
|---|---|---|
| 3.1 | 1 | Operator housing, installation depth 6.1" (155 mm) |
| 3.2 | 1 | With one cross member |
| 3.3 | 1 | No fins |
| 3.4 | 1 | Cover trim |
| 3.5 | 2 | Trim color: Bright blue |
| 3.6 | 2 | Support arm connection CP-L, Ø 5.1" (130 mm), bottom |
| 3.7 | 1 | Connection with frame connector, rigid |
| 3.8 | 2 | Rear panel, hinged with lock |
| 3.9 | 1 | Fitted interface flap |



## Keyboard housing

**Part No.: 6351.009**

**Design code number:**

| 4.1 | 4.2 | 4.3 | 4.4 | 4.5 |
|---|---|---|---|---|
| 1 | 1 | 2 | 1 | 2 |

| | | |
|---|---|---|
| 4.1 | 1 | Keyboard housing, installation depth 4.1" (105 mm) |
| 4.2 | 1 | Cover trim |
| 4.3 | 2 | Trim color: Bright blue |
| 4.4 | 1 | Frame connector, rigid |
| 4.5 | 1 | Cable tube, rigid |

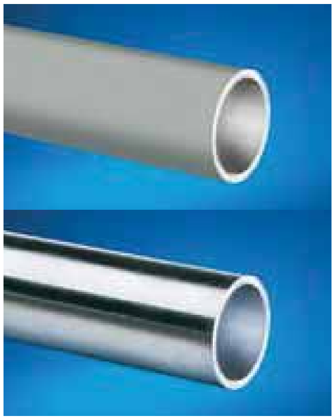
[1] Replace X with the number after selecting the front frame.

**Note:**
If the design code number does not cover your requirements, please enter an X and enclose a written explanation.

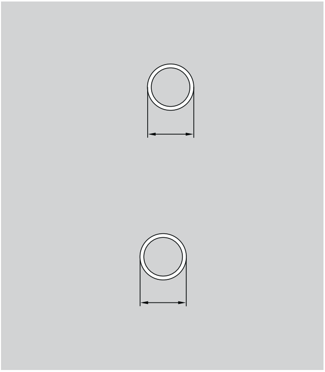
# Support Arm System

## Overview

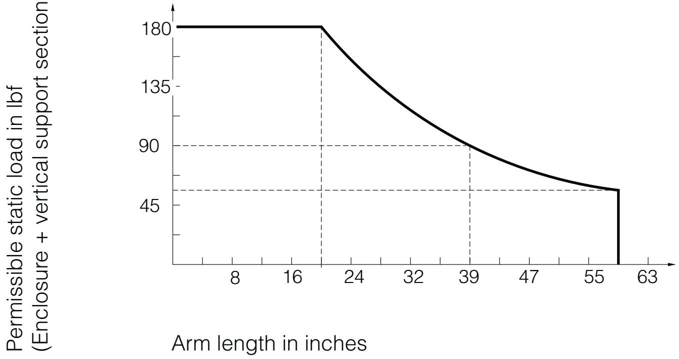
Support arm systems from Rittal make the interaction between man and machine easier. Three different systems can be custom-configured per required arm length and enclosure weight.



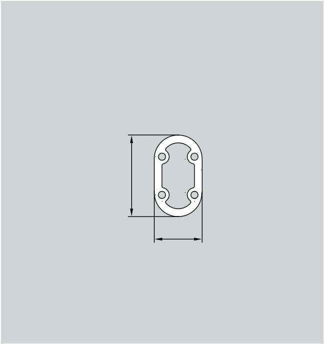
### Load capacity CP-S steel/stainless steel



For use of CP-S in conjunction with CP-L (in the horizontal run of the system), the CP-L load diagram applies.



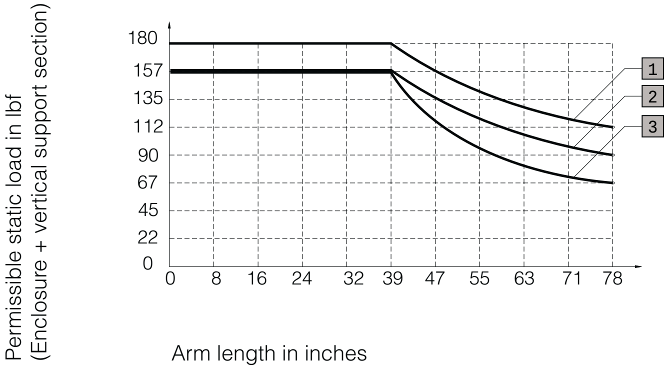
### Load capacity CP-L

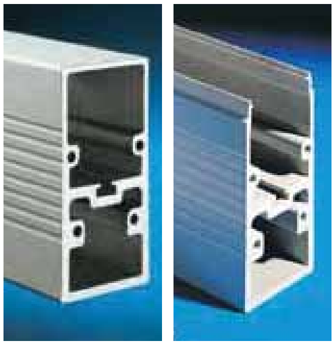


- 1 System assembly without joint
- 2 System assembly with one joint
- 3 System assembly with two joints

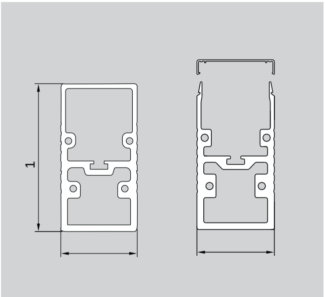
6120.010

**Permissible load depending on system assembly**
Only one Intermediate hinge 6523.010 can be used per system.





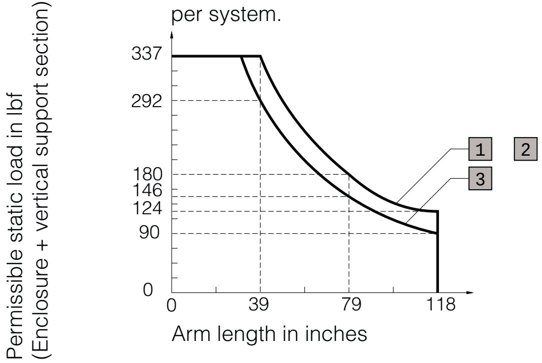
### Load capacity CP-XL



- 1 Open and solid support section
- 2 Solid support section with one joint
- 3 Open support section with one joint

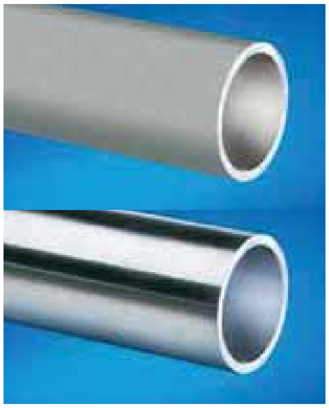
6523.010

**Permissible load depending on system assembly**
Only one intermediate hinge 6120.010 can be used per system.



Conversion factors (N=lb / .224); (mm=in x 25.4)

## Overview



## CP-S steel and stainless steel

The steel angle coupling and angle piece, wallmounted and top-mounted joint of the system have integrated adjustment capabilities.

This means that deviations in the horizontal of ±2.5° may be adjusted easily.

The enclosures are easily mounted on the enclosure coupling of the stainless steel system with a pre-assembled screw.

**90° elbow adaptor**
The ideal connection from a small to medium-sized system.

**Due to the different requirements and slightly deviating attachment types, the support arm and enclosure should be made from the same material (steel or stainless steel).**

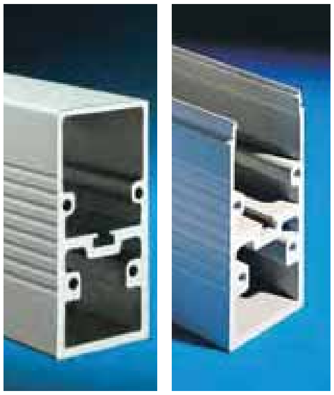
## CP-L aluminum

The alternative for the configuration of compact systems – the 90° support arm bracket.

Signal pillars may be mounted on many connecting elements of the systems using the mounting component, see www.rittal-corp.com.

The height-adjustable support arm offers even better ergonomics.

**90° elbow adaptor**
The ideal means of adapting between different sized pendant arm systems.



## CP-XL aluminum

Four attachment bolts offer a high level of safety for the system.

Two ducts allow the control cable and supply voltage to be separated.

A stable base point for the system – the custom-produced pillar, see www.rittal-corp.com.

# Support Arm System

## Selection Guide

The diagrams show how the connection points of the Rittal enclosures may be continued with support arm systems, either directly or via adaptors. There is a choice of four support arm systems, depending on your design, load and cabling requirements.

↶ tiltable or ↷ rotatable components

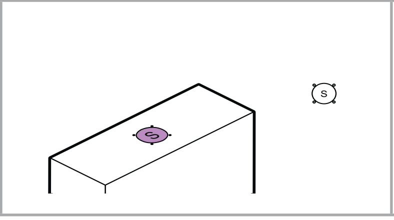
⊢ system end

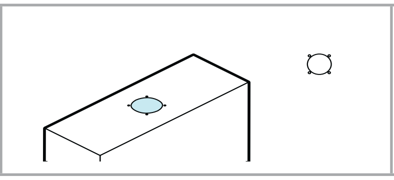
▶ **CP-S steel**
For small and lightweight enclosures.

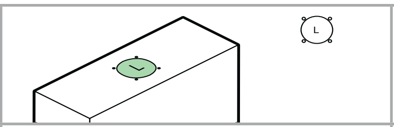
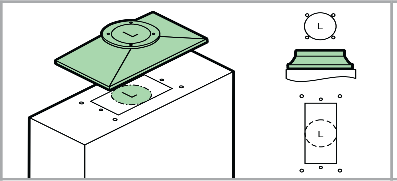
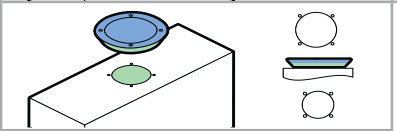
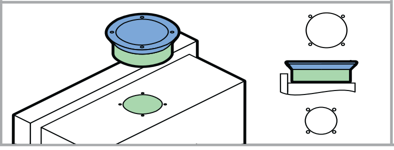
▶ **CP-S stainless steel**
For use where there are special requirements in terms of corrosion and hygiene.

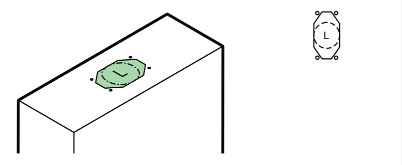
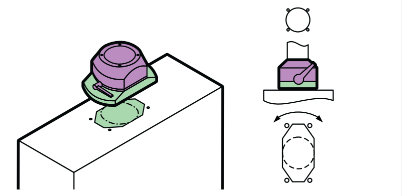
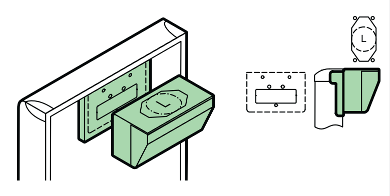
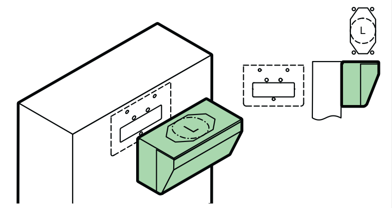
▶ **CP-L**
The system for average command panel weights, stylish lines, and outstanding solution diversity.

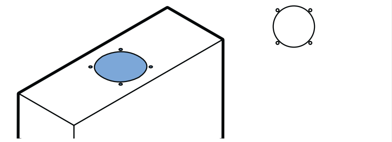
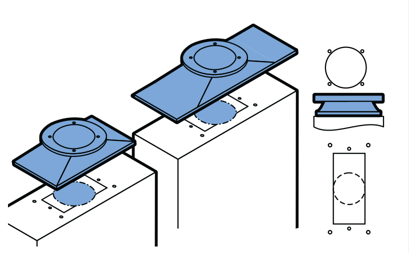
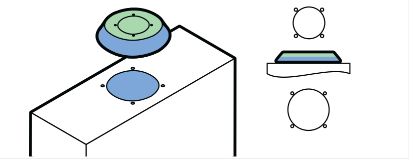
▶ **CP-XL**
The system for extreme loads. Also with open cable duct for super-easy cable entry.

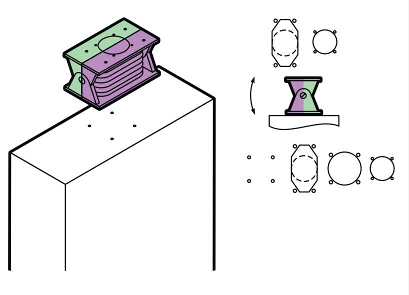
| | Enclosure | Continuation with support arm system |
|---|---|---|
| **CP-S steel** |  | ▶ **CP-S steel:**<br>**1.1**<br>see page 120<br>▶ **CP-L:**<br>**1.6**<br>see page 132 |

| | | |
|---|---|---|
| **CP-S stainless steel** |  | ▶ **CP-S stainless steel:**<br>**1.1**<br>see page 120 |

| | | |
|---|---|---|
| **CP-L Ø 5" (130 mm)** |  | ▶ **CP-L:**<br>**1.1**<br>see page 132 |
| |  | ▶ **CP-L:**<br>**1.2**<br>see page 132 |
| |  | ▶ **CP-XL:**<br>**1.3**<br>**1.4**<br>see page 150 |
| |  | |

| | Enclosure | Continuation with support arm system |
|---|---|---|
| **CP-L ▭ 5 x 3 (120 x 65 mm)** |  | ▶ **CP-L:**<br>**1.4**<br>see page 132 |
| |  | ▶ **CP-S steel:**<br>**1.2**<br>see page 120 |
| |  | |
| |  | |

| | | |
|---|---|---|
| **CP-XL** |  | ▶ **CP-XL:**<br>**1.1**<br>see page 150 |
| |  | ▶ **CP-XL:**<br>**1.2**<br>see page 150<br>▶ **CP-L:**<br>**1.3**<br>see page 132 |
| |  | ▶ **CP-L:**<br>**1.3**<br>**1.4**<br>see page 132 |

| | | |
|---|---|---|
| **VESA 75** |  | ▶ **CP-S:**<br>**1.3**<br>see page 120<br>▶ **CP-L ▭ 5 x 3 (120 x 65 mm)**<br>see page 132<br>⊢ |

Make a simple sketch showing the basic form of the support arm. Next, select the corresponding support arm components. Start with "1: System start" (found on following page) by selecting the appropriate enclosure situation.

▶ Continue with CP-S according to the item numbers.

▶ System changes are indicated by the color. Green = CP-L

System continuation/system end:

all directions

vertical

horizontal

angled

tiltable or

rotatable components

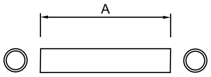
◎ From "3 Enclosure attachments", a support section is required between each component (minimum length approx. 4" [100 mm], for wall/floor mounting approx. 6" [160 mm]).

## T Support sections

**T1 Support section CP-S**

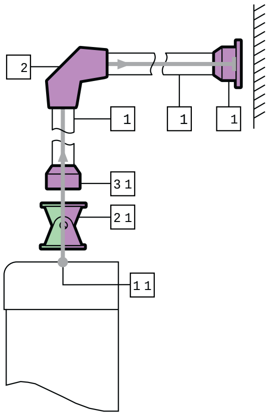
$A_{min.}$ = 4" (100 mm)

$A_{max.}$ = 79" (2000 mm)



| A inches (mm) | RAL 9006 (white aluminium)<br>**Part No.** |
|---|---|
| 20 (500) | 6501.010 |
| 39 (1000) | 6501.030 |
| as per specifications | 6501.340 |

See page 121.



## Assembly example:

**T1** Support section CP-S

**1.1** Mounting cut-out CP-S

**2.1** Tilting enclosure attachment, top mounting

**3.1** Enclosure attachment CP-S

**4.2** Angle piece 90° CP-S

**5.1** Wall/base mounting CP-S

**Note:**
After any given support section, the 90° angle adaptor CP-L to CP-S may be used as a transition to the CP-L system.
**Load diagram, see www.rittal-corp.com.**

# CP-S Support Arm System

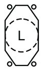
## 1 System start

**Enclosure with mounting cut-out**

**1.1 Mounting cut-out CP-S**
see page 118

▶ 2.1 3.1 3.2 3.4

**1.2 Mounting cut-out CP-L, ▭ 3 x 5" (65 x 120 mm)**
see page 118



▶ 2.1 3.3

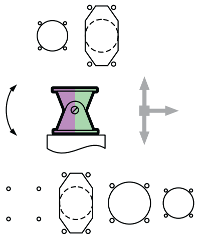
**1.3 Mounting cut-out VESA 75**
see page 118

▶ 2.1

## 2 Tilting adaptor

**2.1 Enclosure attachment, tilting, top mounting**[1]

**6902.670** (RAL 7024 [graphite gray])
see page 121.



▶ 3.1 3.2 3.4

▶ CP-L 2.4 s.p. 133

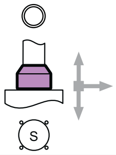
⊣

---

[1] May also be used rotated through 180°, e.g., from CP-L ▭ 5 x 3" (120 x 65 mm) CP-S to CP-L Ø 5" (130 mm)

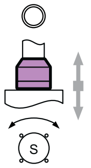
## 3 Enclosure attachments

**3.1 CP-S attachment CP-S**
**6501.070** (RAL 7024 [graphite gray])
see page 122.

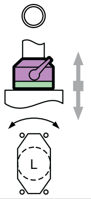


▶ 4.1 4.2 5.1 5.2 5.3

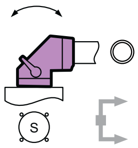
**3.2 Housing coupling, round CP-S**
**6501.050** (RAL 7024 [graphite gray])
see page 123.



**3.3 Housing coupling CP-S, for support arm connection CP-L ▭ 3 x 5" (65 x 120 mm)**
**6501.130** (RAL 7024 [graphite gray])
see page 123.



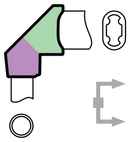
**3.4 Angle coupling 90° CP-S**
**6501.120** (RAL 7024 [graphite gray])
see page 124.



▶ 5.1 5.2 5.3

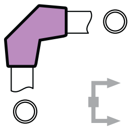
## 4 Angle components

**4.1 Angle adaptor 90° CP-L to CP-S**
**6501.090** (RAL 7024 [graphite gray]),
see page 146.



▶ CP-L 2.4 s.p. 133

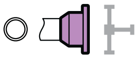
**4.2 Angle piece 90° CP-S**
**6501.140** (RAL 7024 [graphite gray]),
see page 125.



▶ 5.1 5.2 5.3

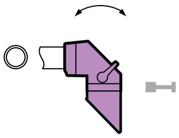
## 5 System end

**5.1 Wall/base mounting CP-S**
**6501.110** (RAL 7024 [graphite gray]),
see page 126.



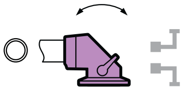
⊣

**5.2 Wall-mounted hinge CP-S**
**6501.150** (RAL 7024 [graphite gray]),
see page 127.



⊣

**5.3 Top-mounted joint CP-S**
**6501.160** (RAL 7024 [graphite gray]),
see page 126.



⊣

## Support section CP-S

Attachment to the connecting components with 2 clamping screws.

**Size:**

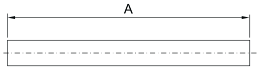
External diameter: 2" (48.3 mm)
Wall thickness: 0.2" (4.0 mm)

**Material:**
Steel tube, powder coated

**Color:**
RAL 9006 (white aluminum)

**Note:**
Bent support sections available on request.

| A inches (mm) | Weight lb (kg) | **Part No.** |
|---|---|---|
| 20 (500) | 5 (2.1) | **6501.010** |
| 39 (1000) | 9 (4.2) | **6501.030** |
| To specifications A = | 9 (4.2) | **6501.340** |



$A_{min.}$ = 4" (100 mm)
$A_{max.}$ = 75" (2000 mm)

## Enclosure attachment, tilting, top-mounting

For mounting on:

- IW worktop, prepared for enclosure attachment CP-L, Ø 5" (130 mm), see www.rittal-corp.com.
- Surfaces
- Enclosure attachment/coupling CP-L 5 x 3" (120 x 65 mm), see pages 142, 144.
- Attachment/housing coupling CP-S (may also be used as tilting adaptor +100°/–60° for CP-S), see pages 122, 123.

To fit enclosures up to 44.1 lb (20 kg) with support arm connection

- CP-S
- CP-L ▭ 5 x 3" (120 x 65 mm)
- CP-L Ø 5" (130 mm)
- VESA Standard 75

With cable tube for protected cable entry.

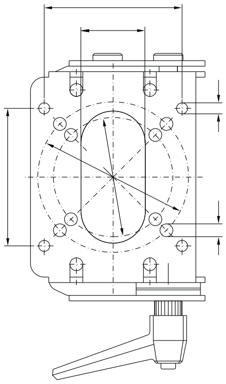
**Tilt Angle:**
+100°/- 60°, adjustable in 7.2° increments using a clamping lever and may be limited to +100°/-15° using the stop screw supplied loose.

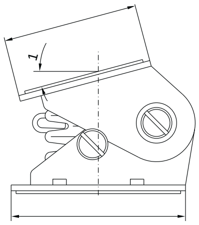
| Color<br>RAL | Weight<br>lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 1 (0.8) | **6902.670** |

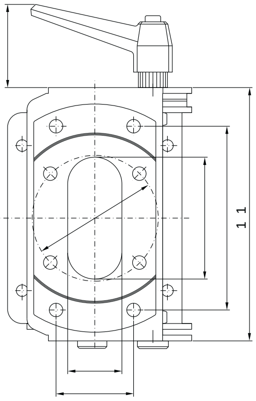
**Material:**
Sheet steel, painted

**Configuration:**
Assembly hardware and plastic bellows section

**Accessories:**
IW worktops prepared for enclosure attachment, see www.rittal-corp.com







Inch and pound measurements are rounded to the nearest whole number.

## Enclosure attachment CP-S

For fixed attachment of the:

- Enclosure to the support section,
- Support arm to flat surfaces, rear[1].

With two drilling patterns for:

a) Rittal Command Panel

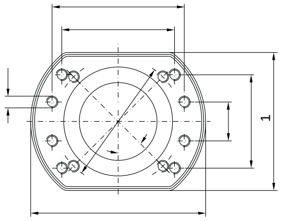
b) Complete Control Panel.

[1] Maximum load 40 lb (400 N).

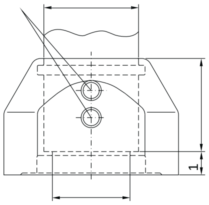
**Material:**
Die-cast zinc

**Configuration:**
Gasket and 2 clamping screws for support section CP-S

| Color<br>RAL | Weight<br>lb (kg) | **Part No.** |
|---|---|---|
| 7024<br>(graphite gray) | 2 (1.0) | **6501.070** |

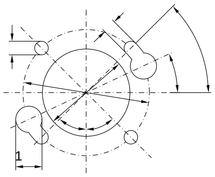


Mounting cut-outs

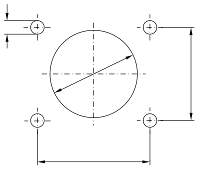


Clamping screw

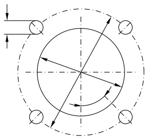
a)



b)



Like cut-out "a)",
but without
lock holes



Inch and pound measurements are rounded to the nearest whole number.

## Enclosure coupling CP-S

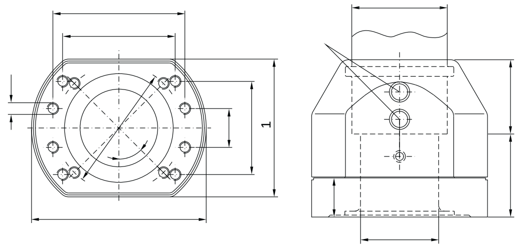
**For support arm connection CP-S, round**
For swivel-mounting of the enclosure on the vertical section of the support arm system.
With two drilling patterns for:
a) Rittal Command Panel
b) Complete Control Panel.

**Rotation Range:**
Approximately 305°, lockable using a clamping lever. By inserting additional pins 0.2 x 0.6" (4 x 16 mm) to ISO 8752 the rotation range may be limited to ± -7°, 44°, 104°, 142°.

| Color<br>RAL | Weight<br>lb (kg) | **Part No.** |
|---|---|---|
| 7024<br>(graphite gray) | 2 (1.1) | **6501.050** |

**Material:**
Die-cast zinc

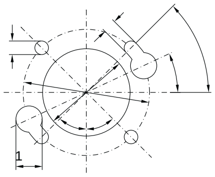
**Configuration:**
Gasket, 2 clamping screws for support section CP-S and clamping lever



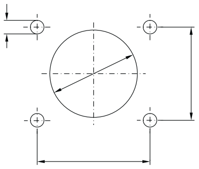
1) Clamping screw

Mounting cut-outs

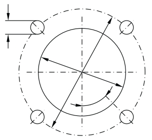
a)

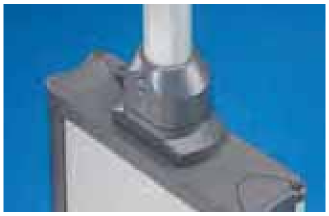


b)



Like cut-out "a)", but without lock holes





## Enclosure coupling CP-S

**For support arm connection CP-L,**
5 x 3" (120 x 65 mm)
For swivel-mounting of the enclosure on the vertical section of the support arm system.

For mounting on:

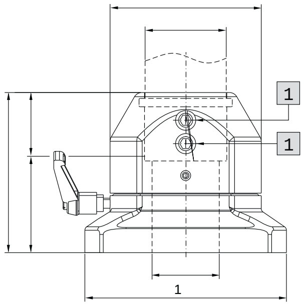
- Optipanel to fit TFT monitors 6380.020 – .040 (see page 94)
- Optipanel H x W x D: 7U x 19 x 4" (100 mm) 6380.000 (see page 94)
- Optipanel installation depth 2" (50 mm), with rear support arm connection.

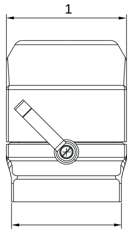
| Color<br>RAL | Weight<br>lb (kg) | **Part No.** |
|---|---|---|
| 7024<br>(graphite gray) | 3 (1.5) | **6501.130** |

**Rotation Range:**
Approximately 305°, lockable using a clamping lever. By inserting additional pins 0.2 x 0.6" (4 x 16 mm) to ISO 8752 the rotation range may be limited to ± -7°, 44°, 104°, 142°

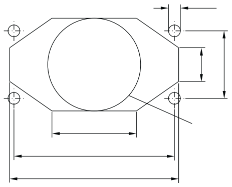
**Material:**
Die-cast zinc

**Configuration:**
Gaskets, 2 locking screws





Mounting cut-out, enclosure



**1** Locking screw

**2** Alternative max. Ø 2" (55 mm)

Inch and pound measurements are rounded to the nearest whole number.

## 90° enclosure coupling CP-S

For swivel fastening of the enclosure to the horizontal support arm system:

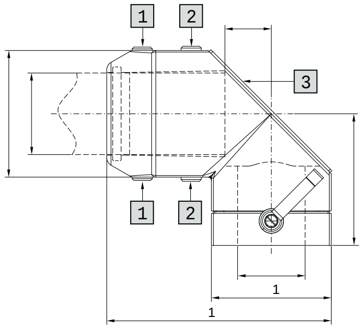
- Enclosure top-mounted or suspended
- Adjustment facility for the support arm system (see page 117)
- Removable panel for easy cable entry

**Rotation Range:**
Approximately 305°, lockable using a clamping lever. By inserting additional pins 0.1 x 0.6" (4 x 16 mm) to ISO 8752 the rotation range may be limited to ± 7°, 44°, 104°, 142°.

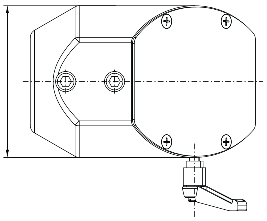
| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024<br>(graphite gray) | 4 (1.6) | **6501.120** |

**Material:**
Cast aluminum/die-cast zinc

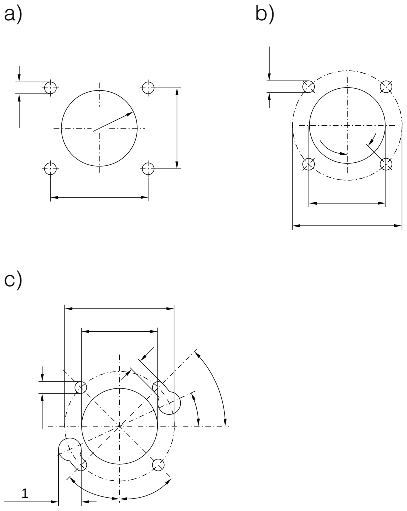
**Configuration:**
Gaskets, 2 locking screws and 2 adjusting screws



| | |
|---|---|
| 1 | Locking screw |
| 2 | Adjusting screw |
| 3 | Removable plate |



Possible mounting cut-outs of enclosures



Version c) for quick/one-man assembly

## 90° adaptor elbow, CP-L to CP-S

see page 146.

Inch and pound measurements are rounded to the nearest whole number.

## 90° elbow CP-S

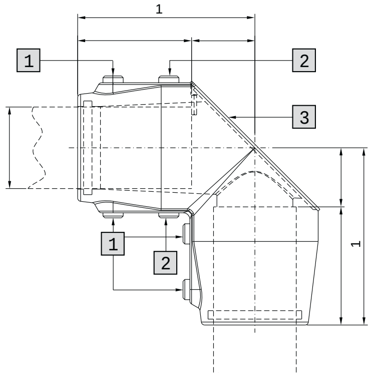
For connecting horizontal and vertical support arm components.

- Adjustment facility for the support arm system (see page 117)
- Removable panel for easy cable entry

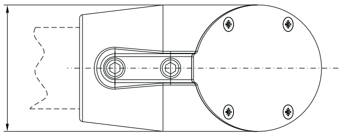
**Material:**
Cast aluminum

**Configuration:**
Gaskets, 4 locking screws and 2 adjusting screws

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024<br>(graphite gray) | 2 (1.1) | **6501.140** |



**1** Locking screw
**2** Adjusting screw
**3** Removable plate



**Accessories:**
Mounting component for signal pillars (2375.030), see www.rittal-corp.com

Inch and pound measurements are rounded to the nearest whole number.

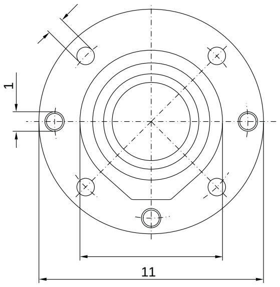
## Wall/base-mounting CP-S

For fixed attachment of the support section to surfaces. With flange for front-mounting.

**Material:**
Cast aluminum

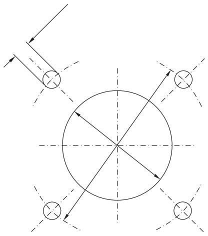
**Configuration:**
Gasket, 2 clamping screws for support section CP-S and 3 pre-fitted adjusting screws

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 2 (0.7) | **6501.110** |

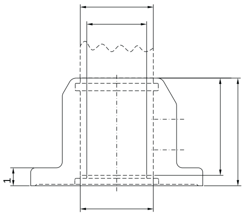


1) Adjusting screw

Mounting cut-out



View A



## Top-mounted joint CP-S

For swivel-mounting of the support arm system to horizontal surfaces.

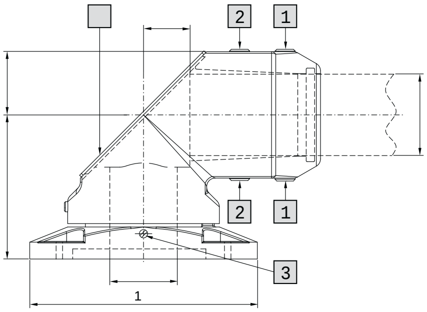
- Enclosure top-mounted or suspended
- Adjustment facility for the support arm system (see page 117)
- Removable panel for easy cable entry

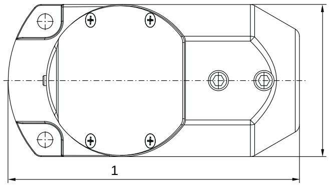
**Rotation Range:**
Approximately 300°, by inserting additional pins 0.2 x 0.8" (6 x 20 mm) to ISO 8752 the rotation range may be limited to ± -6°, 51°, 96°. To lock the joint, the screw may be exchanged for standard clamping lever M6 x 1.0" (25 mm).

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 4 (1.8) | **6501.160** |

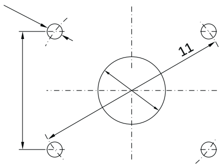
**Material:**
Cast aluminum

**Configuration:**
Gaskets, 2 locking screws and 2 adjusting screws





Mounting cut-out



1 Locking screw
2 Adjusting screw
3 Screw for adjusting rotatability
4 Removable plate

Inch and pound measurements are rounded to the nearest whole number.

## Wallmounted hinge CP-S

For vertically hinged-mounting of the support arm on vertical surfaces.

- Machined keyhole for support arm outlet at the top or bottom for easy one-man assembly:
  - – Pre-mount the screws on a vertical surface
  - – Locate the wallmounted hinge (support arm system pre-mounted)
  - – Tighten the screws
- Adjustment capabilities for the support arm system (see page 117)
- Removable panel for easy cable entry

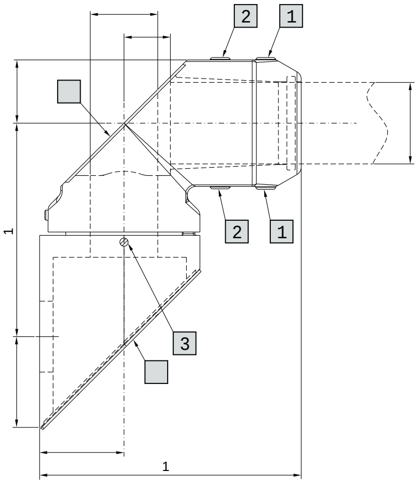
**Rotation Range:**

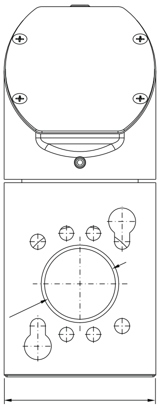
Approximately 300°, by inserting additional pins 0.2 x 0.8" (6 x 20 mm) to ISO 8752 the rotation range may be limited to ± 6°, 51°, 96°. To lock the joint, the screw may be exchanged for standard clamping lever M6 x 1.0" (25 mm).

| Color<br>RAL | Weight<br>lb (kg) | **Part No.** |
|---|---|---|
| 7024<br>(graphite gray) | 5 (2.2) | **6501.150** |

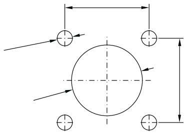
**Material:**
Cast aluminum

**Configuration:**
Gaskets, 2 locking screws and 2 adjusting screws





Mounting cut-out 90°



**1** Locking screw
**2** Adjusting screw
**3** Screw for adjusting rotatability
**4** Removable plate

Inch and pound measurements are rounded to the nearest whole number.

## Support arm system CP-S,

**Stainless Steel**

In conjunction with stainless steel Command Panels, terminal boxes 5" (120 mm) deep and compact enclosures AE from stainless steel, this support arm system is particularly well-suited for meeting high standards of corrosion protection and hygiene.
The tilting adaptor and enclosure coupling may optionally be mounted on the top or bottom of the enclosure. **They are not suitable for use as the base point of a system.** For this purpose, we recommend wall/base mountings, or with larger heights and widths, an additional pillar made of steel tubing or stainless steel (available on request).

**Material:**
Type 303 stainless steel

**Protection ratings:**
IP 69K to DIN 40 050-9
(resistant to high-pressure cleaning)

**Load information:**
visit www.rittal-corp.com

IP 69 K

## Support section CP-S,

**Stainless Steel**

Attached to the connection components via 2 clamping screws.

**Dimensions:**
External diameter: 1.9" (48.3 mm)
Wall thickness: 0.1" (3.6 mm)

**Material:**
Type 304 stainless steel

**Finish:**
Brushed, grain 240

**Other sizes to order available on request.**

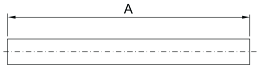
**Order example:**
U-shaped = 6660.200
Dimension A = 12" (300 mm)
Dimension B = 31" (800 mm)
Dimension C = 9" (240 mm)

The minimum dimensions must be adhered to, because of the bending radius and insertion depth of the enclosure attachment, housing coupling and wall/base mountings.

**Straight**

$A_{min.}$ = 4" (100 mm),

$A_{max.}$ = 79" (2000 mm)

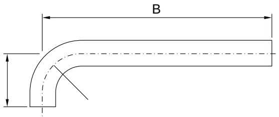


| A inches (mm) | Weight lb (kg) | **Part No.** |
|---|---|---|
| 20 (500) | 4 (2.0) | **6660.050** |
| 39 (1000) | 9 (3.9) | **6660.010** |
| 79 (2000) | 17 (7.8) | **6660.020** |
| as per specifications A = | 26 lb/ft (3.9 kg/m) | **6660.000** |

**L-shaped**

$A_{min.}$ = $B_{min.}$ = 9" (240 mm),

$B_{max.}$ = 59" (1500 mm)



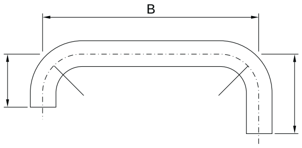
| A inches (mm) | B inches (mm) | Weight lb (kg) | **Part No.** |
|---|---|---|---|
| 9 (240) | 20 (500) | 6 (2.6) | **6660.110** |
| 20 (500) | 39 (1000) | 12 (5.5) | **6660.120** |
| as per specifications A = | as per specifications B = | 26 lb/ft (3.9 kg/m) | **6660.100** |

**U-shaped**

$A_{min.}$ = $C_{min.}$ = 9" (240 mm),

$B_{min.}$ = 16" (410 mm),

$B_{max.}$ = 59" (1500 mm)



| A inches (mm) | B inches (mm) | C inches (mm) | Weight lb (kg) | **Part No.** |
|---|---|---|---|---|
| 9 (240) | 32 (800) | 32 (800) | 15 (6.6) | **6660.210**[1]<br>**6660.230**[2] |
| 9 (240) | 20 (500) | 20 (500) | 10 (4.3) | **6660.220**[1]<br>**6660.240**[2] |
| as per specifications A = | as per specifications B = | as per specifications C = | 26 lb/ft (3.9 kg/m) | **6660.200**[1][2]<br>**6660.250**[1][2] |

[1] Enclosure top-mounted
[2] Enclosure suspended

Inch and pound measurements are rounded to the nearest whole number.

## Tilting adaptor

**10° CP-S Stainless Steel**

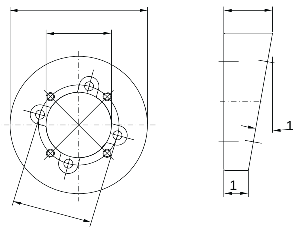
For mounting between the Command Panel and
- Enclosure attachment 6664.500

or
- Housing coupling 6664.000

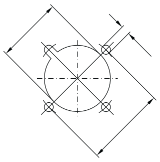
**Material:**
Type 303 stainless steel

| Weight lb (mm) | Part No. |
|---|---|
| 2 (0.7) | **6664.100** |

**Configuration:**
Seal and assembly parts



Mounting cut-out enclosure



## Enclosure attachment CP-S

**Stainless Steel**

For rigid fastening of the enclosure to the support section.

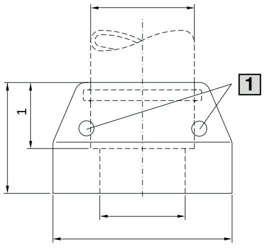
**Material:**
Type 303 stainless steel

**Configuration:**
Seals and 2 clamping screws for support section CP-S, stainless steel

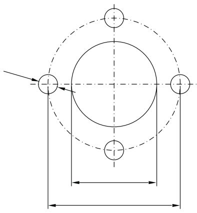
**Note:**
For assembly of a modular pedestal, see page 160, 2 pieces are required.

| Weight lb (mm) | Part No. |
|---|---|
| 3 (1.3) | **6664.500** |

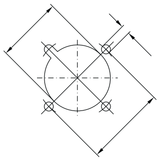
**Accessories:**
Enclosure reinforcement, see page 165.



Mounting cut-out for pedestal, bottom



Mounting cut-out, enclosure



1 Clamping screw

## Housing coupling CP-S

**Stainless Steel**

For mounting on the vertical part of the support arm system.

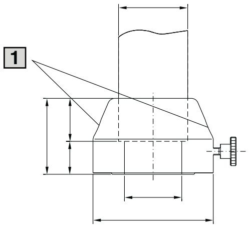
**Rotation range:**
Approx. 350°, lockable via knurled screw

**Material:**
Type 303 stainless steel

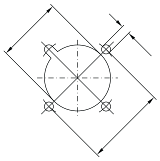
**Configuration:**
Seals and 2 clamping screws for support section CP-S, stainless steel

| Weight lb (mm) | Part No. |
|---|---|
| 2 (1.1) | **6664.000** |

**Accessories:**
Enclosure reinforcement, see page 165.

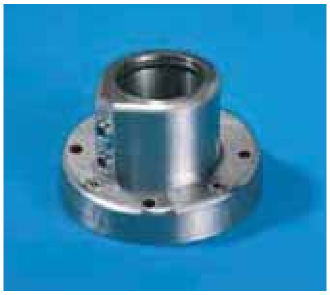


Mounting cut-out enclosure



1 Clamping screw

Inch and pound measurements are rounded to the nearest whole number.



## Wall/base mounting, rigid

**Stainless Steel**

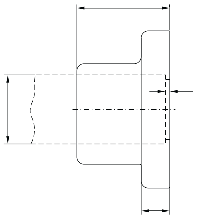
For attaching the support arm system to vertical or horizontal surfaces.

**Material:**
Type 303 stainless steel

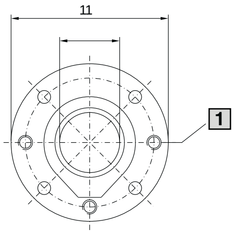
**Configuration:**
Seals, 3 adjusting screws to compensate for any irregularities, and 2 clamping screws for support section CP-S, stainless steel.

| Weight lb (kg) | **Part No.** |
|---|---|
| 4 (1.7) | **6663.000** |

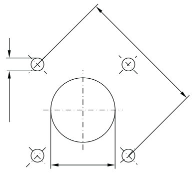
**Accessories:**
Wall consoles,
see page 131.



1 Adjusting screw



Mounting cut-out



1

1

2

2

## Swivel base mount

**Stainless Steel**

For external mounting on
- Horizontal surfaces (suspended or top-mounted)
- Wall console (6663.500 only)

**Rotation range:**
Approx. 350°, lockable via knurled screw

**Material:**
Type 303 stainless steel

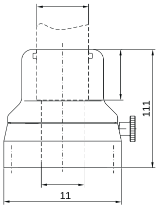
**Configuration:**
Seals and 2 clamping screws for support section CP-S, stainless steel

**Note:**
Rotation range may be limited in 60° increments using a limit plate, supplied loose

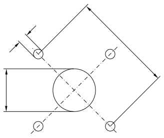
| Attachment | Weight lb (kg) | **Part No.** |
|---|---|---|
| 1 Rear, M8 thread | 9 (3.9) | **6663.500** |
| 2 Front, hole Ø 9 mm | 10 (4.5) | **6663.400** |

**Accessories:**
Wall consoles,
see page 131.

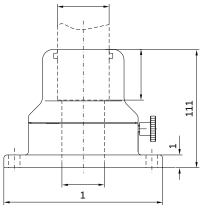
1 Rear attachment 6663.500



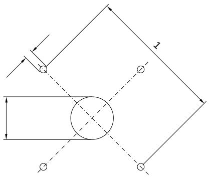
Mounting cut-out



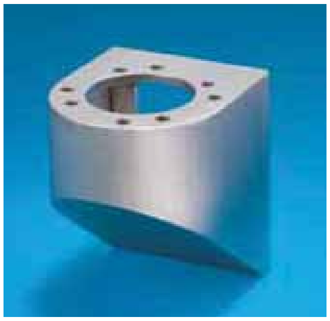
2 Rear attachment 6663.400



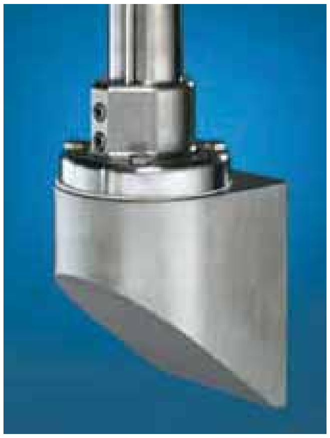
Mounting cut-out



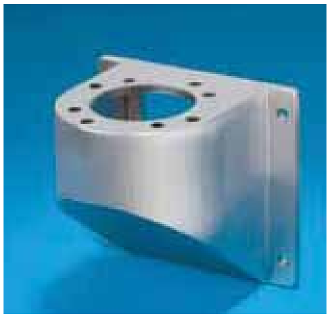
Inch and pound measurements are rounded to the nearest whole number.



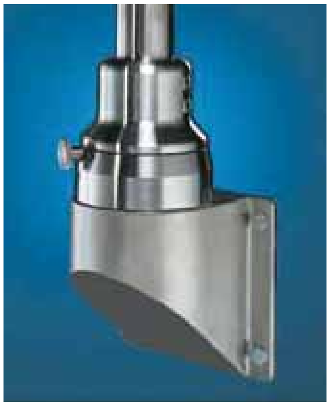
1



1



2



2

## Wall console CP-S

**Stainless Steel**

With holes for mounting

- Base mount, swivel, CP-S (6663.500), with 4 screws
- Wall/base mount, rigid, CP-S (6663.000), with 4 screws and nuts

**Material:**
Type 304 stainless steel

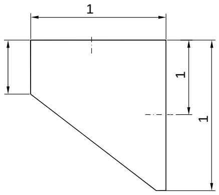
**Finish:**
Brushed, grain 240

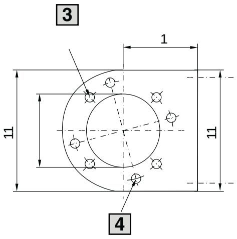
**Configuration:**
Seals and assembly parts

1 Rear attachment, M8 thread
2 Front, hole Ø 9 mm

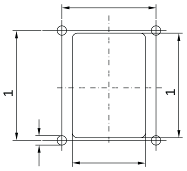
| Attachment | Weight lb (kg) | Part No. |
|---|---|---|
| Rear, M8 thread | 9 (3.9) | **6665.000** |
| Front, hole Ø 9 mm | 10 (4.5) | **6665.500** |

Rear fastening





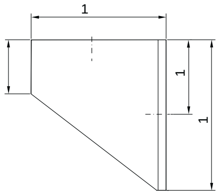
Mounting cut-out

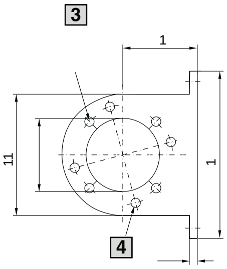


3 Hole for 6663.000

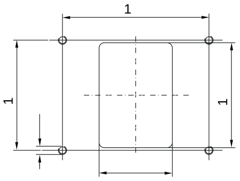
4 Hole for 6663.500

Front fastening





Mounting cut-out



3 Hole for 6663.000

4 Hole for 6663.500

Inch and pound measurements are rounded to the nearest whole number.

## Selection Guide

Make a simple sketch showing the basic form of the support arm. Next, select the corresponding support arm components. Start with "1: system start" by selecting the appropriate enclosure situation.

▶ Continue with CP-L according to the item numbers.

System changes are indicated by the color.

▶ Violet = CP-S

▶ Blue = CP-XL

System continuation/system end:

all directions

vertical

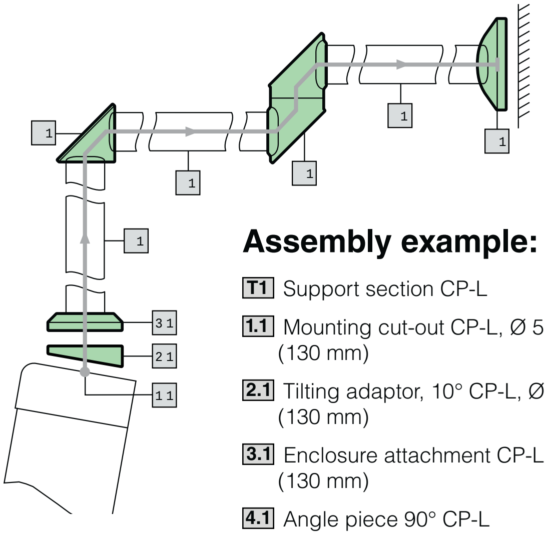
horizontal

angled

tiltable or

rotatable components

From "3: Enclosure attachments", a support section is required between each component (minimum length approx. 4" [100 mm], for wall/floor mounting approx. 6" [160 mm]). The cross-sections indicate the installation position(s).

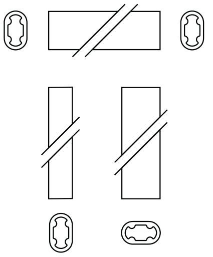


### Assembly example:

- **T1** Support section CP-L
- **1.1** Mounting cut-out CP-L, Ø 5" (130 mm)
- **2.1** Tilting adaptor, 10° CP-L, Ø 5" (130 mm)
- **3.1** Enclosure attachment CP-L, Ø 5" (130 mm)
- **4.1** Angle piece 90° CP-L
- **5.1** Intermediate hinge CP-L
- **6.1** Wall/base mounting CP-L

## T Support sections

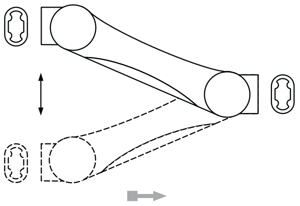
### T1 Support section CP-L.



| Length inches (mm) | Color RAL | Part No. |
|---|---|---|
| 10 (250) | 7035[1] | 6509.000 |
| 20 (500) | 7035[1] | 6511.000 |
| 39 (1000) | 7035[1] | 6513.000 |
| 79 (2000) | 7035[1] | 6515.000 |

See page 136

### T2 Support arm CP-L, height-adjustable

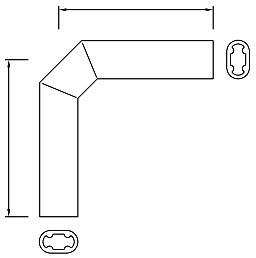


Color: RAL 7024 (graphite gray) /9006 (white aluminium)

| Weight Range lb (kg) | Length inches (mm) | Part No. |
|---|---|---|
| 18 - 88<br>(8 - 40) | 43<br>(1090) | 6510.3X0 |

See page 134

### T3 Support arm bracket 90°, CP-L



| Color RAL | Part No. |
|---|---|
| 7035[1] | 6519.000 |

See page 136

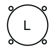
---

[1] light gray

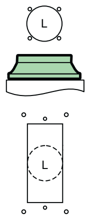
## 1 System start

### Enclosure with mounting cut-out

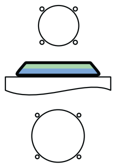
**1.1 Mounting cut-out CP-L, Ø 5" (130 mm)**



**1.2 Connection plate for support arm CP-L**
**6528.210,** see page 141.



**1.3 Connection adaptor CP-L to CP-XL**
**6528.010,** see page 140



▶ 2.1 2.2 2.4 3.1 3.2 3.3

**1.4 Mounting cut-out CP-L, ▭ 3 x 5" (65 x 120 mm)**

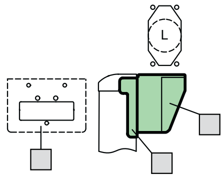
▶ 2.3 2.4 3.4 3.5 3.6

▶ CP-S 3.3 s.p. 120

**1.5 Connection console CP-L, ▭ 3 x 5" (65 x 120 mm)**

**A** **6508.010** on Optipanel support plate

**C** for connection console see page 143.



▶ 2.3 2.4 3.4 3.5 3.6

▶ CP-S 3.3 s.p. 120

**1.6 Mounting cut-out VESA 75**
see page 118.

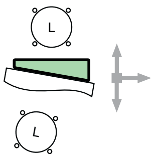
▶ 2.4

Inch and pound measurements are rounded to the nearest whole number.

## Selection Guide

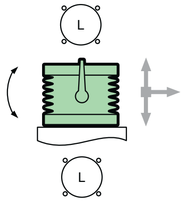
### 2 Tilting adaptor

**2.1 Tilting adaptor 10°**
**CP-L, Ø 5" (130 mm)**
**6527.010,** see page 137

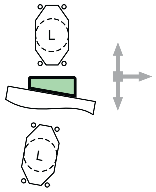


▶ 3.1 3.2 3.3

**2.2 Tilting adaptor ± 45°**
**CP-L, Ø 5" (130 mm)**
**6529.010,** see page 137

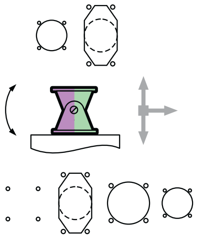


**2.3 Tilting adaptor, 10°**
**CP-L, ▭ 3 x 5"**
**(65 x 120 mm)**
**6527.110,** see page 138



▶ 3.4 3.5 3.6

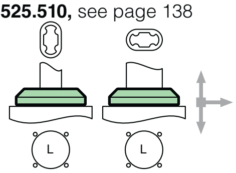
**2.4 Enclosure attachment, tilting, top mounting**[1]
**6902.670,**
see page 121



▶ 3.4 3.5
▶ CP-S 3.3 s.p. 120

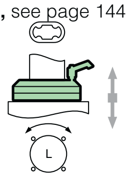
### 3 Enclosure attachments

**3.1 Enclosure attachment**
**CP-L, Ø 5" (130 mm)**
**6525.510,** see page 138



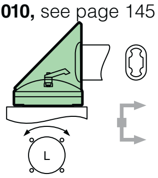
▶ 4.1 4.2 4.3 6.1 6.2 6.3 6.4

**3.2 Housing coupling**
**CP-L, 5" (130 mm)**
**6525.010,** see page 144



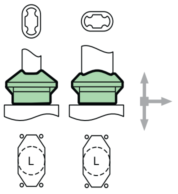
▶ 4.1 4.3 6.1 6.2 6.3[2] 6.4[2]

**3.3 Angle coupling 90°**
**CP-L, Ø 5" (130 mm)**
**6526.010,** see page 145



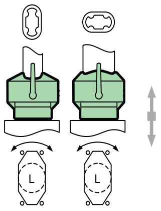
▶ 4.1 5.1 6.1 6.2 6.3 6.4

**3.4 Enclosure attachment**
**CP-L, ▭ 3 x 5"**
**(65 x 120 mm)**
**6525.610,** see page 139



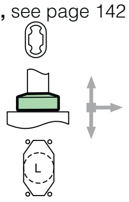
▶ 4.1 4.2 4.3 6.1 6.2 6.3[2] 6.4[2]

**3.5 Housing coupling**
**CP-L, ▭ 3 x 5"**
**(65 x 120 mm)**
**6525.110,** see page 144



▶ 4.1 4.3 6.1 6.2 6.3[2] 6.4[2]

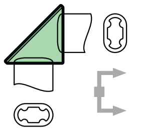
**3.6 Enclosure attachment**
**CP-L, ▭ 3 x 5"**
**(65 x 120 mm), locatable**
**6525.210,** see page 142



▶ 4.1 4.2 4.3 6.1 6.2

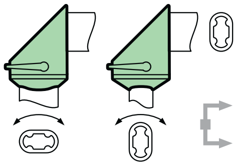
### 4 Angle components

**4.1 Angle piece 90°**
**CP-L**
**6524.010,** see page 145



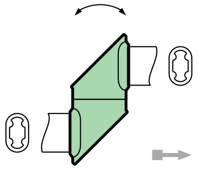
▶ 5.1 6.1 6.2 6.3 6.4

**4.2 Articulated joint 90°**
**CP-L**
**6524.210,** see page 146



### 5 Intermediate hinge

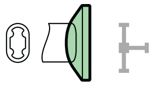
**5.1 Intermediate hinge**
**CP-L**
**6523.010,** see page 147



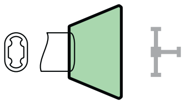
▶ 4.1 6.1 6.2

### 6 System end

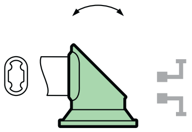
**6.1 Wall/base mounting, small, CP-L**
**6520.510,** see page 147



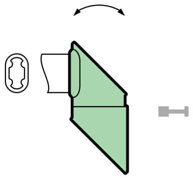
**6.2 Wall/base mounting, large, CP-L**
**6520.010,** see page 148



**6.3 Top-mounted joint**
**CP-L**
**6522.010,** see page 148



**6.4 Wall-mounted hinge**
**CP-L**
**6521.010,** see page 149



**Notes:**

**Re T2**
Support arm, height adjustable, should always be inserted as the first horizontal component after the enclosure.

**Re 5.1 / 6.3 / 6.4**
It is always expedient to use only one intermediate hinge or one wall mounted hinge.

Two joints will restrict load capacity and make positioning the Command Panel more difficult.
**Load diagram,** see page 116.

**Re 4.1**
Two angle pieces may also be used one after the other.

Inch and pound measurements are rounded to the nearest whole number.

[1] May also be used rotated through 180°, e.g. from CP-L ▭ 3 x 5" (65 x 120 mm) or CP-S to CP-L Ø 5" (130 mm).
[2] Via T3 support arm bracket 90° CP-L.

# CP-L Support Arm System

## Support arm, height adjustable CP-L

Offers enhanced ergonomics thanks to:

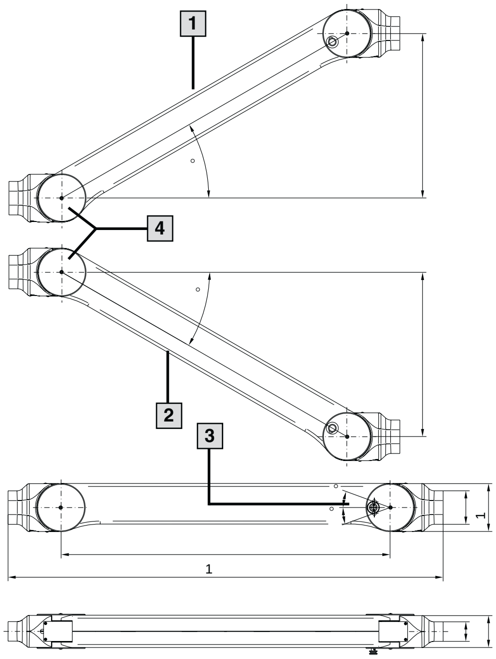
- Adjustment range
  - – for tall and short operators
  - – for seated and stand-up worktstations
- Precise coordination of the compression spring to the enclosure weight via an adjusting screw at the rear of the support arm.
- Complete functional reliabilty – if the compression spring breaks, the arm will remain in position.
- Clip-off plastic panels for access to integral cable routing.
- Tilting angle of the mounted enclosure is identical in every height position.
- More space for cable routing.
- Cables with connectors such as DVI, VGA are also easily inserted.
- Integral locking in three stages.
- Superior load capacity.

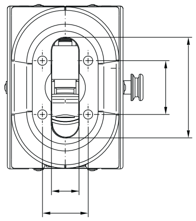
**Configuration:**
Round tube with compression spring relief and U-section cable tray, 2 threaded connectors, plastic casing, including assembly hardware.

| Overall length inches (mm) | Color RAL | Weight range lb (kg)[1] | **Part No.** |
|---|---|---|---|
| 43 (1090) | 9006 (white aluminum) | 18 - 33 (8 - 15) | **6510.320** |
| 43 (1090) | 9006 (white aluminum) | 33 - 71 (15 - 32) | **6510.330** |
| 43 (1090) | 9006 (white aluminum) | 44 - 88 (20 - 40) | **6510.340** |

[1] For configured enclosure and vertical support section

**1** Top end stop
**2** Bottom end stop
**3** Lockable at ± 20°
**4** Max. cross-section for cable entry 0.6 x 1.6" (16 x 40 mm)



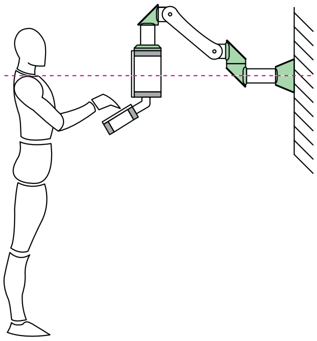


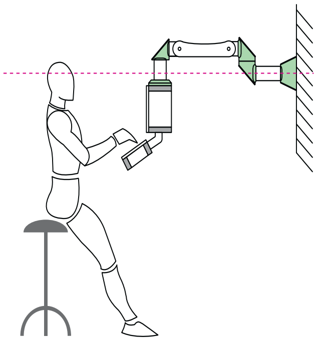
Inch and pound measurements are rounded to the nearest whole number.

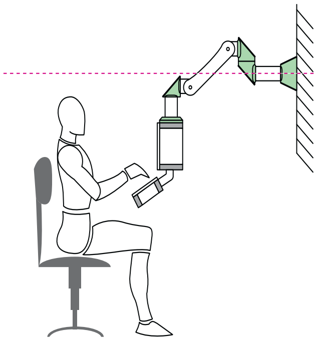
## Support Arm, Height Adjustable

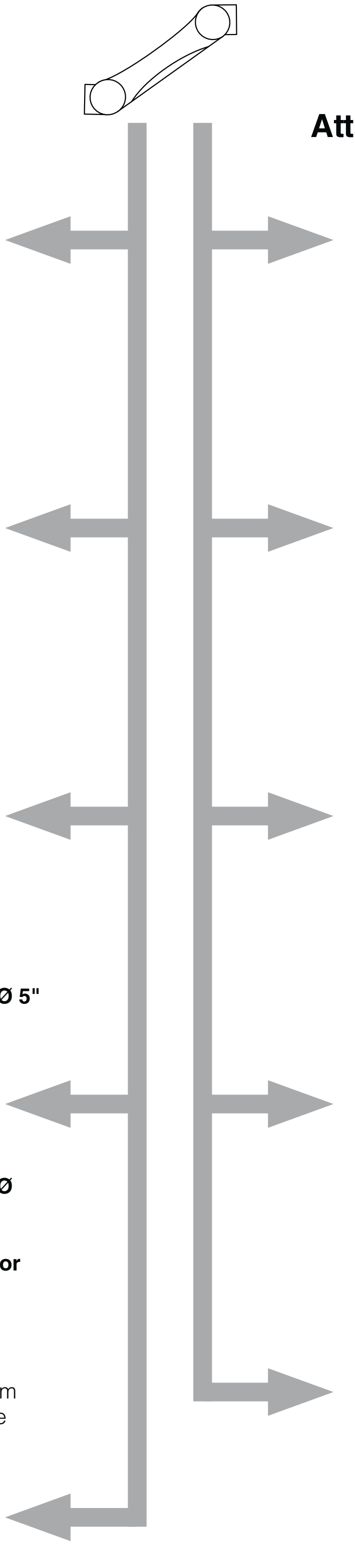
### Support arm, height adjustable CP-L

The versatile combination options with horizontal mounting are illustrated in this diagram.

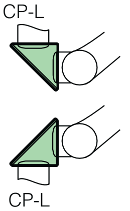




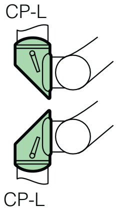




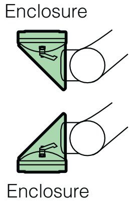
### Enclosure side



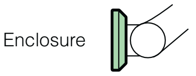
**Angle piece 90° CP-L**
**Part No. 6524.010,**
**see page 145.**



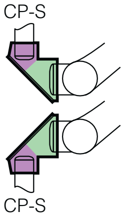
**Angle piece 90° CP-L**
**Part No. 6524.210,**
**see page 146.**



**Angle coupling 90° CP-L**
**for support arm connection Ø 5" (130 mm). Part No. 6526.010,**
**see page 145.**

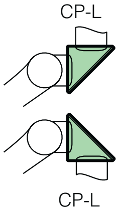


**Enclosure attachment CP-L**
**for support arm connection Ø 5" (130 mm)**
**Part No. 6525.510,**
**enclosure attachment CP-L for support arm connection**
**▭ 3 x 5" (65 x 120 mm)**
**Part No. 6525.610,**
**see page 139.**
Enclosure with rear support arm cut-out/reinforcement available upon request.

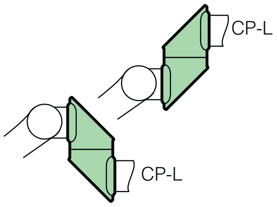


**Angle adaptor 90°, CP-L to CP-S**
**Part No. 6501.090, see page 146.**

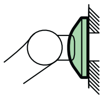
### Attachment side



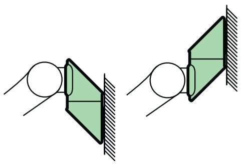
**Angle piece 90° CP-L**
**Part No. 6524.010,**
**see page 145.**



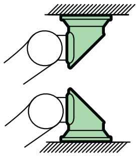
**Intermediate hinge CP-L**
**Part No. 6523.010,**
**see page 147.**



**Wall/base mounting, small, CP-L**
**Part No. 6520.510,**
**see page 147.**



**Wall-mounted hinge CP-L**
**Part No. 6521.010,**
**see page 149.**



**Top-mounted joint CP-L**
**Part No. 6522.010,**
**see page 148.**

## Support section CP-L

Attachment to the connection components with 4 self-tapping screws in a screw channel, may be cut to any required length, no thread-tapping required.

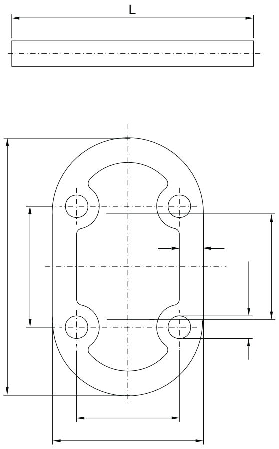
**Dimensions:**
2.0 x 3.3 inches (50 x 85 mm)

**Wall thickness:**
0.3 inches (8 mm)

**Material:**
Extruded aluminum

| Length (L)[1] inches (mm) | Weight lb (kg) | **RAL 7035 Part No.** |
|---|---|---|
| 9.8 (250) | 3 (1.3) | **6509.000** |
| 19.7 (500) | 6 (2.6) | **6511.000** |
| 39.4 (1000) | 11 (5.1) | **6513.000** |
| 78.7 (2000) | 23 (10.2) | **6515.000** |

[1] L min = 135 mm

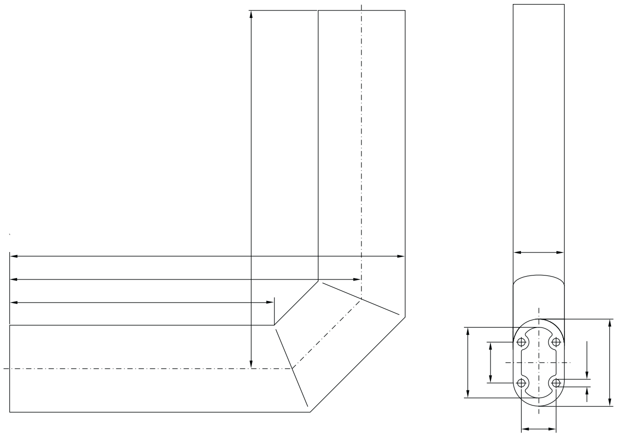


## 90° support arm bracket CP-L

The compact, robust alternative.

**Material:**
Extruded aluminum

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7035 (light gray) | 8 (3.4) | **6519.000** |



Inch and pound measurements are rounded to the nearest whole number.

## Tilting adaptor, 10° CP-L

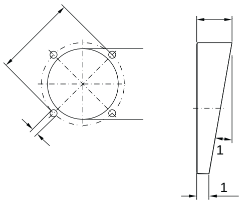
**For support arm connection Ø 5" (130 mm)**
For mounting between:

- Housing coupling CP-L (6525.010)
  or
- Enclosure attachment CP-L (6525.510)
  or
- 90° elbow coupling CP-L (6526.010)
  and the command panel

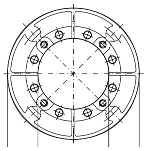
**Material:**
Die-cast zinc

**Configuration:**
Gasket and assembly hardware

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 1 (0.6) | **6527.010** |



Mounting cut-out
Enclosure CP-L, Ø 5" (130 mm)



## Tilting adaptor, ± 45° CP-L

**For support arm connection Ø 5" (130 mm)**
For mounting between:

- Housing coupling CP-L (6525.010)
  or
- Enclosure attachment CP-L (6525.510)
  or
- 90° elbow coupling CP-L (6526.010)
  and the command panel

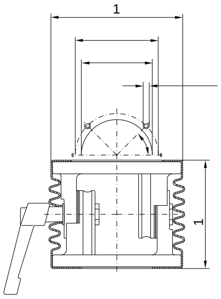
**Tilting Angle:**
Adjustable in 7.5° increments

**Material:**
Cast aluminum

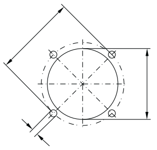
**Configuration:**
Gasket, plastic bellows and assembly hardware

German patent no. 195 40 298
US patent no. 5,911,393

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 3 (1.3) | **6529.010** |



Mounting cut-out
Enclosure CP-L, Ø 5" (130 mm)



Inch and pound measurements are rounded to the nearest whole number.

## Tilting adaptor, 10° CP-L

**For support arm connection**
**5 x 3" (120 x 65 mm)**

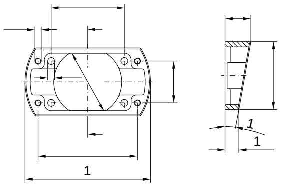
For mounting between:

- Housing coupling CP-L (6525.110)
  or
- Enclosure attachment CP-L (6525.610)
  or
- Housing coupling CP-S (6501.130)
  and the command panel.

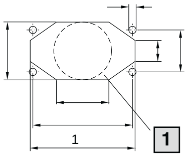
**Material:**
Die-cast zinc

**Configuration:**
Gasket and assembly hardware

| Color RAL | Weight lb (kg) | Part No. |
|---|---|---|
| 7024 (graphite gray) | 1 (0.4) | **6527.110** |



Mounting cut-out
Enclosure CP-L 5 x 3" (120 x 65 mm)



1 Alternative maximum Ø 2" (55 mm)

## Enclosure attachment, tilting,

see page 121.

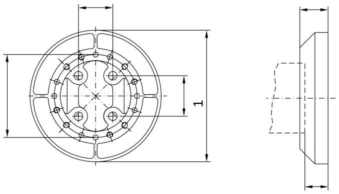
## Enclosure attachment CP-L

**For support arm connection Ø 5" (130 mm)**
For secure fastening of the enclosure to the support arm system.

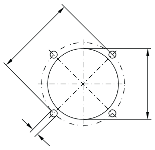
**Material:**
Die-cast zinc

**Configuration:**
Gaskets and self-tapping screws for CP-L support section attachment

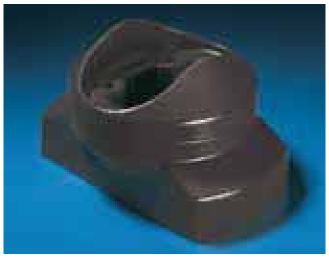
| Color RAL | Weight lb (kg) | Part No. |
|---|---|---|
| 7024 (graphite gray) | 2 (1.0) | **6525.510** |



Mounting cut-out
Enclosure CP-L, Ø 5" (130 mm)



Inch and pound measurements are rounded to the nearest whole number.



## Enclosure attachment CP-L

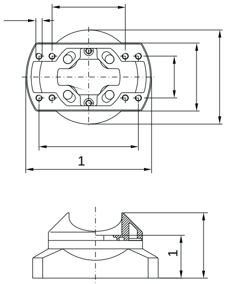
**For support arm connection**
5 x 3" (120 x 65 mm)
For fixed fastening of the enclosure to the support arm system.

**Material:**
Die-cast zinc

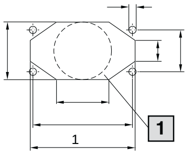
**Configuration:**
Gaskets and self-tapping screws for CP-L support section attachment or support arm connection
5 x 3" (120 x 65 mm)

**Accessories:**
Connection console CP-L,
see page 143.

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 2 (1.0) | **6525.610** |



Mounting cut-out
Enclosure CP-L, 5 x 3" (120 x 65 mm)



**1** Alternative maximum Ø 2" (55 mm)

## Enclosure attachment, tilting, base-mounting

**CP-L 5 x 3" (120 x 65 mm)**
For mounting beneath:

- IW worktop with pedestal
- Sufficiently large surfaces

Fits enclosures with mounting cut-out:

- CP-L 5 x 3" (120 x 65 mm)

With mounting cut-out for connector grommet for sealed cable entry.

**Tilt Angle:**
± 40°, lockable by a clamping lever

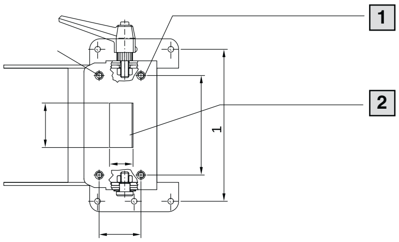
**Material:**
Sheet steel, painted

**Configuration:**
Assembly hardware

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 4 (1.6) | **6902.640** |

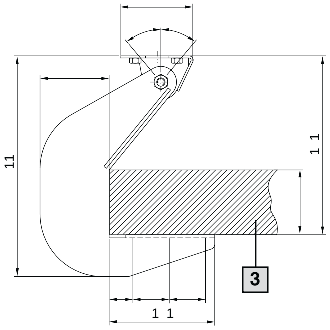
**Note:**
The enclosure attachment can be mounted either on the support arm connection of the Optipanel enclosure or on the underside or rear of any enclosure.

**Accessories:**
Connector grommet, refer to www.rittal-corp.com.
IW worktop, see page 188
Pedestal, see page 161



**1** Prepared for enclosure with connection CP-L/CP-S, 5 x 3" (120 x 65 mm) or connection console CP-L 6508.010

**2** Prepared for connector gland 2400.300/2400.500



A = maximum
2" (62 mm)

**3** Worktop, 6902.310

Inch and pound measurements are rounded to the nearest whole number.

## Connection adaptor CP-L to CP-XL

For mounting between:

- Enclosure with support arm connection CP-L and
- Support arm system CP-XL

The cut-out for CP-L may also be used for the attachment of command panels directly to machines and systems without a support arm.

**Assembly Sequence:**

- Mount the connection adaptor on the supporting structure
- Mount the enclosure and tighten the screws

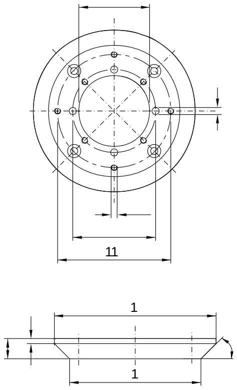
The gasket to the supporting structure is available on request.

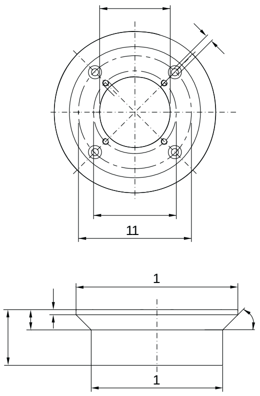
**Material:**
Cast aluminum

**Configuration:**
Gasket and assembly hardware

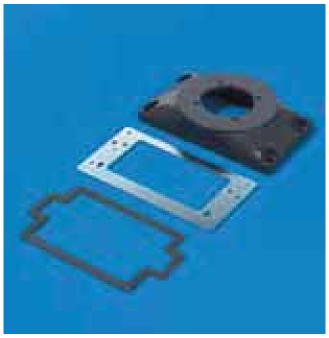
| Height inches (mm) | Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|---|
| 1 (20)[1] | 7024 (graphite gray) | 1 (0.6) | **6528.010** |
| 2 (55)[2] | 7024 (graphite gray) | 2 (0.7) | **6528.510** |

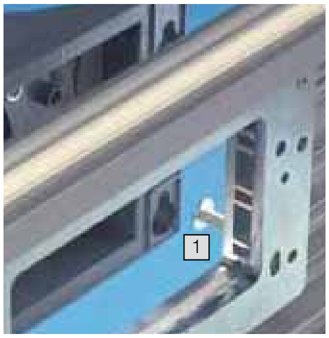
[1] Provided the load permits, may also be mounted between enclosure with support arm connection CP-XL and support arm system CP-L Ø 5" (130 mm).
[2] For command panel VIP 6000, see page 102 3.1 Operator housing, design code number 1 to 5.





Inch and pound measurements are rounded to the nearest whole number.





## Connection plate

### With reinforcement plate

- For easy location of the command panel on the support arm or pedestal
- After drilling 4 holes Ø 0.3" (7 mm), screwfasten the connection plate from the outside
- More space for cable entry plus clamping bracket

For assembling:

- VIP 6000[3]
- Optipanel[4]
- Sheet steel command panel[5] to:

| Support arm system components | CP-L | CP-XL |
|---|---|---|
| Enclosure attachment | **6525.510** | **6130.610** |
| Housing coupling | **6525.010** | **6130.010** |
| Elbow coupling | **6526.010** | **6040.010** |
| Tilting adaptor ± 45° | **6529.010** | **-** |

**1** To install the enclosure; pre-install the screws, mount the enclosure, and tighten the screws.

| With support arm connection | Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|---|
| CP-L | 7024[2] | 2 (0.7) | **6528.210** |

[2] RAL 7024 (graphite gray)

**Note:**
The square support arm cut-out can be prepared on request.

**Material:**
Connection plate: Cast aluminum Reinforcement plate: Sheet steel 0.2" (6 mm)

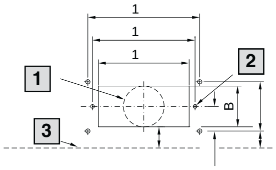
**Configuration:**
Gaskets and assembly hardware

[3] From a front panel width of 10" (265 mm). The CP-XL version cannot be used in conjunction with installation depths 6 and 12" (155 and 295 mm).

[4] From a front panel width of 9" (220 mm) and installation depth of 6" (150 mm).

[5] Mounting surface area, minimum W x D = 12 x 5" (300 x 135 mm) (as in the command panel housing with door).

Mounting cut-out CP-L/CP-XL



**1** Alternative Ø B

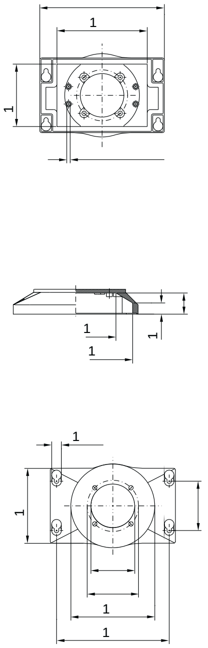
**2** Ø 0.2" (6 mm) only with metal enclosures for securing the reinforcement plate

**3** Enclosure outer edge rear

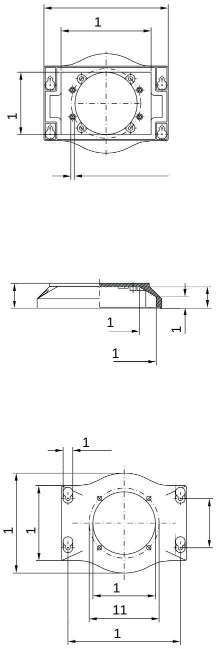
| | Installation depth inches (mm) | A | B | C |
|---|---|---|---|---|
| VIP 6000 | 6 – 7 (155 - 185) | 32 | 81 | 30 |
| | 12 – 17 (295 - 438) | 174 | 81 | 173 |
| Optipanel | 6 (150) | 34 | 65 | 28 |
| Metal enclosure | – | [1] | 86 | [1] |

[1] Drill the holes/cut-out in the center of the reinforcement plate of the enclosure.

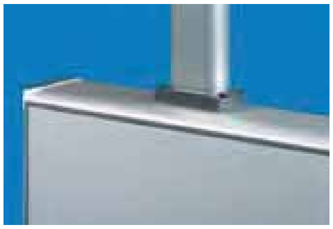
CP-L



CP-XL



Inch and pound measurements are rounded to the nearest whole number.



## Enclosure attachment, fixed CP-L

**For support arm connection 5 x 3" (120 x 65 mm)**

For fixed fastening of the enclosure to the support section.

With machined keyholes for easy, secure mounting by just one person:

- Screw the enclosure attachment to the support arm
- Secure the supporting plate to the inside of the enclosure and pre-fit two screws from the outside
- Mount the enclosure and tighten the screws

For enclosures with a depth of 3" (70 mm). More space for cable entry with connectors.

**Material:**

Enclosure attachment: Die-cast zinc
Support plate: Sheet steel

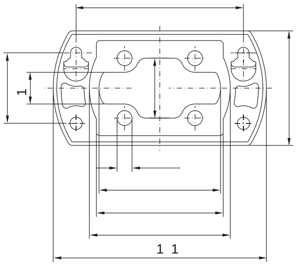
**Configuration:**

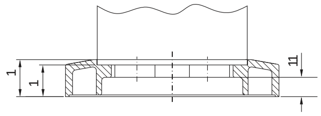
Gasket, support plate and assembly hardware. Enclosure attachment: CP-L for support arm connection 5 x 3" (120 x 65 mm)

**Additional Parts Needed:**

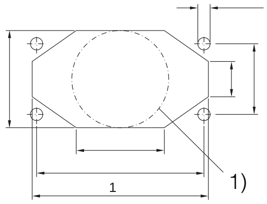
90° hinged joint CP-L, see page 146

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 1 (0.4) | **6525.210** |



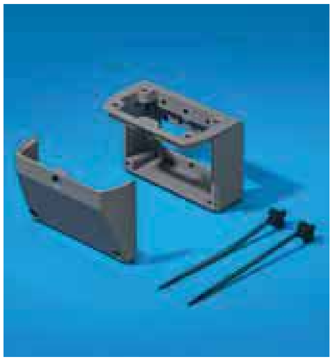


Mounting cut-out
Enclosure 5 x 3" (120 x 65 mm)



1) Alternative maximum Ø 2" (55 mm)

Inch and pound measurements are rounded to the nearest whole number.



## Connection housing CP-L

For rear connection of slimline operator housings. Removable lid for simple cable entry.

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 1 (0.7) | **6508.010** |

**Material:**
Cast aluminum

**Configuration:**
Gaskets and assembly hardware for mounting on the enclosure and 2 cable ties.

**Mounting Options:**
**1. Optipanel**

Retrofitting:

- Cut-out in rear wall/door

Selection by design code number (see page 98, item 2.3, selection 7 or 8):

Connection housing and support plate are fitted.

**Additional Parts Needed:**
Enclosure attachment (6525.610), see page 139.
Housing coupling (6525.110), see page 144.
Tilting adaptor 10° (6527.110), see page 138.
Housing coupling CP-S (6501.130), see page 123.

**Accessories:**
Spacer plate (6508.200), available on request.

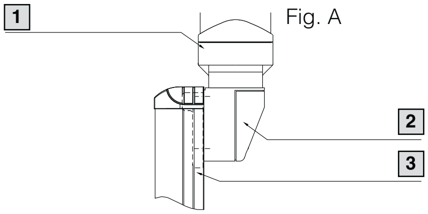
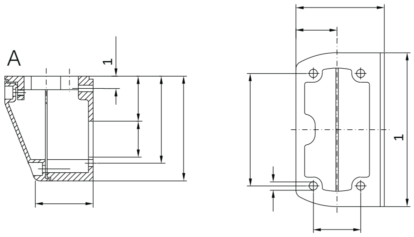
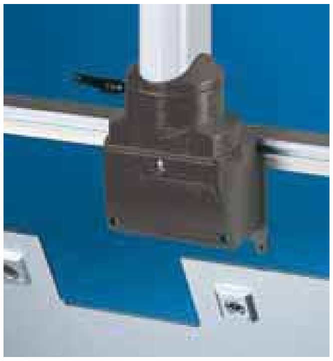


Fig. A

View A





1. Optipanel

2. General

**2. General**

- Terminal boxes (see page 4),
- Cast aluminum enclosures (see page 58)

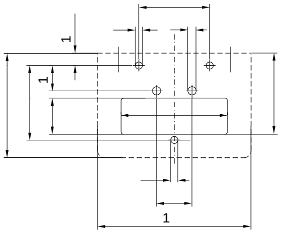
The connection housing may be mounted:

a) Directly, flush with enclosure edge (see Fig. B top),

b) In the center with spacer plate 6508.200 (on request) (see Fig. B below),

On the rear wall of the enclosure. Additional reinforcement of the rear wall should be checked in individual cases.

Mounting cut-out



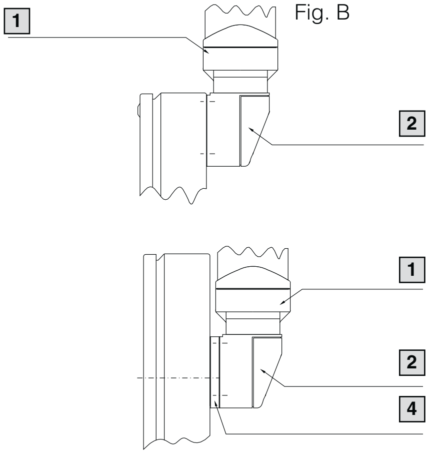


Fig. B

1 Support arm component CP-L
5 x 3" (120 x 65 mm)
2 Connection housing CP-L
3 Support plate (inside)
4 Spacer plate

Inch and pound measurements are rounded to the nearest whole number.

## Rotating enclosure coupling CP-L

**For support arm connection Ø 5" (130 mm)**

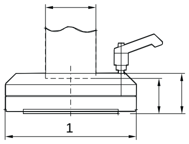
For swivel-mounting of the enclosure on the vertical section of the support arm system.

**Rotation Range:**
Approximately 310°, lockable via clamping lever. By inserting additional pins 0.2 x 0.7" (5 x 18 mm) to ISO 8752, the rotation range may be limited to ± 5°, 65°, 95° and 155°.

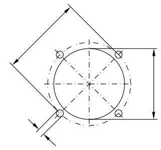
**Material:**
Die-cast zinc

**Configuration:**
Gaskets and self-tapping screws for CP-L support section attachment

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 4 (1.7) | **6525.010** |



Mounting cut-out
Enclosure CP-L, Ø 130 mm



## Rotating enclosure coupling CP-L

**For support arm connection**
**5 x 3" (120 x 65 mm)**

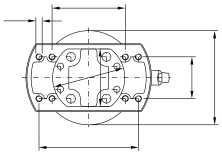
For swivel-mounting of the enclosure on the vertical section of the support arm system.

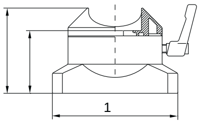
**Rotation Range:**
Approximately 350°, lockable via clamping lever. By inserting additional pins 0.2 x 0.8" (6 x 20 mm) to ISO 8752, the rotation range may be limited to ± 5° and 100°.

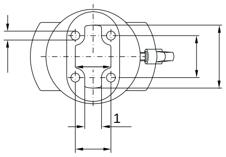
**Configuration:**
Gaskets and self-tapping screws for CP-L support section attachment

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 3 (1.4) | **6525.110** |

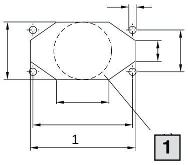
**Material:**
Die-cast zinc







Mounting cut-out
Enclosure CP-L,
5 x 3" (120 x 65 mm)



**1** Alternative maximum
Ø 2" (55 mm)

Inch and pound measurements are rounded to the nearest whole number.

## 90° enclosure coupling CP-L

**For support arm connection Ø 5" (130 mm)**
For swivel-mounting of the enclosure on the horizontal part of the support arm system. Enclosure may be suspended or top-mounted. The removable plate enables easy cable entry.

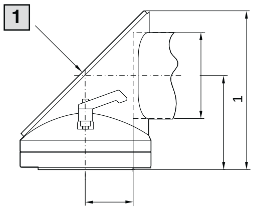
**Rotation Range:**
Approximately 310°, by inserting additional pins 0.2 x 0.7" (5 x 18 mm) to ISO 8752, the rotation range may be limited to ± 5°, 65°, 95° and 155°.

**Material:**
Cast aluminum/die-cast zinc

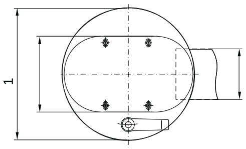
**Configuration:**
Gaskets, adjustment set and self-tapping screws for CP-L support section attachment

**Accessories:**
Mounting component for signal pillars (2375.000), see www.rittal-corp.com

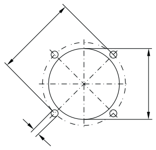
| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 4 (1.9) | **6526.010** |



**1** Removable plate



Mounting cut-out
Enclosure CP-L Ø 5" (130 mm)



## 90° elbow CP-L

For connecting horizontal and vertical support arm components. The removable plate ensures easy cable entry.

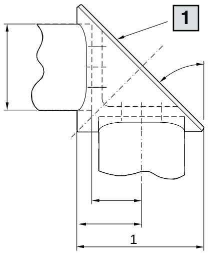
**Material:**
Die-cast zinc

**Configuration:**
Gaskets, adjustment set and self-tapping screws for CP-L support section attachment

**Property Rights:**
German patent no. 43 31 125
French patent no. 94 10901
Italian patent no. 012 74 738
Japanese patent no. 2 809 993
US patent no. 5,533,763

**Accessories:**
Mounting component for signal pillars (2375.000), see www.rittal-corp.com

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 3 (1.4) | **6524.010** |



**1** Removable plate
3 x 7" (75 x 174 mm)

Inch and pound measurements are rounded to the nearest whole number.

## 90° rotating elbow CP-L

The swivel connection between horizontal and vertical support sections.

With very slimline enclosures, there is no need for the deep housing coupling. With the shallow enclosure attachment (6525.210), the support section may also be attached with its wide side.

**Rotation Range:**
Approximately 325°. Option of limiting the rotation range with the use of additional pins 0.2 x 0.7" (5 x 18 mm) to ISO 8752 to ± 54° and 98°.

**Material:**
Cast aluminum/die-cast zinc

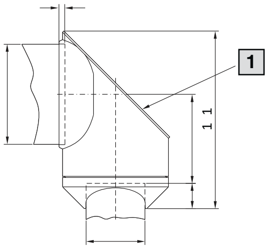
**Configuration:**
Gaskets, self-tapping screws for support section attachment and adjustment set

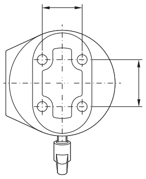
**Additional Parts Needed:**
Enclosure attachment, locatable CP-L for support arm connection 5 x 3" (120 x 65 mm) (6525.210), see page 142,

or

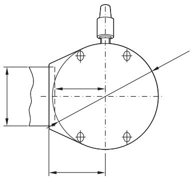
Enclosure attachment CP-L for support arm connection 5 x 3" (120 x 65 mm) (6525.610), see page 144.

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 3 (1.2 ) | **6524.210** |





**1** Removable plate



## 90° adaptor elbow, CP-L to CP-S

Connection component between:

- Small and larger support arm systems
- Outlet optionally at the top or bottom if this configuration is chosen for structural and visual reasons
- The removable cover ensures easy cable entry

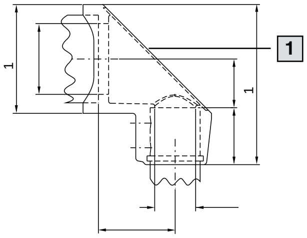
**Material:**
Cast aluminum

**Configuration:**
Gasket for support section attachment

**Note:**
Mounting component for signal pillar available on request

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 2 (1.0) | **6501.090** |

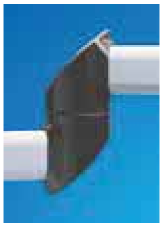
6501.090



**1** Removable plate
3 x 6" (71 x 149 mm)

**2** Removable cover

Inch and pound measurements are rounded to the nearest whole number.



## Intermediate hinge CP-L

For vertically hinged connection of horizontal support sections within the support arm system.

The removable plates ensure easy cable entry.

**Rotation Range:**
Approximately 315°, with the option of restricting the rotation range in 60° increments using the screws supplied.

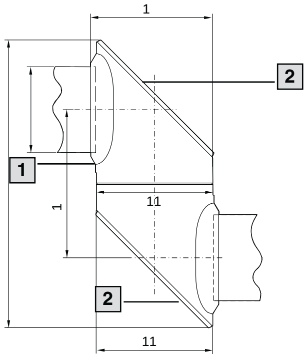
**Material:**
Cast aluminum

**Configuration:**
Gaskets, adjustment set and self-tapping screws for CP-L support section attachment

**Property Rights:**
German patent no. 44 03 593
French patent no. 94 10902
Italian patent no. 01274751
Japanese patent no. 2 675 264
US patent no. 5,522,118

**Accessories:**
Mounting component for signal pillars (2375.020), see www.rittal-corp.com

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 7 (3.2) | **6523.010** |



1 Screw for adjusting rotatability
2 Removable plate

## Wall/base-mounting, small CP-L

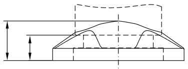
For fixed attachment of the support arm system to vertical or horizontal surfaces.

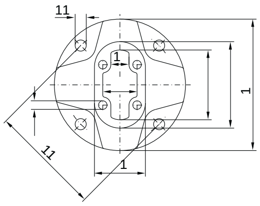
Suitable for the configuration of compact support arm systems with cable infeed from the inside.

**Material:**
Cast aluminum

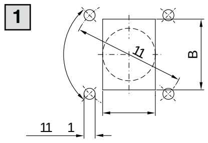
**Configuration:**
Gaskets, adjustment set for support section and self-tapping screws for CP-L support section attachment

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 1 (0.6) | **6520.510** |





Mounting cut-out



1 Alternative Ø 2" (52 mm)
A = maximum 2" (52 mm)
B = maximum 3" (70 mm)

Inch and pound measurements are rounded to the nearest whole number.

## Wall/base-mounting, large CP-L

For fixed attachment of the support arm system to vertical or horizontal surfaces with cable entry from the inside.

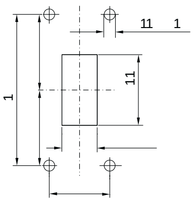
**Material:**
Cast aluminum

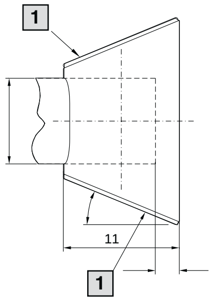
**Configuration:**
Gaskets, opportunity for adjustment with offset screws and self-tapping screws supplied loose for CP-L support section attachment.

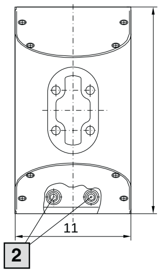
**Accessories:**
Pillar, refer to www.rittal-corp.com

| Color RAL | Weight lb (kg) | Part No. |
|---|---|---|
| 7024 (graphite gray) | 4 (1.9) | **6520.010** |

Mounting cut-out







1 Removable plate
2 Adjusting screws

## Top-mounted joint CP-L

For swivel-mounting of the support arm system on horizontal surfaces – also suitable for suspending from the ceiling. The removable plate allows easy cable entry.

**Rotation Range:**
Approximately 315°, with the option of restricting the rotation range in 60° increments and adjusting the mobility of the joint with the screws supplied loose. To lock the joint, the screw may be exchanged for a standard commercially available clamping lever M 1" (8 x 16 mm).

**Material:**
Cast aluminum

| Color RAL | Weight lb (kg) | Part No. |
|---|---|---|
| 7024 (graphite gray) | 7 (3.0) | **6522.010** |

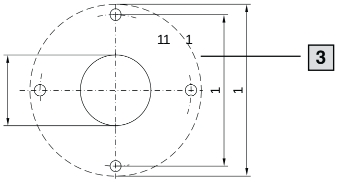
**Configuration:**
Gaskets, adjustment set and self-tapping screws for CP-L support section attachment.

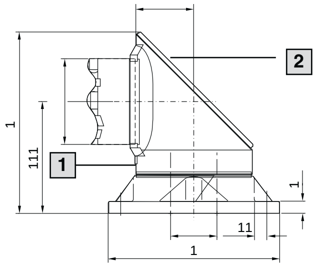
**Note:**
Cannot be used as an enclosure coupling.

**Accessories:**
Pillar, refer to www.rittal-corp.com.

Mounting component for signal pillars (2375.020), refer to www.rittal-corp.com.

Mounting cut-out





1 Screw for adjusting rotatability
2 Removable plate
3 Mounting surface

Inch and pound measurements are rounded to the nearest whole number.

## Wallmounted hinge CP-L

For vertically hinged-mounting of the support arm on vertical surfaces. The removable plates facilitate simple cable routing and cable entry.

**Rotation Range:**
Approximately 315°, with the option of restricting the rotation range in 60° increments and adjusting the mobility of the joint with the screws supplied loose. To lock the joint, the screw may be exchanged for a standard commercially available clamping lever M 1" (8 x 16 mm).

**Material:**
Cast aluminum

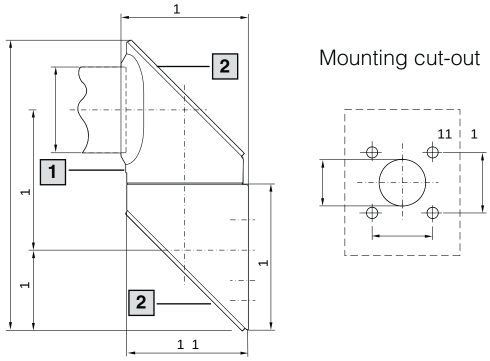
**Configuration:**
Gaskets, adjustment by grub screws and self tapping screws for CP-L support section attachment.

**Property Rights:**
German patent no. 44 03 593
French patent no. 94 10902
Italian patent no. 01274751
Japanese patent no. 2 675 264
US patent no. 5,522,118

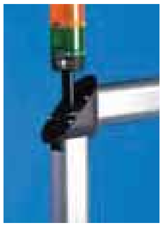
**Accessories:**
Pillar, see www.rittal-corp.com

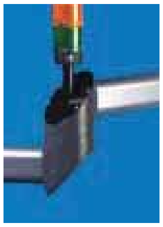
Mounting component for signal pillars (2375.020), see www.rittal-corp.com

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 7 (3.2) | **6521.010** |



| | |
|---|---|
| 1 | Screw for adjusting rotatability |
| 2 | Removable plate |





## Mounting component CP-L

### For signal pillars

For mounting a signal pillar with connection component for conduit-mounting on support arm system CP-L, see www.rittal-corp.com.

Inch and pound measurements are rounded to the nearest whole number.

# CP-XL Support Arm System

## Selection Guide

Make a simple sketch showing the basic form of the support arm. Next, select the corresponding support arm components. Start with "1: System start" by selecting the appropriate enclosure situation.

► Continue with CP-XL according to the item numbers.

System continuation/system end:

all directions

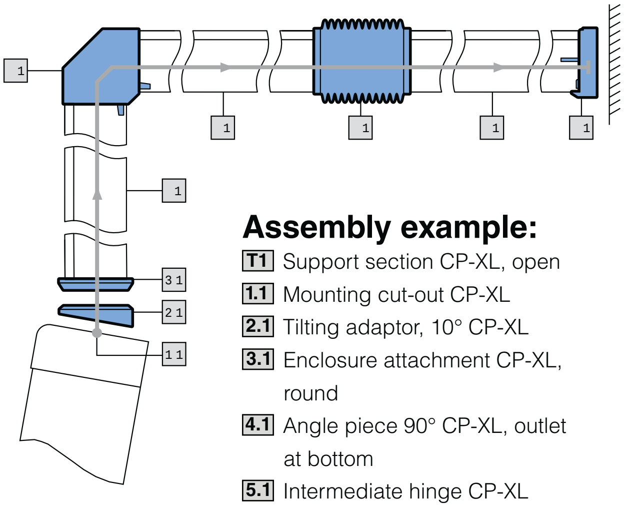
vertical

horizontal

angled

rotatable components

From "3: Enclosure attachments", a support section is required between each component (minimum length approx. 4" [100 mm], for wall/floor mounting approx. 6" [160 mm]). The cross-sections indicate the installation position(s).

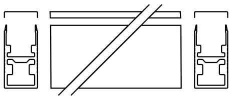


### Assembly example:

- **T1** Support section CP-XL, open
- **1.1** Mounting cut-out CP-XL
- **2.1** Tilting adaptor, 10° CP-XL
- **3.1** Enclosure attachment CP-XL, round
- **4.1** Angle piece 90° CP-XL, outlet at bottom
- **5.1** Intermediate hinge CP-XL
- **6.1** Wall/base mounting CP-XL

## T Support sections

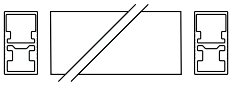
### T1 Support section CP-XL, open



| Length inches (mm) | Color RAL | Part No. |
|---|---|---|
| 20 (500) | 7035[1] | 6050.000 |
| 39 (1000) | 7035[1] | 6100.000 |
| 79 (2000) | 7035[1] | 6200.000 |

See page 152

### T2 Support arm CP-XL, solid



| Length inches (mm) | Color RAL | Part No. |
|---|---|---|
| 20 (500) | 7035[1] | 6050.500 |
| 39 (1000) | 7035[1] | 6100.500 |
| 79 (2000) | 7035[1] | 6200.500 |

See page 152

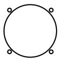
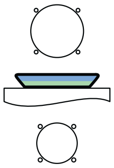
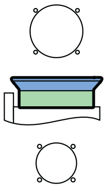
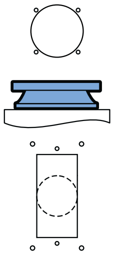
[1] light gray

**Note:**

- Only insert one intermediate hinge
- Two angle pieces may also be used one after the other
- With angle pieces, take care to ensure correct positioning of the support section cable duct
- **Load diagram,** see page 116.

## 1 System start

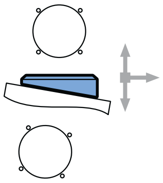
### Enclosure with mounting cut-out

| | |
|---|---|
| **1.1 Mounting cut-out CP-L**<br> | ►<br>**2.1**<br>**3.1**<br>**3.2**<br>**3.3**<br>**3.4**<br>**3.5** |
| **1.2 Connection adaptor CP-L to CP-XL**<br>**6528.010,** see page 140<br> | |
| **1.3 Connection adaptor CP-L to CP-XL**<br>for VIP 6000 enclosures with installation depths 6, 7, 12" (155, 185, 295 mm)<br>**6528.510,** see page 140<br> | |
| **1.4 Connection plate with reinforcement plate**<br>**6528.420** width 8" (200 mm)<br>**6528.430** width 16" (418 mm),<br> | ►<br>**2.1**<br>**3.1**<br>**3.2**<br>**3.3**<br>**3.4** |

Inch and pound measurements are rounded to the nearest whole number.

## 2 Tilting adaptor

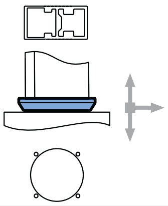
**2.1 Tilting adaptor 10°**
**CP-XL**
**6023.010** see page 155



▶
**3.1**
**3.3**
**3.4**

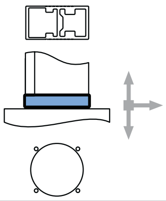
## 3 Enclosure attachments

**3.1 Enclosure attachment**
**CP-XL, round**
**6130.610** see page 153

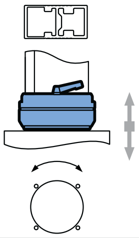


▶
**4.1**
**4.2**
**5.1**
**6.1**
**6.2**
**6.3**

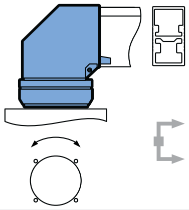
**3.2 Enclosure attachment**
**CP-XL, rectangular**
**6130.510** see page 154



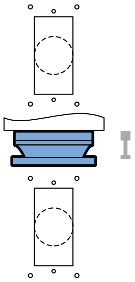
**3.3 Enclosure attachment**
**CP-XL**
**6130.010** see page 154



**3.4 Angle coupling 90°**
**CP-XL**
**6040.010** see page 156

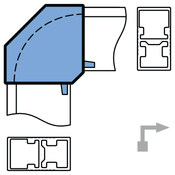


**3.5 Housing coupling**
**for desktop mounting**
**6528.400** width 8" (200 mm)
**6528.410** width 16"
(418 mm)



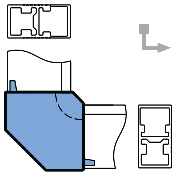
## 4 Angle components

**4.1 Angle piece 90°**
**CP-XL, outlet at**
**bottom**
**6140.010** see page 157



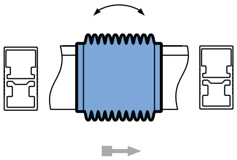
▶
**5.1**
**6.1**
**6.2**
**6.3**

**4.2 Angle piece 90°**
**CP-XL, outlet at top**
**6180.010** see page 157



## 5 Intermediate hinge

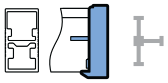
**5.1 Intermediate hinge**
**CP-XL**
**6120.010** see page 157



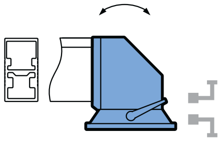
▶
**4.1**
**4.2**
**6.2**
**6.3**

## 6 System end

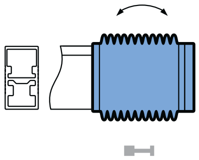
**6.1 Wall/base mounting**
**CP-XL**
**6160.010** see page 159

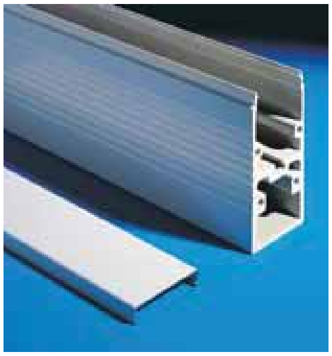


**6.2 Top-mounted joint**
**CP-XL**
**6170.010** see page 159



**6.3 Wall-mounted hinge**
**CP-XL**
**6110.010** see page 158





## Support section CP-XL, open

Attachment to the connecting components with 4 self-tapping screws in the screw channel, may be cut to any required length.

With open cable duct, for easy servicing access and for pre-assembled cables with connectors; easily locked using a clip-on lid.

**Size:**
3 x 6" (80 x 155 mm)

**Material:**
Extruded aluminum

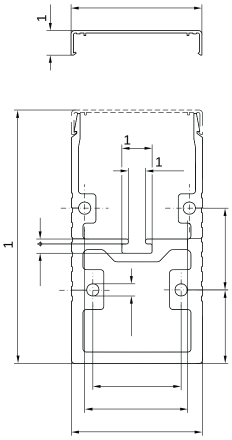
**Configuration:**
Clip-on lid

**Note:**
Load information, see page 116.

**Accessories:**
Adjustment set for support section, see page 153.

| Length mm (inches) | Color RAL | Weight lb (kg) | Part No. |
|---|---|---|---|
| 20 (500) | 7035 1) | 11 (4.9) | **6050.000** |
| 39 (1000) | 7035 1) | 22 (9.8) | **6100.000** |
| 79 (2000) | 7035 1) | 43 (19.6) | **6200.000** |

1) RAL 7035 (light gray)



## Support section CP-XL, solid

The alternative solution for higher loads and torsion compared with the CP-L support section, open.

**Size:**
3 x 6" (80 x 155 mm)

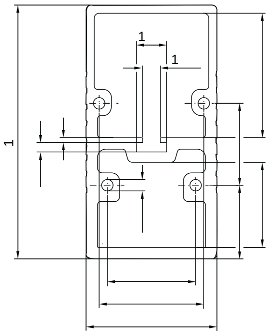
**Material:**
Extruded aluminum

**Note:**
Load information, see page 116.

**Accessories:**
Adjustment set for support section, see page 153.

| Length mm (inches) | Color RAL | Weight lb (kg) | Part No. |
|---|---|---|---|
| 20 (500) | 7035 1) | 12 (5.5) | **6050.500** |
| 39 (1000) | 7035 1) | 24 (11.0) | **6100.500** |
| 79 (2000) | 7035 1) | 49 (22.0) | **6200.500** |

1) RAL 7035 (light gray)



Inch and pound measurements are rounded to the nearest whole number.

## Adjustment set for support section CP-XL

The adjustment set permits field alignment of the CP support section.

**Material:**
Sheet steel 19 ga (1.0 mm), zinc-plated, passivated

| PU | Part No. |
|---|---|
| 10 | **6205.000** |

## Connection plate

**With reinforcement plate**

See page 141.

## Connection adaptor CP-L to CP-XL

See page 140.

## Enclosure attachment CP-XL, round

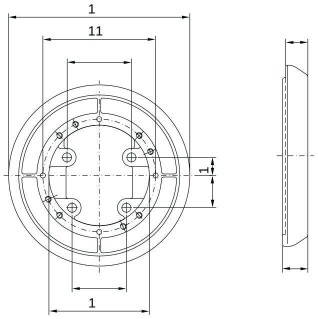
For fixed external-mounting of enclosures to:

- Support section

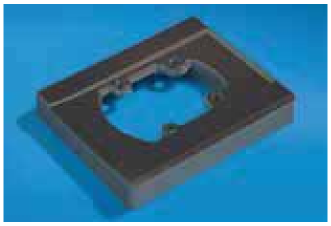
**Material:**
Die-cast zinc

**Configuration:**
Gaskets and self-tapping screws for CP-XL support section attachment

| Color RAL | Weight lb (kg) | Part No. |
|---|---|---|
| 7024 (graphite gray) | 4 (1.6) | **6130.610** |



Inch and pound measurements are rounded to the nearest whole number.



## Enclosure attachment CP-XL, rectangular

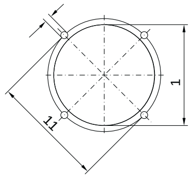
For fixed external-mounting on the enclosure.

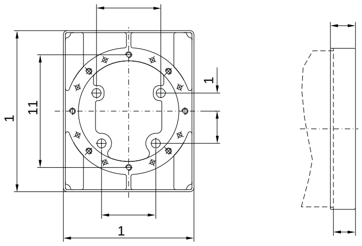
**Material:**
Die-cast zinc

**Configuration:**
Gasket and self-tapping screws for CP-XL support section attachment.

| Color RAL | Weight lb (kg) | Part No. |
|---|---|---|
| 7024 (graphite gray) | 3 (1.2) | **6130.510** |

Mounting cut-out enclosure CP-XL





## Rotating enclosure coupling CP-XL

For swivel-mounting of the enclosure on the vertical section of the support arm system.

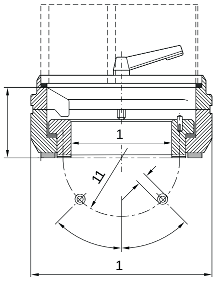
**Rotation Range:**
Approximately 350°

**Material:**
Die-cast zinc

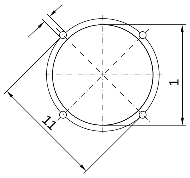
**Configuration:**
Gaskets and self-tapping screws for CP-XL support section attachment.

**Note:**
By inserting pins 0.2 x 0.5" (5 x 12 mm) to DIN EN ISO 8741, the rotation range may be limited in 90° increments.

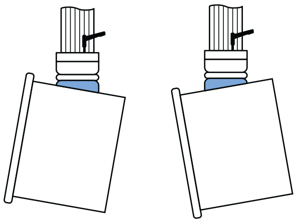
| Color RAL | Weight lb (kg) | Part No. |
|---|---|---|
| 7024 (graphite gray) | 15 (6.8) | **6130.010** |



Mounting cut-out
Enclosure CP-XL



Inch and pound measurements are rounded to the nearest whole number.



## Tilting adaptor 10° CP-XL

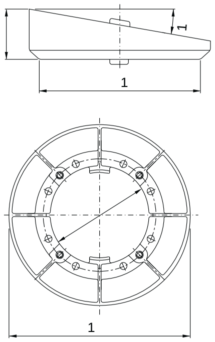
For mounting between:

- Housing coupling (6130.000)
  or
- Enclosure attachment (6130.600)
  or
- Elbow coupling (6040.000) and the command panel.

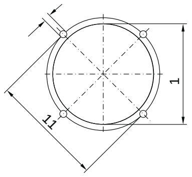
**Material:**
Die-cast zinc

**Configuration:**
Gaskets and assembly hardware

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 3 (1.4) | **6023.010** |



Mounting cut-out
Enclosure CP-XL



Inch and pound measurements are rounded to the nearest whole number.

## 90° enclosure coupling CP-XL

For swivel-mounting of the enclosure on the horizontal part of the support arm system.

Enclosure may be suspended or supported.

**Rotation Range:**
Approximately 350°

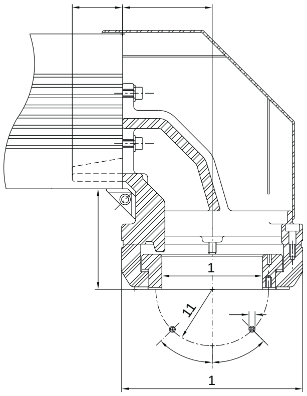
**Material:**
Spheroidal-graphite cast iron and die-cast zinc

**Configuration:**
Gaskets, plastic housing and self-tapping screws for CP-XL support section attachment.

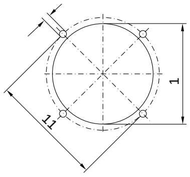
**Note:**
By inserting pins 0.2 x 0.5" (5 x 12 mm) to DIN EN ISO 8741, the rotation range may be limited in 90° increments.

**Property Rights:**
German patent no. 4033747
Italian patent no. 1252120

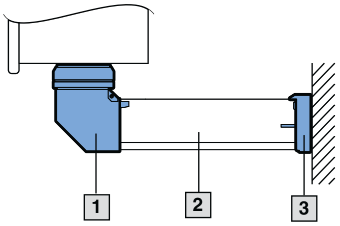
| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 14 (6.2) | **6040.010** |



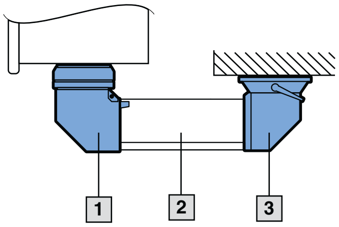
Mounting cut-out
Enclosure CP-XL



Support mounting is only possible as shown in the diagrams below (without intermediate hinge).



1 Enclosure coupling 6040.010
2 Support section 6050.500
3 Wall/base-mounting bracket 6160.010



1 Enclosure coupling 6040.010
2 Support section 6050.500
3 Top-mounted joint 6170.010

Inch and pound measurements are rounded to the nearest whole number.

## 90° elbow CP-XL

For connecting horizontal and vertical support arm components.

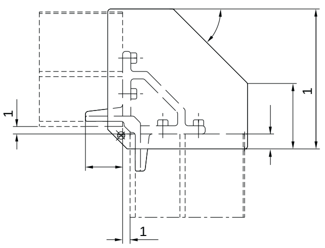
**Material:**
Spheroidal-graphite cast iron

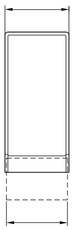
**Configuration:**
Gaskets, plastic housing and self-tapping screws for CP-XL support section attachment.

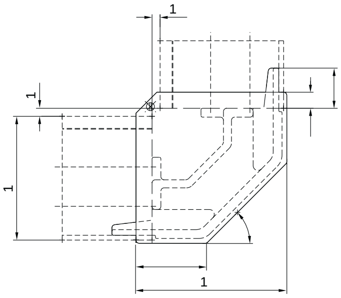
**Property Rights:**
German patent no. 58901106
European patent no. 0330027 with validity for IT

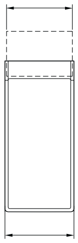
| Mounting* | Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|---|
| Suspended | 7024 (graphite gray) | 5 (2.4) | **6140.010** |
| Supported | 7024 (graphite gray) | 8 (3.6) | **6180.010** |

* Suspended mounting is secured to the top of an enclosure. Supported mounting is secured to the bottom of an enclosure.









## Intermediate hinge CP-XL

For vertically hinged connection of horizontal support sections within the support arm system.

**Rotation Range:**
Approximately 180°

**Material:**
Spheroidal-graphite cast iron

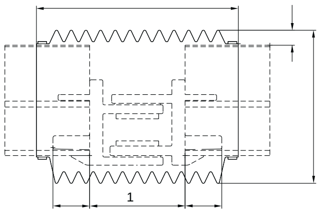
**Configuration:**
Self-tapping screws for CP-XL support section attachment and divided bellow section with zipper for easy access to the cable duct.

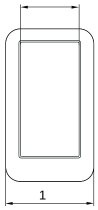
**Note:**
Rotation range may be reduced with rotation limiter.

**Property Rights:**
German patent no. 3805424
European patent no. 0330029 with validity for IT

**Accessories:**
Rotation limiter CP-XL, see page 158.

| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 14 (6.5) | **6120.010** |





Inch and pound measurements are rounded to the nearest whole number.

## Wallmounted hinge CP-XL

For vertically hinged-mounting of the support arm on vertical surfaces.

**Rotation Range:**
Approximately 180°

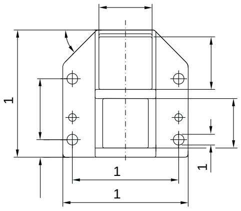
**Material:**
Spheroidal-graphite cast iron

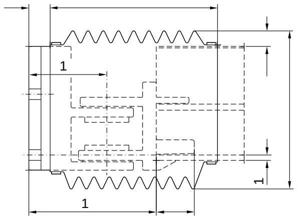
**Configuration:**
Gaskets, bellow section and assembly hardware

**Note:**
Rotation range may be reduced with rotation limiter CP-XL.

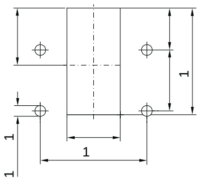
**Accessories:**
Rotation limiter CP-XL, see below.

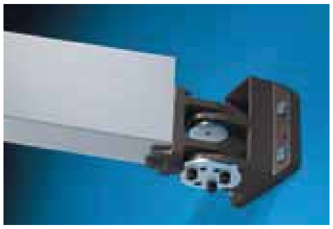
| Color RAL | Weight lb (kg) | **Part No.** |
|---|---|---|
| 7024 (graphite gray) | 19 (8.5) | **6110.010** |





Mounting cut-out





## Rotation limiter CP-XL

Suitable for:

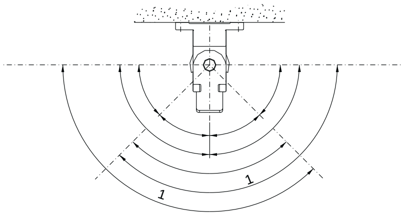
- Wallmounted hinge (6110.010)
- Intermediate hinge (6120.010).

**Material:**
Steel, zinc-plated, passivated

**Configuration:**
2 steel disks, slotted, including 3 cheese-head screws for assembly

| PU | Weight lb (kg) | **Part No.** |
|---|---|---|
| 1 set | 1 (0.6) | **6110.100** |

Adjustable swivel area:



Inch and pound measurements are rounded to the nearest whole number.

## Top-mounted joint CP-XL

For swivel-mounting of the support arm system on horizontal surfaces – also suitable for suspending from the ceiling.

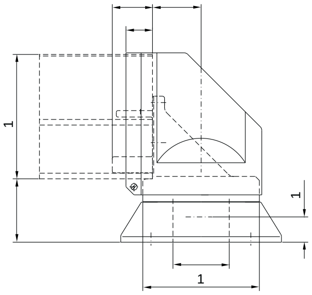
**Rotation Range:**
Approximately 350°, lockable

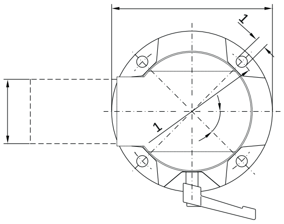
**Material:**
Steel and cast parts

**Configuration:**
Gaskets and plastic housing, self-tapping screws for CP-XL support section attachment

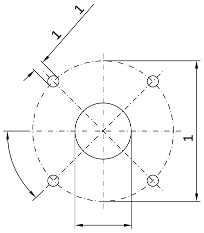
**Note:**
Safety end stop as anti-twist protection.

| Color RAL | Weight lb (kg) | Part No. |
|---|---|---|
| 7024 (graphite gray) | 26 (11.9) | **6170.010** |





Mounting cut-out



## Wall/base-mounting CP-XL

For fixed attachment of the support arm system to vertical or horizontal surfaces.

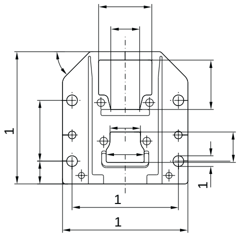
**Material:**

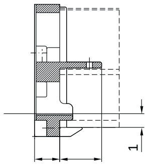
Spheroidal-graphite cast iron

**Configuration:**

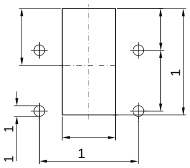
Gaskets and self-tapping screws for CP-XL support section attachment

| Color RAL | Weight lb (kg) | Part No. |
|---|---|---|
| 7024 (graphite gray) | 9 (4.1) | **6160.010** |





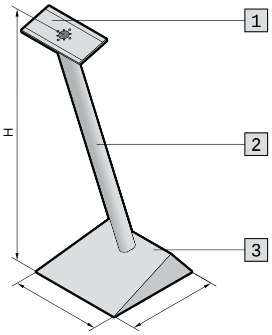
Mounting cut-out



Inch and pound measurements are rounded to the nearest whole number.

# CP-L Pedestal, Bases

## Pedestal, modular, CP-L



| May be compiled from the following modules: | | Part No. | Page |
|---|---|---|---|
| 1 Enclosure reinforcement | | 6143.310 | 165 |
| 2 Support section, straight (may be shortened to required length by sawing) | 20" (500 mm) | 6660.050 | 128 |
| | 40" (1000 mm) (H + 65mm) | 6660.010 | 128 |
| | 80" (2000 mm) | 6660.020 | 128 |
| 3 Pedestal base plate, small | | 6143.200 | 160 |

**For additional technical information, please visit www.rittal-corp.com**

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## Pedestal base plate

**small**

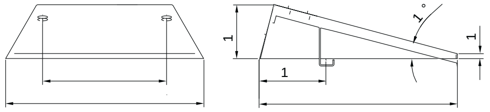
- With one hole at the rear for commercially available cable conduit gland M20.
- With two holes at the top (including sealing bung) for floor attachment.
- Prepared on the inside for a cable clamp for strain relief.

**Material:**
Sheet steel, 2.5 mm

| Weight lb (kg) | Color RAL | Part No. |
|---|---|---|
| 14 (6.3) | 7035 (light gray) | 6143.200 |

**Supply includes:**
Assembly parts.

**Note:**
Commercially available screws up to M8 may be used for floor attachment.



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## Pedestal base plate

**large**

- Cut-out for concealed mounting of cable conduit adaptor M50
- Cut-out for PG segments (2235.010 to 2235.080) or cable conduit adaptor up to Ø 70 mm
- Integral cable clamping bracket

**Material:**
Sheet steel, powder-coated

| For support section | Color RAL | Weight lb (kg) | Part No. |
|---|---|---|---|
| CP-L | 7035 (light gray) | 27 (12.4) | 6137.535 |
| CP-XL | 7035 (light gray) | 29 (13.1) | 6137.035 |

**Supply includes:**
Integral reinforcement and mounting cut-out for support section CP-L or CP-XL, complete with assembly parts for configuration of the support section.

---

## Pedestal

**mobile**

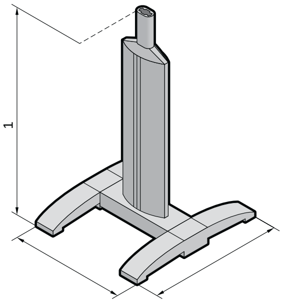
Consisting of:
2 sheet steel axles, each with 2 die-cast zinc roller bearings with plastic coating, 4 twin castors, 2 x with, 2 x without locks, 1 cross-brace, screw-fastened, of sheet steel with integral cable clamping bracket, 1 support section of aluminium (for 6136.000 with clip-in lid), partially pre-assembled.

**Color:**
Powder-coated in RAL 7035, corner pieces in RAL 7030.

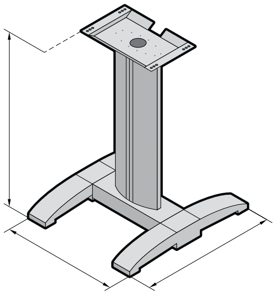
| Pedestal, mobile with support section | Part No. |
|---|---|
| CP-L | 6136.500 |
| CP-XL | 6136.000 |

**For additional technical information, please visit www.rittal-corp.com**

Inch and pound measurements are rounded to the nearest whole number.



1



2

1

2

## Pedestal

One oval panel is permanently screw-fastened, while the other can be opened by "spreading" with a screwdriver for easy laying of cables.
In order to ensure opening of the front panels, we recommend that the adjustable frame connector be used with all panels with keyboard housings.

**Material:**
Feet: cast aluminum
Cross member, vertical support tubes: Steel
Panels: Aluminum section

**Configuration:**
**for Command Panel:**
2 cast aluminum feet,
1 cross member made of steel,
2 steel support tubes welded to cross member,
2 oval panels made from aluminum section,
1 top cover made from cast aluminum with support section CP-L, partially pre-assembled.

**for IW worktops:**
2 cast aluminum feet,
1 cross member made of steel,
2 steel support tubes welded to cross member,
2 oval panels made from aluminum section,
1 worktop attachment of sheet steel.

| | For Command Panel | For IW worktops | |
|---|---|---|---|
| Design | 1<br>with cable conduit adaptor and drilled hole for cable entry in cross member | 2<br>with drilled hole for cable entry in cross member | Page |
| H x W x D inches (mm) | 43 x 24 x 28<br>(1093 x 600 x 700) | 37 x 24 x 28<br>(946 x 600 x 700) | |
| **Part No.** | **6141.100** | **6141.200** | |
| Weight lb (kg) | 77 (35.1) | 74 (33.7) | |
| Color RAL | 7035[1]/ natural-anodized | 7035[1]/ natural-anodized | |
| **Accessories** | | | |
| Twin castors | 6148.000,<br>4634.500 | 6148.000,<br>4634.500 | 201,<br>168 |
| Leveling feet | 4612.000 | 4612.000 | 201 |
| Base mount | 6147.000 | 6147.000 | 163 |
| Foot rest | 6145.100 | 6145.100 | 163 |
| Trim panel | 6144.100 | 6144.100 | 163 |
| Cable conduit | | | 262 |

[1] light gray

Inch and pound measurements are rounded to the nearest whole number.

# Command Panel and IW Pedestal

| | For Command Panel | For IW worktops | Page |
|---|---|---|---|
| Enclosure attachment CP-L, Ø 5" (130 mm) | 6525.510 | – | 138 |
| Enclosure attachment CP-L, ▭ 3 x 5" (65 x 120 mm) | 6525.610 | – | 139 |
| Housing coupling CP-L, Ø 5" (130 mm) | 6525.010 | – | 144 |
| Housing coupling CP-L, ▭ 3 x 5" (65 x 120 mm) | 6525.110 | – | 144 |
| Enclosure attachment CP-L, ▭ 3 x 5" (65 x 120 mm), locatable | 6525.210 | – | 142 |
| Enclosure attachment, tilting | – | 6902.640 | 139 |
| Worktop without handle (H x W x D: 1 x 37 x 24" (38 x 950 x 600 mm) | – | 6902.310 | 188 |

[1] Other widths and heights and support tubes available upon request.

Inch and pound measurements are rounded to the nearest whole number.

## Cross member

**with cast feet**

Steel cross member with mounting holes for lifting pillar or other individual assemblies, including 2 cast aluminum feet.

| Color RAL | PU | Weight lb (kg) | Part No. |
|---|---|---|---|
| 7035 (light gray) | 1 | 13 (5.8) | **6142.100** |

**Accessories:**
Foot rest 6145.100,
Trim panel 6144.100,
Base mount 6147.000,
See below.
Twin castors, see page 201.

## Base mount

Brackets for screw-fastening from below to the cast feet with posidrive raised countersunk screws M12.
Optionally with projection at the front, interior or sides, with Ø 0.5" (11 mm) hole for screw-fastening to the base.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Posidrive raised countersunk screws M12.

| PU | Part No. |
|---|---|
| 4 | **6147.000** |

## Trim panel

**Material:**
Cast aluminum

**Configuration:**
Assembly parts for screw-fastening between the cast feet at the front or rear.

| Color RAL | PU | Part No. |
|---|---|---|
| 7035 (light gray) textured | 1 | **6144.100** |

## Foot rest

**Material:**
Connector pieces: Cast aluminum
Round tube section: Aluminum

**Configuration:**
Assembly parts.

| Color RAL | PU | Weight lb (kg) | Part No. |
|---|---|---|---|
| 7035 (light gray) textured/ natural-anodized | 1 | 1 (0.6) | **6145.100** |

Inch and pound measurements are rounded to the nearest whole number.

## Pedestal, open

With cable duct open
- for inserting cables with pre-assembled connectors for optimum service access

Head plate with accommodation for:
- CP-L housing coupling for support arm connection Ø 5" (130 mm), 6525.010, see page 144
- CP-L enclosure attachment for support arm connection Ø 5" (130 mm), 6525.510, see page 138

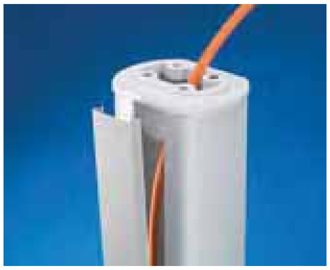
**Material:**
Pedestal tube: Steel, spray-finished in RAL 7035
Cover section: Plastic RAL 7030

**Design:**
16 x 16" (400 x 400 mm), 0.4" (10 mm) thick base plate, with 0.2 x Ø 0.4" (4 x 11 mm) mounting holes.
Pedestal tube H x W 3 x 3" (73 x 86 mm), 11 ga (3 mm) thick, head and base plate welded on.

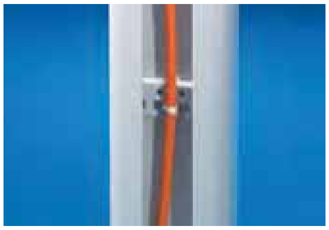
**Configuration:**
Assembly parts and cover section.

1 Cover section just clips on

2 With cable clamping bracket



1

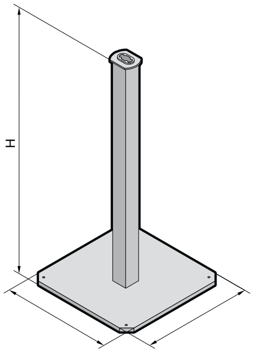


2

| Height (H) inches (mm) | Weight lb (kg) | PU | **Part No.** |
|---|---|---|---|
| 43 (1093) | 53 (24) | 1 | **6215.000** |
| To specifications | – | 1 | **6215.100** |

**Accessories:**
Cable tie 2597.000, see www.rittal-corp.com

**For additional technical information, please visit www.rittal-corp.com**



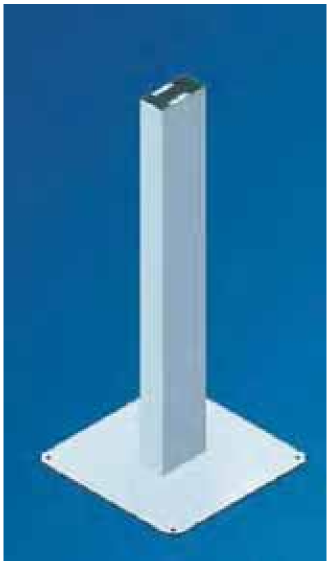
## Pillar

**Small**

For heavy assemblies, connection plates at the top for CP-XL support arm components.
- With cut-out for 24-pole connectors for cable entry at the bottom rear
- Height: 45" (1150 mm)

**Material:**
Steel

**Design:**
Base plate cross-section 20 x 20" (500 x 500 mm), 0.5" (12 mm) thick, with 4 mounting holes.
Pedestal tube (cross-section 3 x 6" (80 x 160 mm), wall thickness 11 ga (3.2 mm) welded to base plate.



| Color RAL | PU | **Part No.** |
|---|---|---|
| 7035 (light gray) | 1 | **6214.500** |

**Accessories:**
CP-XL housing coupling, see page 154.
CP-XL enclosure attachment, see pages 153-154.

**For additional technical information, please visit www.rittal-corp.com**

Inch and pound measurements are rounded to the nearest whole number.

6143.310

6143.210

6503.000

## Enclosure reinforcement plate

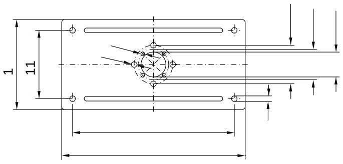
For external or internal reinforcement of enclosures of a corresponding size. Smaller enclosures may also be mounted directly without enclosure reinforcement.

**Configuration:**
Assembly parts for the enclosure and support section plus 2 seals.

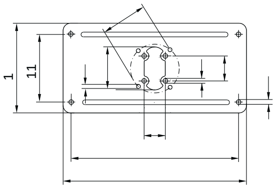
| For enclosure | Support arm connection | Material | Weight lb (kg) | **Part No.** |
|---|---|---|---|---|
| B1 ≥ 12" (300 mm)<br>T1 ≥ 6" (150 mm) | CP-S | Type 304 stainless steel | 2 (0.9) | **6143.310** |
| B1 ≥ 12" (300 mm)<br>T1 ≥ 6" (150 mm) | CP-L | Sheet steel | 2 (0.9) | **6143.210** |
| 6662.000<br>or<br>AE<br>(B1 = 24" [600 mm],<br>T1 ≥ 8" [210 mm]) | CP-XL | Sheet steel | 5 (2.2) | **6503.000** |

Inch and pound measurements are rounded to the nearest whole number.

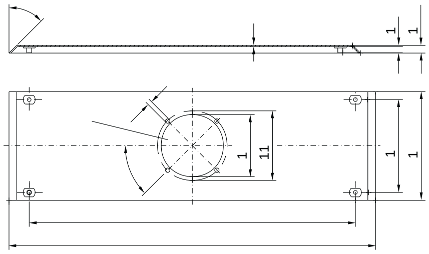
6143.310



6143.210



6503.000



## Features

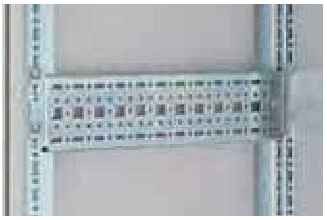
### Assembly

**Easy assembly**
The integrated “mounting assistant" can be used as an adjustment and securing aid: Simply insert, snap into position, and screw fasten.

**Simple assembly**
The fitted mounting panel slides in and locks easily into position (in a 25 mm pitch pattern). This depth variable installation and securing technology saves a lot of time and money during assembly and servicing.

**Practical diversity**
Perforated system strips fitted to doors and covers for TS compatible installation, i.e., for mounting rails or wiring plan pockets.

### System configuration

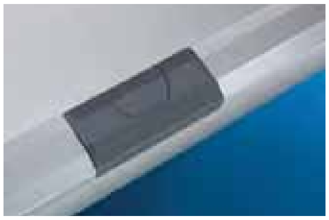


**Individual interior configuration**
The numerous components from the Rittal modular system produce a host of individual solutions which you are sure to find worthwhile.

**Extra advantage**
All TopConsole modules are fitted with threaded studs and are therefore ready for use in TS compatible configurations (rails, partial mounting panels and many more besides).

**Exemplary cable routing**
TopConsole system – also stands for more combination options for cable entries, thanks to individual gland plates.

### Design, safety, ergonomics

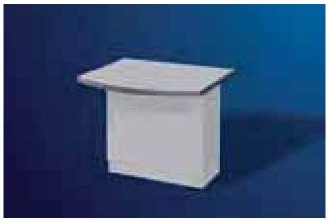


**Design line**
The integrated lock, which is shielded by a hinged flap, is visually aligned with the handle strip.

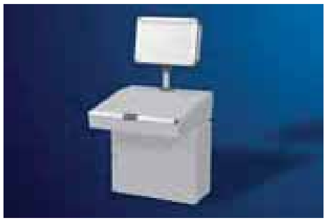
**Single-handed operation**
The desk unit lid stay locks home automatically and it can be unlocked in one operation.

**Stylish ergonomics**
Screens, displays and operating controls are mounted at an ergonomically favorable angle.

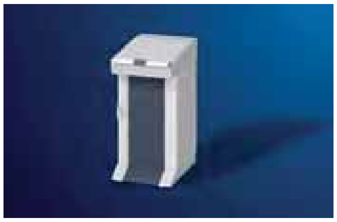
### Combination diversity



**Example 1:**
The pedestal of a TopConsole combined with an IW worktop.



**Example 2:**
The TopConsole pedestal combined with a desk unit, CP-L support arm components and a Command Panel.



**Example 3:**
A TopConsole desk unit combined with an IW pedestal, 24 inches (600 mm) deep.

## Combination Options

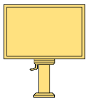
**Easy selection of your desired combination**
The TP TopConsole System components can be combined in many user-specific versions as shown in the diagrams below.
The table opposite allows you to immediately find the order number for your selection. In addition to this, the IW and Command Panel range make the new TopConsole system TP combination options virtually infinite.

Small operator units are easily integrated into separate Command Panels.

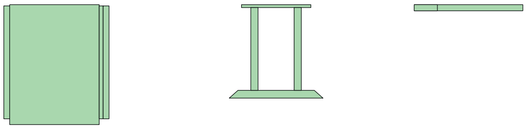
Completely new options for space utilization are available when used in conjunction with our range of IW enclosures.

The TS modular base/plinth system also ensures more cable entry flexibility when used with consoles.

## Rittal human/machine interface family

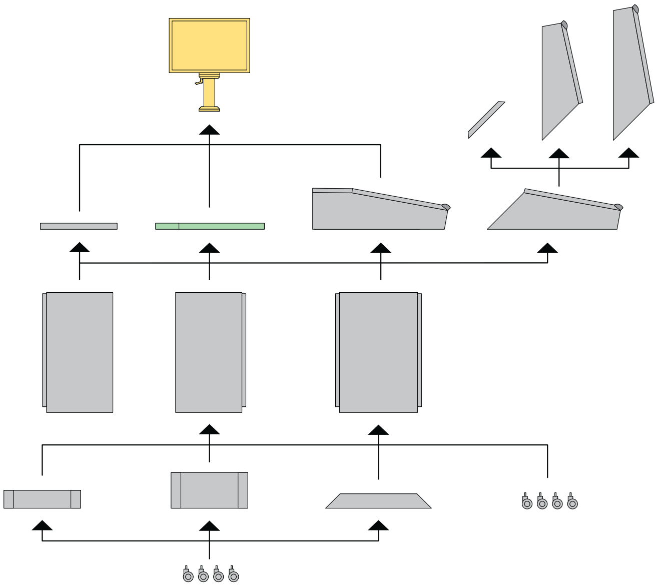


Command Panels may be found on page 102-115.

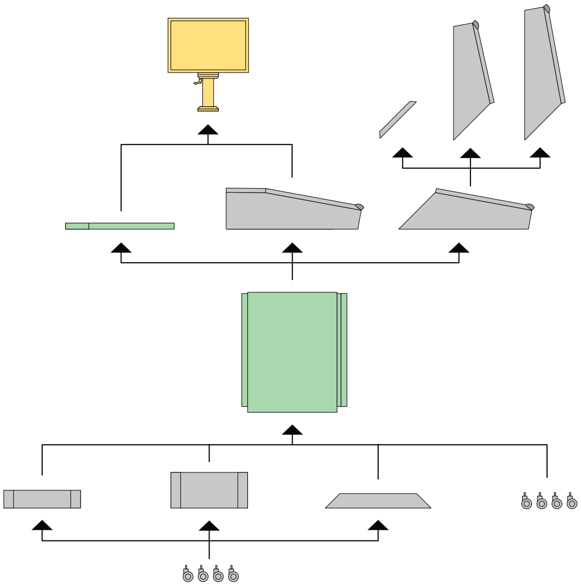


Industrial Workstations (IW) may be found from page 182.

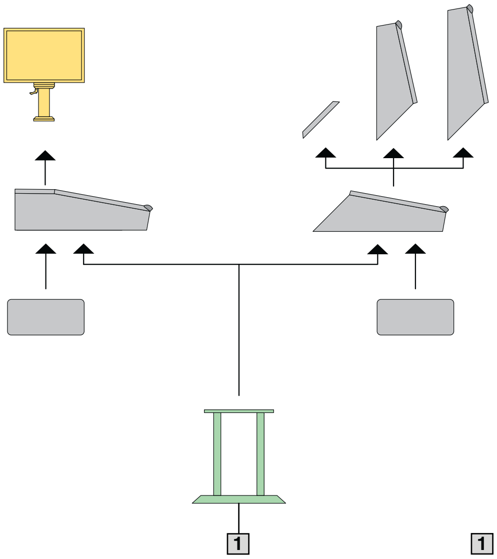
## Combination with console base sections



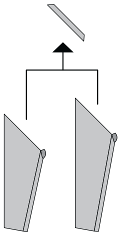
## Combination with IW enclosures



## Combination with worktop base



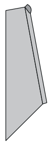
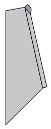
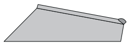
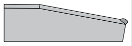
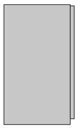
## Upper section used as wall enclosure



1 Worktop base for 31" (800 mm) width

# TopConsole System

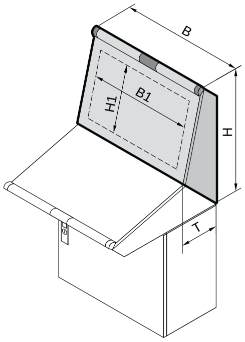
## Overview Table

| Width inches (mm) | | 24 (600) | | 32 (800) | | 47 (1200) | | 63 (1600) | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Part No.** | **Part No.** | **Part No.** | **Part No.** | **Part No.** | **Part No.** | **Part No.** | **Part No.** |
| **Console, upper section** | | | | | | | | | |
|  | Height 30" (750 mm) | **6720.500** | | **6721.500** | | **6722.500** | | **6723.500** | |
|  | Height 26" (650 mm) | **6724.500** | | **6725.500** | | **6726.500** | | **6727.500** | |
| **Desk unit already prepared for an upper section** | | | | | | | | | |
|  | Depth 30" (755 mm) | **6714.500** | | **6715.500** | | **6716.500** | | **6717.500** | |
| **Console/desk unit trim panel** | | | | | | | | | |
| | for height 26/30" (650/750 mm) | **6730.200** | | **6730.210** | | **6730.220** | | **6730.230** | |
| **Rear of desk unit, with hinged lid** | | | | | | | | | |
|  | Depth 30" (755 mm) | **6710.500** | | **6711.500** | | **6712.500** | | **6713.500** | |
| **Gland plate for desk unit (from page 278)** | | | | | | | | | |
| | Size | 4 | | 5 | | 4 | | 5 | |
| | Qty. | 1 | | 1 | | 2 | | 2 | |
| **Trim panel** | | | | | | | | | |
| | Depth inches (mm) | 16 (400) | 20 (500) | 16 (400) | 20 (500) | 16 (400) | 20 (500) | 16 (400) | 20 (500) |
| | | **6730.000** | **6730.100** | **6730.010** | **6730.110** | **6730.020** | **6730.120** | **6730.030** | **6730.130** |
| **Pedestal** | | | | | | | | | |
|  | Depth inches (mm) | 16 (400) | 20 (500) | 16 (400) | 20 (500) | 16 (400) | 20 (500) | 16 (400) | 20 (500) |
| | Height 27" (675 mm) | **6700.500** | **6704.500** | **6701.500** | **6705.500** | **6702.500** | **6706.500** | **6703.500** | **6707.500** |
| **Base/plinth components, front and rear** | | | | | | | | | |
| | Height 8" (200 mm) | **8602.600** | | **8602.800** | | **8602.200** | | **8602.920** | |
| | Height 4" (100 mm) | **8601.600** | | **8601.800** | | **8601.200** | | **8601.920** | |
| **Base/plinth trims, side** | | | | | | | | | |
| | Depth inches (mm) | 16 (400) | 20 (500) | 16 (400) | 20 (500) | 16 (400) | 20 (500) | 16 (400) | 20 (500) |
| | Height 8 " (200 mm) | **8602.040** | **8602.050** | **8602.040** | **8602.050** | **8602.040** | **8602.050** | **8602.040** | **8602.050** |
| | Height 4 " (100 mm) | **8601.040** | **8601.050** | **8601.040** | **8601.050** | **8601.040** | **8601.050** | **8601.040** | **8601.050** |
| **Cross member, adjustable** | | | | | | | | | |
| | Height 3" (75 mm) | **8601.450** | | **8601.450** | | **8601.450** | | **8601.450** | |
| **Castors** | | | | | | | | | |
| | Height 5" (125 mm) | **4634.500** | | **4634.500** | | **4634.500** | | **4634.500** | |

Inch and pound measurements are rounded to the nearest whole number.

# TopConsole System

## Depth: 9" (240 mm), Height: 26 - 30" (650 - 750 mm)



**Material:**
Sheet steel
Enclosure: 16 ga (1.5 mm)
Cover: 14 ga (2.0 mm)
Design handle strip: Aluminum
Corner protectors and lock lid:
Plastic, self-extinguishing

**Finish:**
Enclosure and cover:
Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Design handle strip:
Natural-anodized
Corner protectors and lock lid:
RAL 7015 (slate gray)

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529) (when using a suitable trim panel, see page 174, or mounting on a desk unit, see page 172).

UL File: 76083

**Configuration:**
Enclosure with lid, hinged at the bottom, may be swapped to the top, includes lid stay, open base for individual cable entry

**For additional technical information, please visit www.rittal-corp.com**

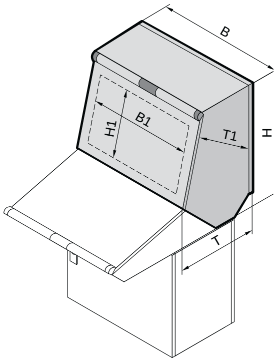
| **Height** (H) inches (mm) | | PU | 26 (650) | 26 (650) | 26 (650) | 26 (650) | 30 (750) | 30 (750) | 30 (750) | 30 (750) | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 47 (1200) | 63 (1600) | 24 (600) | 32 (800) | 47 (1200) | 63 (1600) | |
| **Depth** (T) inches (mm) | | | 9 (240) | 9 (240) | 9 (240) | 9 (240) | 9 (240) | 9 (240) | 9 (240) | 9 (240) | |
| Max. cut-out | Height (H1) inches (mm) | | 12 (313) | 12 (313) | 12 (313) | 12 (313) | 16 (413) | 16 (413) | 16 (413) | 16 (413) | |
| | Width (B1) inches (mm) | | 19 (488) | 27 (688) | 43 (1088) | 59 (1488) | 19 (488) | 27 (688) | 43 (1088) | 59 (1488) | |
| **Part No.** | | 1 | **6724.500** | **6725.500** | **6726.500** | **6727.500** | **6720.500** | **6721.500** | **6722.500** | **6723.500** | |
| **Accessories** | | | | | | | | | | | |
| Trim panel (when used alone) | | 1 | 6730.200 | 6730.210 | 6730.220 | 6730.230 | 6730.200 | 6730.210 | 6730.220 | 6730.230 | 174 |
| Rail for interior installation, horizontal | for width | 4 | 5001.050 | 5001.051 | 5001.053 | 5001.055 | 5001.050 | 5001.051 | 5001.053 | 5001.055 | 233 |
| Punched section with mounting flange 2.9 x 0.7" (73 x 17 mm)[1] | for lid | 4 | 8612.140 | | | | 8612.150 | | | | 234 |
| | for enclosures | 4 | 8612.150 | | | | 8612.150 | | | | 234 |
| Support strip[1] | for lid | 20 | 4694.000 | | | | 4695.000 | | | | 236 |
| | for enclosures | 20 | 4695.000 | | | | 4695.000 | | | | 236 |
| Punched rail 1.5 x 0.7" (38 x 18 mm)[1] | for lid | 4 | 8612.240 | | | | 8612.250 | | | | 233 |
| | for enclosures | 4 | 8612.250 | | | | 8612.250 | | | | 233 |
| Partial mounting panel | 8" (200 mm) width | 1 | 6730.310 | | | | 6730.310 | | | | 232 |
| | 20" (500 mm) width | 1 | 6730.330 | | | | 6730.330 | | | | 232 |
| | 28" (700 mm) width | 1 | – | 6730.340 | | | – | 6730.340 | | | 232 |
| **Lock systems** | | | | | | | | | | | |
| Standard double-bit lock insert may be exchanged for 1" (27 mm) lock inserts, type A, see page 218 | | | | | | | | | | | |

To order primed consoles please add extension .800 to the Part No.
[1] Can be vertically mounted in lid and rear enclosure wall.

Inch and pound measurements are rounded to the nearest whole number.

# TopConsole System

## Depth: 21" (525 mm), Height: 31" (785 mm)



Console for mounting on pedestal with depth 20" (500 mm) in conjunction with desk unit. Opening at the rear, with rear panel hinged at the bottom and cam locks. Side panels with bolts for mounting rails for interior installation.

**Material:**
Sheet steel
Enclosure: 16 ga (1.5 mm)
Cover: 14 ga (2.0 mm)
Design handle strip: Aluminum
Corner protectors and lock lid: Plastic, self-extinguishing

**Finish:**
Enclosure and cover:
Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Design handle strip: Natural-anodized Corner protectors and lock lid:
RAL 7015 (slate gray)

**Protection Ratings:**
NEMA 12 (IP 55 to EN 60 529) (when mounting on a desk unit)

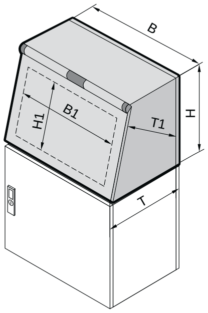
**Configuration:**
Enclosure with cover at the front, hinged at the bottom, including cover retainer, rear door, hinged at the bottom with cam locks, base open for individual cable entry.

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H) inches (mm) | | PU | 31 (785) | 31 (785) | 31 (785) | 31 (785) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 47 (1200) | 63 (1600) | |
| **Depth** (T) inches (mm) | | | 21 (525) | 21 (525) | 21 (525) | 21 (525) | |
| Max. cut-out | Height (H1) inches (mm) | | 16 (413) | 16 (413) | 16 (413) | 16 (413) | |
| | Width (B1) inches (mm) | | 19 (488) | 27 (688) | 43 (1088) | 59 (1488) | |
| Installation depth (T1) inches (mm) | | | 16 (415) | 16 (415) | 16 (415) | 16 (415) | |
| **Part No.** | | 1 | **6720.200** | **6721.200** | **6722.200** | **6723.200** | |
| **Accessories** | | | | | | | |
| Rail for interior installation | For height | 4 | 5001.051 | | | | 233 |
| Punched section with mounting flange 2.9 x 0.7" (73 x 17 mm) | For width | 4 | 8612.060 | 8612.080 | 8612.020 | – | 234 |
| | For depth | 4 | 8612.030 | | | | 234 |
| Mounting bars | For width | 20 | 8800.130 | 4579.000 | – | – | 236 |
| | For depth | 20 | 4594.000 | | | | 236 |
| Punched section with mounting flange 2.9 x 0.7" (73 x 17 mm) | For front cover | 4 | 8612.150 | | | | 234 |
| | For rear cover | 4 | 8612.060 | | | | 234 |
| Mounting bars | For front cover | 20 | 4695.000 | | | | 236 |
| | For rear cover | 20 | 8800.130 | | | | 236 |
| Partial mounting panel | 8" (200 mm) width | 1 | 6730.310 | | | | 232 |
| | 20" (500 mm) width | 1 | 6730.330 | | | | 232 |
| | 28" (700 mm) width | 1 | – | 6730.340 | | | 232 |
| **Lock systems** | | | | | | | |
| Standard double-bit lock insert, in both covers, may be exchanged for 1" (27 mm) lock inserts, type A, see page 218. | | | | | | | |
| To order primed consoles please add extension .800 to the Part No. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

## Depth: 21" (525 mm), Height: 22" (565 mm)



Console for mounting on pedestal with depth 20" (500 mm) in conjunction with desk unit. Opening at the rear, with rear panel hinged at the bottom and cam locks. Side panels with bolts for mounting rails for interior installation.

**Material:**
Sheet steel
Enclosure: 16 ga (1.5 mm)
Cover: 14 ga (2.0 mm)
Design handle strip: Aluminum
Corner protectors and lock lid:
Plastic, self-extinguishing

**Finish:**
Enclosure and cover:
Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Design handle strip: Natural-anodized Corner protectors and lock lid: RAL 7015 (slate gray)

**Protection Ratings:**
NEMA 12 (IP 55 to EN 60 529)
(when mounting on a desk unit)

**Configuration:**
Enclosure with cover at the front, hinged at the bottom, including cover retainer, rear door, hinged at the bottom with cam locks, base open for individual cable entry.

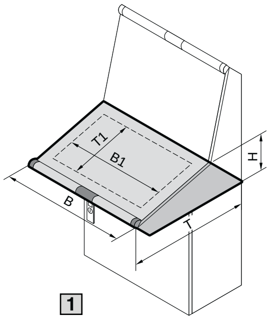
**For additional technical information, please visit www.rittal-corp.com**

| | | PU | | | | | Page |
|---|---|---|---|---|---|---|---|
| **Height** (H) inches (mm) | | PU | 22 (565) | 22 (565) | 22 (565) | 22 (565) | Page |
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 47 (1200) | 63 (1600) | |
| **Depth** (T) inches (mm) | | | 21 (525) | 21 (525) | 21 (525) | 21 (525) | |
| Max. cut-out | Height (H1) inches (mm) | | 16 (413) | 16 (413) | 16 (413) | 16 (413) | |
| | Width (B1) inches (mm) | | 19 (488) | 27 (688) | 43 (1088) | 59 (1488) | |
| Installation depth (T1) inches (mm) | | | 16 (415) | 16 (415) | 16 (415) | 16 (415) | |
| **Part No.** | | 1 | **6720.100** | **6721.100** | **6722.100** | **6723.100** | |
| **Accessories** | | | | | | | |
| Rail for interior installation | For height | 4 | 5001.050 | | | | 233 |
| Punched section with mounting flange 2.9 x 0.7" (73 x 17 mm) | For width | 4 | 8612.060 | 8612.080 | 8612.020 | – | 234 |
| | For depth | 4 | 8612.030 | | | | 234 |
| Mounting bars | For width | 20 | 8800.130 | 4579.000 | – | | 236 |
| | For depth | 20 | 4594.000 | | | | 236 |
| Punched section with mounting flange 2.9 x 0.7" (73 x 17 mm) | For front cover | 4 | 8612.150 | | | | 234 |
| | For rear cover | 4 | 8612.150 | | | | 234 |
| Mounting bars | For front cover | 20 | 4695.000 | | | | 236 |
| | For rear cover | 20 | 4695.000 | | | | 236 |
| Partial mounting panel | 8" (200 mm) width | 1 | 6730.310 | | | | 232 |
| | 20" (500 mm) width | 1 | 6730.330 | | | | 232 |
| | 28" (700 mm) width | 1 | – | 6730.340 | | | 232 |
| **Lock systems** | | | | | | | |
| Standard double-bit lock insert, in both covers, may be exchanged for 1" (27 mm) lock inserts, type A, see page 218. | | | | | | | |
| To order primed consoles please add extension .800 to the Part No. | | | | | | | |

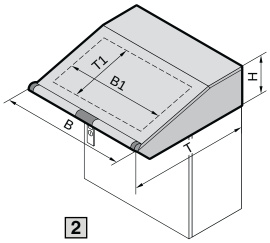
Inch and pound measurements are rounded to the nearest whole number.

# TopConsole System Desk Unit

## Depth: 30" (750 mm), Height: 9" (235 mm)



1



2

1

2

**Material:**
Sheet steel
Enclosure: 16 ga (1.5 mm)
Cover: 14 ga (2.0 mm)
Design handle strip: Aluminum
Corner protectors and lock lid:
Plastic, self-extinguishing

**Finish:**
Enclosure and cover:
Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Design handle strip:
Natural-anodized
Corner protectors and lock lid: RAL 7015 (slate gray)

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529) in combination with console, trim panel for console/desk unit and pedestal.

UL File: 76083

**Configuration:**
Enclosure with lid, hinged at rear, 2 stays with automatic locking and unlocking, gland plate opening for cable entry in the enclosure base.

1 Prepared for console: open at top

2 Closed rear with hinged lid

**For additional technical information, please visit www.rittal-corp.com**

| | | PU | 1 Prepared for console | | | | 2 Rear with hinged lid | | | | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Height** (H) inches (mm) | | | 9 (235) | 9 (235) | 9 (235) | 9 (235) | 9 (235) | 9 (235) | 9 (235) | 9 (235) | |
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 47 (1200) | 63 (1600) | 24 (600) | 32 (800) | 47 (1200) | 63 (1600) | |
| **Depth** (T) inches (mm) | | | 30 (750) | 30 (750) | 30 (750) | 30 (750) | 30 (750) | 30 (750) | 30 (750) | 30 (750) | |
| Max. cut-out console lid | Height (H1) inches (mm) | | 19 (488) | 27 (688) | 43 (1088) | 59 (1488) | 19 (488) | 27 (688) | 43 (1088) | 59 (1488) | |
| | Width (B1) inches (mm) | | 16 (413) | 16 (413) | 16 (413) | 16 (413) | 16 (413) | 16 (413) | 16 (413) | 16 (413) | |
| **Part No.** | | 1 | **6714.500** | **6715.500** | **6716.500** | **6717.500** | **6710.500** | **6711.500** | **6712.500** | **6713.500** | |
| **Accessories** | | | | | | | | | | | |
| Trim panel for console/desk unit | | 1 | 6730.200 | 6730.210 | 6730.220 | 6730.230 | – | – | – | – | 174 |
| Gland plate | Size | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | |
| | Qty. | | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | |
| Rail for interior installation | for width | 4 | 5001.050 | 5001.051 | 5001.053 | 5001.055 | 5001.050 | 5001.051 | 5001.053 | 5001.055 | 233 |
| Punched section with mounting flange 2.9 x 0.7" (73 x 17 mm)¹⁾ | in depth | 4 | 8612.150 | | | | 8612.150 | | | | 234 |
| Support strip¹⁾ | in depth | 20 | 4695.000 | | | | 4695.000 | | | | 236 |
| Partial mounting panel | 8" (200 mm) width | 1 | 6730.310 | | | | 6730.310 | | | | 232 |
| | 20" (500 mm) width | 1 | 6730.330 | | | | 6730.330 | | | | 232 |
| | 28" (700 mm) width | 1 | – | 6730.340 | | | – | 6730.340 | | | 232 |
| **Lock systems** | | | | | | | | | | | |
| Standard double-bit lock insert may be exchanged for 1" (27 mm) lock inserts, type A, see page 218. | | | | | | | | | | | |

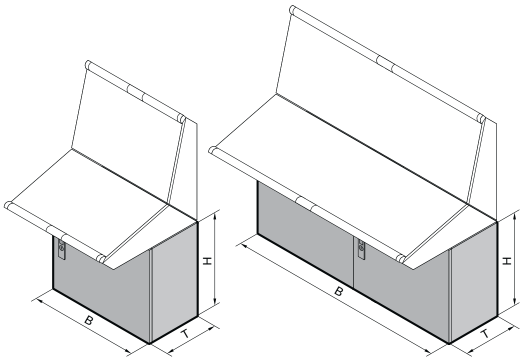
To order primed consoles please add extension .800 to the Part No.

[1] Can be vertically mounted in lid and rear enclosure wall.

Inch and pound measurements are rounded to the nearest whole number.

# TopConsole System Pedestal

## Depth: 16 - 20" (400 - 500 mm), Height: 27" (675 mm)



**Material:**
Sheet steel
Enclosure: 16 ga (1.5 mm)
Door: 14 ga (2.0 mm)
Mounting panel: 13 ga (2.5 mm)

**Finish:**
Enclosure and door:
Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Mounting panel: Zinc-plated

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529) in combination with gland plates (p. 259) and one of the following:

- Trim panel for pedestal (p. 174)
- UL Type 12 console unit

UL File: 76083

**Configuration:**
Enclosure, open at the top, door or double door with locking rod (with 16" (400 mm) depth at the front, with 20" (500 mm) depth at the front and rear), depth-adjustable mounting panel, open base for individual cable entry options.

**For additional technical information, please visit www.rittal-corp.com**

| **Height** (H) inches (mm) | | PU | 27 (675) | 27 (675) | 27 (675) | 27 (675) | 27 (675) | 27 (675) | 27 (675) | 27 (675) | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Width** (B) inches (mm) | | | 24 (600) | 32 (800) | 47 (1200) | 63 (1600) | 24 (600) | 32 (800) | 47 (1200) | 63 (1600) | |
| **Depth** (T) inches (mm) | | | 16 (400) | 16 (400) | 16 (400) | 16 (400) | 20 (500) | 20 (500) | 20 (500) | 20 (500) | |
| **Part No.** | | 1 | **6700.500** | **6701.500** | **6702.500** | **6703.500** | **6704.500** | **6705.500** | **6706.500** | **6707.500** | |
| Door(s) | | | 1 | 1 | 2 | 2 | 1/1 | 1/1 | 2/2 | 2/2 | |
| **Base/plinth** | | | | | | | | | | | |
| Components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | 8601.800 | 8601.200 | 8601.920 | 8601.600 | 8601.800 | 8601.200 | 8601.920 | 194 |
| | Height 8 (200) | 1 set | 8602.600 | 8602.800 | 8602.200 | 8602.920 | 8602.600 | 8602.800 | 8602.200 | 8602.920 | 194 |
| Side panels inches (mm) | Height 4 (100) | 1 set | 8601.040 | | | | 8601.050 | | | | 194 |
| | Height 8 (200) | 1 set | 8602.040 | | | | 8602.050 | | | | 194 |
| Cross member, adjustable | | 2 | 8601.450 | | | | | | | | 199 |
| **Accessories** | | | | | | | | | | | |
| Trim panel for pedestal | | 1 | 6730.000 | 6730.010 | 6730.020 | 6730.030 | 6730.100 | 6730.110 | 6730.120 | 6730.130 | 174 |
| Rail for interior installation | for height | 4 | 5001.050 | | | | | | | | 233 |
| Punched sections with mounting flanges 2.9 x 0.7" (73 x 17 mm) | in depth | 4 | 8612.140 | | | | 8612.150 | | | | 234 |
| Mounting bars | in depth | 20 | 4694.000 | | | | 4695.000 | | | | 236 |
| Punched sections with mounting flanges 2.9 x 0.7" (73 x 17 mm) | for door | 4 | 8612.050 | – | 8612.050 | – | 8612.050 | – | 8612.050 | – | 234 |
| Mounting bars | for door | 20 | 4596.000 | 4598.000 | 4596.000 | 4598.000 | 4596.000 | 4598.000 | 4596.000 | 4598.000 | 236 |
| Cable clamp rail | | 1 | 5001.080 | 5001.081 | 5001.083 | 5001.084 | 5001.080 | 5001.081 | 5001.083 | 5001.084 | 262 |
| Wiring plan pocket | | 1 | 4116.500 | 4118.500 | 4116.500 | 4118.500 | 4116.500 | 4118.500 | 4116.500 | 4118.500 | – |
| **Lock systems** | | | | | | | | | | | |
| Standard double-bit lock insert may be exchanged for 1" (27 mm) lock inserts, type A, and for the Ergoform-S lock system, see page 218. | | | | | | | | | | | |

To order primed pedestals please add extension .800 to the Part No.

Inch and pound measurements are rounded to the nearest whole number.

# TopConsole System Accessories

## Trim Panels

### Trim panel

**for pedestal**

For covering the complete top opening when using the pedestal on its own.

**Material:**
Sheet steel

**Color:**
Textured RAL 7035 (light gray)

**Protection Ratings:**
UL 12 (IP 55 to EN 60 529)

UL File: 76083

**Configuration:**
Assembly parts

| For pedestal | | **Part No.** |
|---|---|---|
| Width inches (mm) | Depth inches (mm) | |
| 24 (600) | 16 (400) | **6730.000** |
| 32 (800) | | **6730.010** |
| 47 (1200) | | **6730.020** |
| 63 (1600) | | **6730.030** |
| 24 (600) | 20 (500) | **6730.100** |
| 32 (800) | | **6730.110** |
| 47 (1200) | | **6730.120** |
| 63 (1600) | | **6730.130** |

### Trim panel

**for console/desk unit**

For covering the entire top opening when used alone.

**Material:**
Sheet steel

**Color:**
Textured RAL 7035 (light gray)

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529)

UL File: 76083

**Configuration:**
Assembly parts

1 Console used as a wall-mounted enclosure

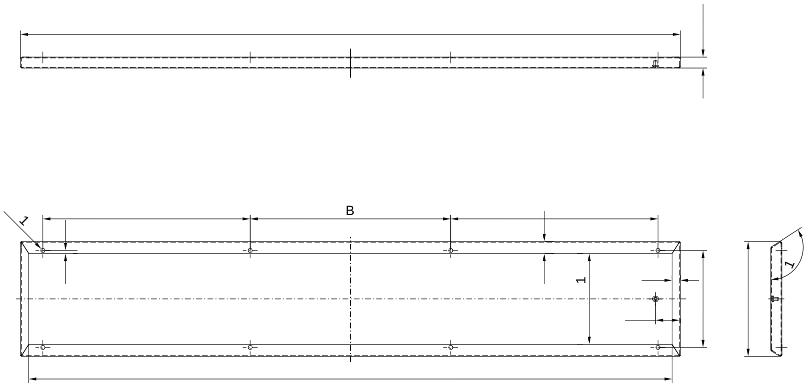
2 Trim panel on desk section

| For console width inches (mm) | **Part No.** |
|---|---|
| 24 (600) | **6730.200** |
| 32 (800) | **6730.210** |
| 47 (1200) | **6730.220** |
| 63 (1600) | **6730.230** |

**Note:**
Can be used with desk unit prepared for an upright console as well.

1

2



| **Part No.** | Width inches (mm) | A | B | C | D |
|---|---|---|---|---|---|
| **6730.200** | 24 (600) | 23 (592) | 19 (484) | – | 22 (552) |
| **6730.210** | 31 (800) | 31 (792) | 27 (684) | – | 30 (752) |
| **6730.220** | 47 (1200) | 47 (1192) | 15 (384) | 14 (350) | 45 (1152) |
| **6730.230** | 63 (1600) | 63 (1592) | 19 (484) | 20 (500) | 61 (1552) |

Inch and pound measurements are rounded to the nearest whole number.

## Attachment/Baying Rails

### Attachment rail

For accessories such as a scanner holder, or a shelf for printer etc. Mounting on the existing holes in the side groove between the pedestal and console. The enclosure protection ratings remain unaffected by this installation. No additional reinforcements are required for the pedestal. Holes can be drilled in the attachment rail prior to installation (e.g., for fitting screws, self-tapping screws or rivets).

| To fit pedestal depth inches (mm) | Part No. |
|---|---|
| 16 (400) | **6730.500** |
| 20 (500) | **6730.510** |

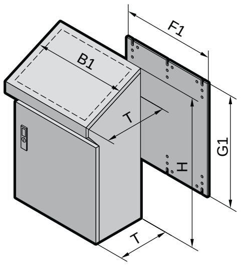
**Material:**
Rail: Sheet steel, zinc-plated, passivated
Cover caps: Plastic, black

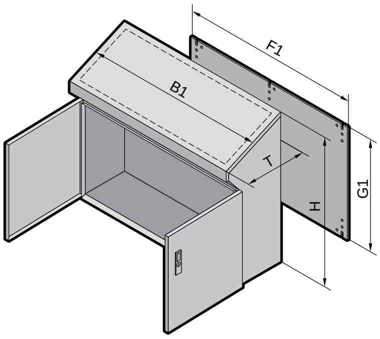
**Configuration:**
Assembly parts

Inch and pound measurements are rounded to the nearest whole number.

# One-piece TopConsole

## Depth: 16/20" (400/520 mm), Height: 38" (960 mm)





**Material:**
Sheet steel
Enclosure: 16 ga (1.5 mm)
Door and console lid: 14 ga (2.0 mm)
Mounting panel: 11 ga (3.0 mm)
Designer handle strip: Aluminum
Corner protectors and lock cover:
Plastic, self-extinguishing

**Finish:**
Enclosure, cover, and door:
Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside
Mounting panel: Zinc-plated
Design handle strip: Natural-anodized
Corner protectors and lock cover: RAL 7015 (slate gray)

**Protection Ratings:**
UL 12 (IP 55 to EN 60 529), with selection of the appropriate gland plates, see page 259.

**Configuration:**
Enclosure, solid rear and sides, door or double door at the front, with locking rod, console lid hinged at rear, 2 stays with automatic latching and unlatching, base open for individual cable entry.

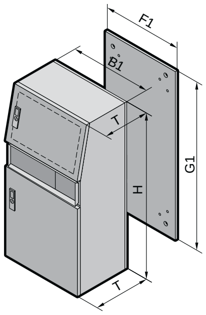
**For additional technical information, please visit www.rittal-corp.com**

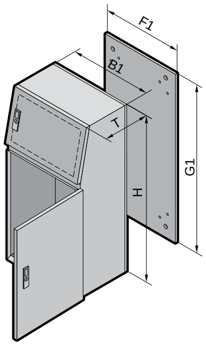
| **Height** (H) inches (mm) | | PU | 38 (960) | 38 (960) | 38 (960) | 38 (960) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 24 (600) | 32 (800) | 39 (1000) | 47 (1200) | |
| **Depth** Base/ Console (T) inches (mm) | | | 16 (400)/ 20 (520) | 16 (400)/ 20 (520) | 16 (400)/ 20 (520) | 16 (400)/ 20 (520) | |
| Panel height (G1) inches (mm) | | | 35 (900) | 35 (900) | 35 (900) | 35 (900) | |
| Panel width (F1) inches (mm) | | | 20 (499) | 28 (699) | 35 (899) | 43 (1099) | |
| **Part No.** | | 1 | **6746.500** | **6748.500** | **6740.500** | **6742.500** | |
| Door(s) | | | 1 | 1 | 2 | 2 | |
| **Base/plinth** | | | | | | | |
| Components front and rear | Height 4" (100 mm) | 1 set | 8601.600 | 8601.800 | 8601.000 | 8601.200 | 194 |
| | Height 8" (200 mm) | 1 set | 8602.600 | 8602.800 | 8602.000 | 8602.200 | 194 |
| Trim panels (sides) | Height 4" (100 mm) | 1 set | 8601.040 | | | | 194 |
| | Height 8" (200 mm) | 1 set | 8602.040 | | | | 194 |
| Cross member, adjustable | | 2 | 8601.450 | | | | 199 |
| **Accessories** | | | | | | | |
| Rail for interior installation | For height | 4 | 5001.051 | | | | 233 |
| | For lid | 4 | 5001.050 | 5001.051 | 5001.052 | 5001.053 | 233 |
| Punched section with mounting flange 2.9 x 0.7" (73 x 17 mm) | For lid | 4 | 8612.040 | | | | 234 |
| | For enclosure | 4 | 8612.140 | | | | 234 |
| | For door | 4 | 8612.050 | – | 8612.040 | 8612.050 | 234 |
| Mounting bars | For lid | 20 | 4309.000 | | | | 236 |
| | For enclosure | 20 | 4694.000 | | | | 236 |
| | For door | 20 | 4596.000 | 4598.000 | 4309.000 | 4596.000 | 236 |
| Cable clamp rail | | 1 | 5001.080 | 5001.081 | 5001.082 | 5001.083 | 262 |
| Wiring plan pocket | | 1 | 4116.000 | 4118.000 | 4115.000 | 4116.000 | 227 |
| **Lock systems** | | | | | | | |
| Console lid: Standard double-bit lock insert, may be exchanged for 1" (27 mm) lock inserts, type A, and for Ergoform-S lock system, see pages 218. | | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# Universal AP Console

## Depth: 16/20" (418/500 mm), Height: 51" (1300 mm)





**Material:**
Sheet steel
Enclosure, gland plates: 16 ga (1.5 mm); doors: 14 ga (2.0 mm)
Mounting panel: 11 ga (3.0 mm)
Design strips (2695.500): Aluminum section

**Finish:**
Enclosure: Dipcoat-primed, powder coated on the outside
Mounting panel and gland plates: Zinc-plated

**Color:**
Enclosure: textured RAL 7035 (light gray). Design strips (2695.500): RAL 5018 (turquoise blue)

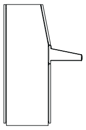
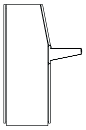
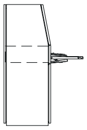
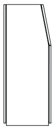
**Protection Ratings:**
UL Type 12
(IP 55 to EN 60 529/10.91)
With a short door at the bottom (2694.500), in order to maintain the protection ratings, a drawer or desk section must be installed.
UL Type 12 when assembled per instructions.

UL file: E76083

**Configuration:**
Enclosure with doors, mounting panel, gland plates, design strips (2695.500).

**Note:**
Top door with studs left and right for installing vertical perforated mounting strips 2310.038 and horizontal support strips 2325.000 to be mounted on top.
AP universal consoles are based on the freestanding enclosure ES 5000; therefore, a variety of accessory components can be installed.

**For additional technical information and configuration, please visit www.rittal-corp.com**

| | |  |  |  |  | |
|---|---|---|---|---|---|---|
| Version | PU | With short front door | | | With tall front door | Page |
| **Height** (H) inches (mm) | | 51 (1300) | | | 51 (1300) | |
| **Width** (B1) inches (mm) | | 24 (600) | | | 24 (600) | |
| **Depth** Base/ Console (B1) inches (mm) | | 16 (418)/ 20 (500) | | | 16 (418)/ 20 (500) | |
| Panel height (G1) inches (mm) | | 47 (1196) | | | 47 (1196) | |
| Panel width (F1) inches (mm) | | 20 (499) | | | 20 (499) | |
| **Part No.** | 1 | **2694.500** | | | **2695.500** | |
| Weight lb (kg) | | 170 (77.0) | | | 176 (80.0) | |
| **Also required** | | | | | | |
| Desk section | | 2696.500 | 2696.500 | – | – | |
| Drawer for keyboard | | – | – | 4757.500[1] | – | |
| **Accessories** | | | | | | |
| Base/plinth inches (mm) Height 4 (100) | 1 | 2807.200 | | | | 196 |
| Base/plinth inches (mm) Height 8 (200) | 1 | 2808.200 | | | | 196 |
| Cable clamp rail | | 4191.000 | | | | 256 |
| **Lock systems** | | | | | | |
| For lock options, see www.rittal-corp.com. | | | | | | |

[1] Only suitable for installation without a mounting panel.

Inch and pound measurements are rounded to the nearest whole number.

# One-piece AP Console

## Depth: 16/19" (400/480 mm), Height: 38" (960 mm)

**Material:**
Stainless steel
Enclosure: 16 ga (1.5 mm)
Door(s) and console lid:
14 ga (2.0 mm)
Mounting panel: Sheet steel
11 ga (3.0 mm)

**Finish:**
Enclosure, door and console lid:
Brushed, grain size 120
Mounting panel: Zinc-plated

**Protection Ratings:**
NEMA 12
(IP 55 to EN 60 529/09.2000)

**Configuration:**
Enclosure sealed at the rear and sides, door or double door at the front, with locking rod, console lid with lid stay and stainless steel cam latched in the enclosure, two-piece gland plate, mounting panel, zinc-plated.

**For additional technical information, please visit www.rittal-corp.com**

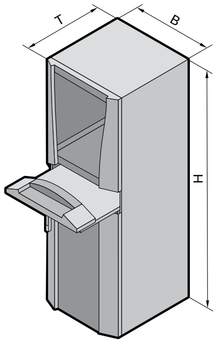
| **Height** (H) inches (mm) | | PU | 38 (960) | 38 (960) | 38 (960) | 38 (960) | Page |
|---|---|---|---|---|---|---|---|
| **Width** (B1) inches (mm) | | | 24 (600) | 32 (800) | 39 (1000) | 47 (1200) | |
| **Depth** Base/ Console (T) inches (mm) | | | 16 (400)/ 19 (480) | 16 (400)/ 19 (480) | 16 (400)/ 19 (480) | 16 (400)/ 19 (480) | |
| Mounting panel width (F1) inches (mm) | | | 21 (530) | 29 (730) | 37 (930) | 44 (1130) | |
| Mounting panel height (G1) inches (mm) | | | 31 (780) | 31 (780) | 31 (780) | 31 (780) | |
| **Part No.** | **Type 304** | 1 | **2683.600** | **2684.600** | **2685.600** | **2686.600** | |
| | **Type 316L** | 1 | **2683.500**[1] | **2684.500**[1] | **2685.500**[1] | **2686.500**[1] | |
| Door(s) | | | 1 | 1 | 2 | 2 | |
| Weight lb (kg) | | | 114 (52.0) | 143 (65.2) | 175 (79.5) | 199 (90.3) | |
| **Accessories** | | | | | | | |
| Base/plinth | Height 4" (100 mm) | 1 | 2865.000 | 2869.000 | 2867.000 | 2870.000 | 196 |
| | Height 8" (200 mm) | 1 | 2875.000 | 2878.000 | 2885.000 | 2886.000 | 196 |
| **Lock systems** | | | | | | | |
| Standard double-bit lock insert in the locking rod may be exchanged for 27 mm lock inserts, type A, and for the Ergoform-S lock system, see page 218. | | | | | | | |

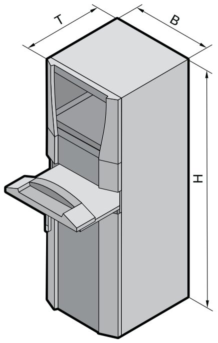
[1] Delivery times available upon request.

Inch and pound measurements are rounded to the nearest whole number.

# PC Enclosure System

## Depth: 25 - 33" (636 - 836 mm), Height: 63" (1600 mm)





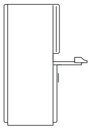
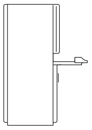
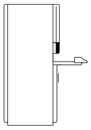
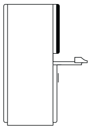
**Configuration:**
Based on TS8 enclosure
Foamed-in-place polyurethane gasket
Front and rear doors right hand hinged
2-pt locking system
Vented shelf for monitors up to 24 inches

**Material:**
Sheet Steel
Frame, sidewalls, roof, front door: 16 ga (1.5 mm)
Rear door: 14 ga (2.0 mm)

**Protection Ratings:**
UL Type 12
(IP 55 to EN 60 529)
when assembled per instructions.

UL file: E76083

**For additional technical information, please visit www.rittal-corp.com**

| | | |  |  |  |  | |
|---|---|---|---|---|---|---|---|
| Version | | PU | With keyboard drawer, viewing door | With keyboard drawer, viewing door, mounting compartment, small | With keyboard, mounting compartment, large | With keyboard drawer, viewing door | Page |
| **Height** (H) inches (mm) | | | 63 (1600) | 63 (1600) | 63 (1600) | 63 (1600) | |
| **Width** (B) inches (mm) | | | 24 (600) | 24 (600) | 24 (600) | 24 (600) | |
| **Depth** (T) inches (mm) | | | 25 (636) | 25 (636) | 25 (636) | 33 (836) | |
| **Part No.** | | 1 | **8366.000** | **8366.300** | **8366.400** | **8368.000** | |
| Maximum keyboard dimensions inches (mm) | Height | | 3 (70) | 3 (70) | 3 (70) | 3 (70) | |
| | Width | | 19 (480) | 19 (480) | 19 (480) | 19 (480) | |
| | Depth | | 10 (260) | 10 (260) | 10 (260) | 10 (260) | |
| Weight lb (kg) | | | 4.6 (118) | 4.6 (118) | 4.6 (118) | 4.6 (118) | |
| **Accessories** | | | | | | | |
| Base/plinth, stationary | | 1 | 8800.920 | | | on request | – |
| Base/plinth components front and rear inches (mm) | Height 4 (100) | 1 set | 8601.600 | | | | 194 |
| | Height 8 (200) | 1 set | 8602.600 | | | | 194 |
| Base/plinth trim, front inches (mm) | Height 8 (200) | 1 set | 8360.920 | | | | – |
| Base/plinth trim, side inches (mm) | Height 4 (100) | 1 set | 8601.060 | | | 8601.080 | 194 |
| | Height 8 (200) | 1 set | 8602.060 | | | 8602.080 | 194 |
| Cross member, adjustable inches (mm) | Height 3 (70) | 2 | 8601.680 | | | | 199 |
| Partial mounting panel inches (mm) | Height 31 (775) | 1 | 8614.675 | | | | 231 |

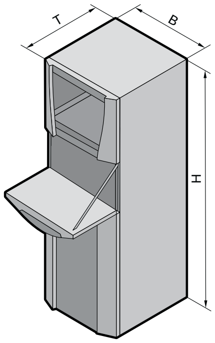
**Lock systems**

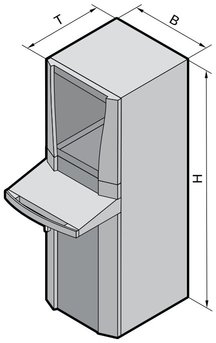
Standard lock insert, may be exchanged on rear door: TS lock inserts, see page 217, comfort handle, see pages 217.
Designer door, front: TS lock inserts, see pages 217-220, comfort handle, see page 217 (via handle adaptor 8611.300, see www.rittal-corp.com). Keyboard drawer/fold-out tray: Lock inserts, 1" (27 mm), version A, see pages 219.

Inch and pound measurements are rounded to the nearest whole number.

# PC Enclosure System

## Depth: 25 - 33" (636 - 836 mm), Height: 63" (1600 mm)





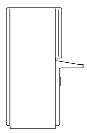
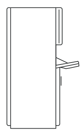
**Configuration:**
Based on TS8 enclosure
Foamed-in-place polyurethane gasket
Front and rear doors right hand hinged
2-pt locking system
Vented shelf for monitors up to 24 inches

**Material:**
Sheet Steel
Frame, sidewalls, roof, front door: 16 ga (1.5 mm)
Rear door: 14 ga (2.0 mm)

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529) when assembled per instructions.

UL file: E76083

**For additional technical information, please visit www.rittal-corp.com**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | |  |  | | | | |
| Version | | PU | With desk section, viewing door | With fold-out keyboard tray, viewing door | | With fold-out keyboard tray, viewing door | | Page |
| **Height** (H) inches (mm) | | | 63 (1600) | 63 (1600) | | 63 (1600) | | |
| **Width** (B) inches (mm) | | | 24(600) | 24 (600) | | 24 (600) | | |
| **Depth** (T) inches (mm) | | | 25 (636) | 25 (636) | | 33 (836) | | |
| **Part No.** | | 1 | **8366.200** | **8366.100** | | **8368.100** | | |
| Maximum keyboard dimensions inches (mm) | Height | | 2 (40) | 2 (60) | 2 (50) | 2 (60) | 2 (50) | |
| | Width | | 21 (540) | 19 (475) | | 19 (475) | | |
| | Depth | | 7 (175) | 8 (200) | 10 (250) | 8 (200) | 10 (250) | |
| Weight lb (kg) | | | 238.1 (108) | 260.1 (118) | | 273.3 (124) | | |
| **Accessories** | | | | | | | | |
| Base/plinth, stationary | | 1 | 8800.920 | | | on request | | – |
| Base/plinth components front and rear inches (mm) | Height 4 (100) | 1 | 8601.600 | | | | | 194 |
| | Height 8 (200) | 1 | 8602.600 | | | | | 194 |
| Base/plinth trim, front inches (mm) | Height 8 (200) | 1 | 8360.920 | | | | | – |
| Base/plinth trim, side inches (mm) | Height 4 (100) | 1 | 8601.060 | | | 8601.080 | | 194 |
| | Height 8 (200) | 1 | 8602.060 | | | 8602.080 | | 194 |
| Cross member, adjustable inches (mm) | Height 3 (70) | 2 | 8601.680 | | | | | 199 |
| Partial mounting panel inches (mm) | Height 31 (775) | 1 | 8614.675 | | | | | 231 |
| **Lock systems** | | | | | | | | |
| Standard lock insert, may be exchanged on rear door: TS lock inserts, see page 219, comfort handle, see pages 217.<br>Designer door, front: TS lock inserts, see pages 219-220, comfort handle, see page 217 (via handle adaptor 8611.300, see www.rittal-corp.com). Keyboard drawer/fold-out tray: Lock inserts, 1" (27 mm), version A, see pages 219. | | | | | | | | |

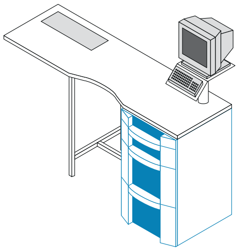
*Also available in Stainless Steel N12 and N4X - see www.rittal-corp.com.

Inch and pound measurements are rounded to the nearest whole number.

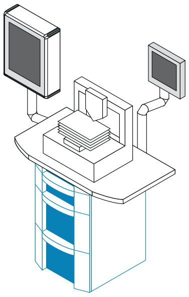
## Features

Rittal's Industrial Workstations give you the ability to create professional workstations for practically any application from a comprehensive modular system.

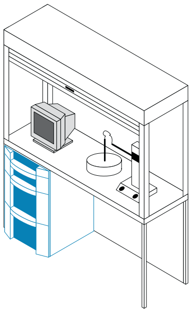
Combined with operator housings, support arm systems, PC enclosures, and a diverse range of system accessories, there is virtually no limit to the possibilities. Here are a few examples:



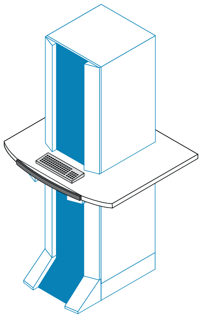
**Workbench/assembly bench** consisting of:
- IW enclosure
- IW pedestal
- Individual worktop



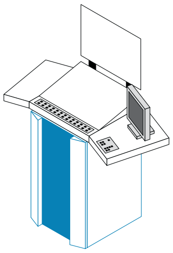
**Laboratory equipment** and **small machinery** consisting of:
- IW enclosure
- Worktop
- Support arm system
- Operator housings



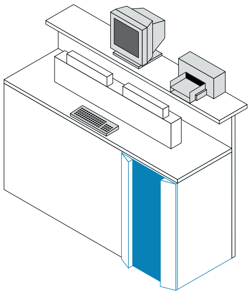
**Protective cabinets:** With lockable roller blind upon request.



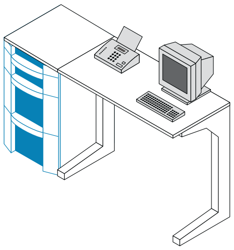
**Measurement/control systems:** "More space" with the enclosure on top of the worktop.



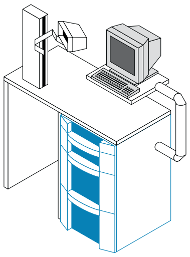
**Control desks** e.g. for printing presses consisting of:
- IW enclosure
- Individual worktop and assemblies



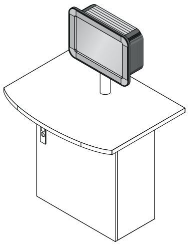
**Workbench** consisting of:
- IW enclosure for tools, etc.
- Individual worktop with shelf for monitor, printer, etc.



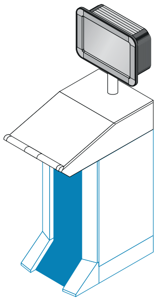
**Calibration/measuring station** consisting of:
- IW enclosure
- IW pedestal
- Worktop



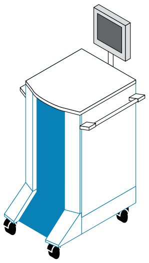
**Programming station:** Ergonomically adaptable via the support arm system.



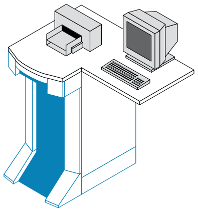
**Production workstation** consisting of:
- TP pedestal
- IW worktop
- Support arm system
- Operator housing



**Workstation** consisting of:
- Base/plinth
- IW enclosure
- TP desk unit
- Support arm system
- Operator housing



**Mobile workstation/workshop trolley** consisting of:
- Base/plinth with castors
- IW enclosure
- Worktop
- Handle system
- Operator housing



**Scanner/PC station** consisting of:
- IW enclosure
- Individual worktop

## Features

### IW Quality Point/IW Logistic Point

The integration of a TFT monitor creates space on the work surface.

The rotatable printer shelf and the paper tray are a perfect duo for the secure accommodation of printers in an industrial environment.

Optimum glare-free illumination of the workplace with the integral workstation light.

### IW enclosure

In two standard heights, optionally with designer door or glazed door. Offers plenty of storage space.

With drawer front for an orderly filing system. A pull-out lock which prevents the simultaneous opening of several drawers is integrated to increase operational safety.

If no enclosure is needed to accommodate documents or equipment, the IW pedestal may be used instead. By combining with a worktop, a large work surface is created.

### IW monitor housing

In two sizes for monitors up to 17 and 21" (screen diagonal). In conjunction with a turntable, the monitor can be viewed from all angles.

TFT monitors are increasingly being used in industrial environments. Thanks to the large number of standardized system components. TFT's may be easily integrated into the workstation.

Mounting of a TFT monitor without reducing the work space. With the aid of the enclosure attachment, the angle of the display is ideally adapted to suit the user.

### IW worktops

14 different worktops in 7 different sizes accommodate virtually all requirements.

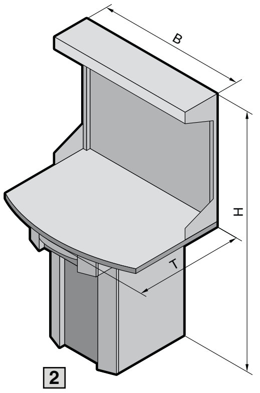
Monitor housings may be mounted either rigidly or swivel-mounted on worktops prepared for a turntable.

Worktops available with or without a handle.

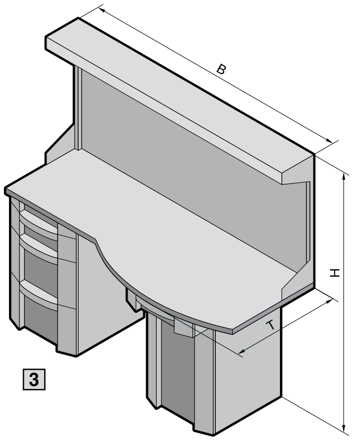
# Inspection Station

## Depth: 35" (895 mm), Height: 79" (2000 mm)

1



2



3

The complete system for use as a testing station in industrial environments (e.g., directly at the machine) where it is necessary to perform testing and process the data electronically. An individual PC system is integrated to perfection.

**Benefits:**

- Plenty of space to accommodate test equipment
- Easy integration of PC's, monitors, printers, etc.
- Theft protection

1 Assembly example
2 Single Inspection Station
3 Double Inspection Station

**Color:**
RAL 7015 (slate gray)/7035 (light gray)/9006 (white aluminium)

**Protection Ratings:**
NEMA 12 (IP 54 to EN 60 529)

**Single Inspection Station Configuration:**
Enclosure with keyboard drawer section 6900.410, see page 186, worktop 1.5 x 39 x 35" (38 x 1000 x 895 mm) H x W x D, Inspection Station attachment with side system punchings on a 1" (25 mm) pitch pattern for the attachment of system accessories (such as punched sections with mounting flanges), workstation light, 2 x 36 W, 230 V, 50 Hz.

**For additional technical information, please visit www.rittal-corp.com**

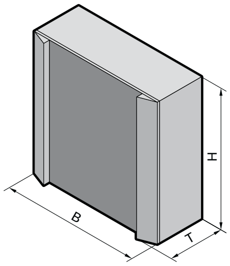
**Double Inspection Station Configuration:**
Enclosure with drawer front (left), 6900.600, see page 187, enclosure with keyboard drawer section (right), 6900.410, see page 186, worktop 1.5 x 79 x 35" (38 x 2000 x 895 mm) H x W x D, Inspection Station attachment with side system punchings on a 1" (25 mm) pitch pattern for the attachment of system accessories (such as punched sections with mounting flanges), workstation light, 2 x 36 W, 230 V, 50 Hz.

| Version | PU | Single Inspection Station | Double Inspection Station | Page |
|---|---|---|---|---|
| **Height** (H) inches (mm) | | 79 (2000) | 79 (2000) | |
| **Width** (B) inches (mm) | | 39 (1000) | 79 (2000) | |
| **Depth** (T) inches (mm) | | 35 (895) | 35 (895) | |
| **Part No.** | 1 | **6920.100** | **6920.200** | |
| Weight lb (kg) | | 306 (139) | 607 (276) | |
| **Accessories** | | | | |
| Punched sections with mounting flanges 3 x 0.6" (73 x 17 mm) | | 8612.090 | – | 234 |
| Bracket, locatable for shelves | | 6902.690 | | – |
| Paper removal flap | | 6903.200 | | – |
| Paper tray | | 6903.000 | | – |
| Mounting panel | | 8614.675 | | 231 |
| Component shelf, static installation | | 8800.900 | | – |
| Component shelf, pull-out | | 6902.960 | | – |
| Drawer tray | | 6902.700 | | – |
| **Lock systems** | | | | |
| Standard double-bit lock insert may be exchanged for type F lock inserts, see page 220, type B lock cylinder inserts, see page 219, or comfort handle, see page 217, for front designer door only in conjunction with handle adaptor 8611.300, see page 211.<br>Drawer with lock no. 3524 E. Other versions available upon request. | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# Enclosure for Tower PC

## Depth: 12" (300 mm), Height: 30" (760 mm)



1 Assembly example

Compact enclosure, ready to connect. Standard commercially available tower PC's, up to 21 x 10 x 24" (530 x 250 x 600 mm) H x W x D (max. 44 lb [20 kg]) may be attached securely to the base, screw fastened to the door using the retaining strap (supplied loose). The rear interfaces of the PC are readily accessible with the door open. Because the socket strip and fan-and-filter unit are already pre-installed, the enclosure is ready for immediate use.

**Roof prepared for mounting**
- worktop 6902.310
- beneath surfaces

**Base prepared for mounting**
- cast feet 6902.920
- on surfaces

**Material:**
Enclosure:
Sheet steel, powder coated in textured RAL 7035 (light gray)
Door:
Sheet steel, spray-finished in RAL 7015 (slate gray) with fitted design strips of aluminum in RAL 7035 (light gray)

**Protection Ratings:**
NEMA 12 (IP 54 to EN 60 529)
(in conjunction with connector gland 2400.300/.500, supplied loose)

**Configuration:**
Enclosure sealed all round, right hand door hinge, with screw-fastened base on the inside of the tubular door frame to accommodate a tower PC, locked at the side with a fitted cam lock.

**For additional technical information, please visit www.rittal-corp.com**

Rear panel with two cut-outs for use of the connector gland 2400.300 and 2400.500, supplied loose. Connector for power supply, retaining strap to secure the tower PC to the base, left-hand side panel with fitted outlet filter 3322.200.

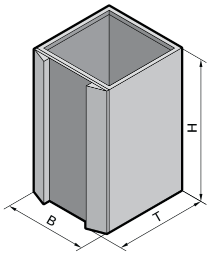
Side panel, right, fitted with:
- Fan-and-filter unit 3322.107, see page 267
- Supply socket for 230 V power supply
- Socket strip with 3 sockets and over voltage protection

| | PU | Enclosure for tower PC | Page |
|---|---|---|---|
| **Height** (H) inches (mm) | | 30 (760) | |
| **Width** (B) inches (mm) | | 30 (760) | |
| **Depth** (T) inches (mm) | | 12 (300) | |
| **Part No.** | 1 | **6900.300** | |
| Weight lb (kg) | | 121 (55) | |
| **Accessories** | | | |
| Cast feet | 2 | 6902.920 | – |
| Twin castors | 1 set | 4634.500 | 168 |
| Worktop without handle | 1 | 6902.310 | 188 |
| Enclosure attachment, tilting, base mounting | 1 | 6902.640 | 139 |
| TFT monitor 17" with safety glass screen | 1 | 6450.020 | – |
| Desktop keyboard IP 65 | 1 | 6446.000 | – |
| **Lock systems** | | | |
| Standard double-bit lock insert may be exchanged for 2" (47 mm) lock inserts, type D, or plastic handles, type G, see www.rittal-corp.com. | | | |

Inch and pound measurements are rounded to the nearest whole number.

# Enclosure With Doors

## Depth: 24" (600 mm), Height: 35" (900 mm)



1 Assembly example

**Property rights:**
German patent no. 100 13 034
German registered design
no. 400 02 325
US patent no. 6,538,876
US design patent no. D 487, 730
UK reg. design no. 2 094 499
Japan reg. design no. 113 95 92
IR reg. design no. DM/053 554
with validity for FR, IT

**For additional technical information, please visit www.rittal-corp.com**

**Material:**
Enclosure, designer door, rear panel, rear door: Sheet steel, RAL 7035 (light gray)
Glazed door:
Plastic to UL 94-V0, RAL 7035 (light gray), toughened safety glass 0.15" (4.0 mm)

**Protection Ratings:**
NEMA 12 (IP 55 to EN 60 529)

**Note:**
- Other enclosure depths or heights, variable on a 1" (25 mm) pitch pattern
- All IW components as well as system accessories fully assembled, available upon request.

| | | | | |
|---|---|---|---|---|
| Version | PU | Designer door, rear panel screw-fastened from the inside | Deisgner door, rear door | Page |
| **Height** (H) inches (mm) | | 35 (900) | 35 (900) | |
| **Width** (B) inches (mm) | | 24 (600) | 24 (600) | |
| **Depth** (T) inches (mm) | | 24 (600) | 24 (600) | |
| **Part No.** | 1 | **6900.000** | **6900.100** | |
| Weight lb (kg) | | 121 (54.9) | 132 (59.9) | |
| **Accessories** | | | | |
| Base/plinth, stationary | 1 | 8800.920 | | – |
| Cross member, adjustable | 2 | 8601.680 | | 199 |
| Twin castors | 1 set | 4634.500 | | 168 |
| Paper tray | 1 | 6903.000 | | – |
| Paper removal flap | 1 | 6903.200 | | – |
| Handle adaptor for comfort handle | 1 | 8611.300 | | 211 |
| Mounting panel for enclosure width 24" (600 mm) | 1 | 8614.675 | | 231 |
| Component shelf, static installation | 1 | 8800.900 | | – |
| Component shelf, pull-out | 1 | 6902.960 | | – |
| Drawer tray | 11 | 6902.700 | | – |
| Drawer extension lock | 1 | 6902.730 | | – |
| Mobile workstations | 1 | 4641.000 | | – |
| Adaptor section 19" (482.6 mm) | | 8613.070 | | 245 |
| Gland Plate Size | | 2 | 2 | |
| Qty. | | 1 | 1 | |

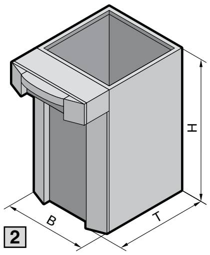
**Lock systems**

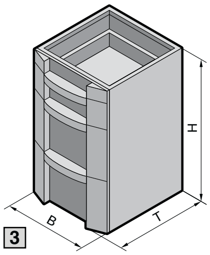
Standard double-bit lock insert may be exchanged for type F lock inserts, type B lock cylinder inserts, or comfort handle, see from page 217, for designer door and glazed door only in conjunction with handle adaptor 8611.300, see page 211.

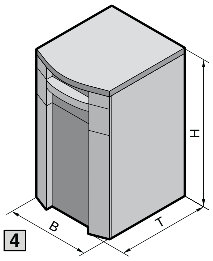
Inch and pound measurements are rounded to the nearest whole number.

# Enclosure With Drawers or Worktop

## Depth: 24 - 25" (600 - 645 mm), Height: 35 - 40" (900 - 1000 mm)







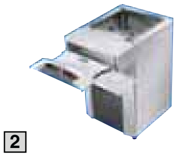
1 Assembly example

**Material:**
Enclosure, roof, drawer tray, designer door and rear door: Sheet steel, RAL 7035 (light gray)
Worktop:
Chipboard, plastic-laminated on both sides, similar to RAL 7035 (light gray), with tough plastic edging, similar to RAL 7015 (slate gray)
Drawer trim panel:
Plastic, RAL 7015 (slate gray)/7035 (light gray)/9006 (white aluminium)

**Protection Ratings:**
NEMA 12 (IP 54 to EN 60 529)

**Note:**
- Other enclosure depths or heights, variable on a 1" (25 mm) pitch pattern
- All IW components as well as system accessories fully assembled
- Other drawer combinations
- Fitted version 6901.100 (with worktop) also with other worktops, see page 188, available upon request

**For additional technical information, please visit www.rittal-corp.com**

| | | 2 |  2 | 3 | 4 | |
|---|---|---|---|---|---|---|
| Version | PU | Drawer section for documents, designer door, rear door | Drawer section for keyboard and mouse, designer door, rear door | Drawer front, rear panel | Enclosure with worktop, keyboard drawer | Page |
| **Height** (H) inches (mm) | | 35 (900) | 35 (900) | 35 (900) | 40 (1000) | |
| **Width** (B) inches (mm) | | 24 (600) | 24 (600) | 24 (600) | 24 (600) | |
| **Depth** (T) inches (mm) | | 24 (600) | 24 (600) | 24 (600) | 25 (645) | |
| **Part No.** | 1 | **6900.400** | **6900.410** | **6900.600** | **6901.100** | |
| Weight lb (kg) | | 161 (73) | 161 (73) | 172 (78) | 200 (91) | |
| **Accessories** | | | | | | |
| Base/plinth, stationary | 1 | 8800.920 | | | | – |
| Cross member, adjustable | 2 | 8601.680 | | | – | 199 |
| Twin castors | 1 set | 4634.500 | | | | 168 |
| Paper removal flap | 1 | 6903.200 | | | | – |
| Paper tray | 1 | 6903.000 | | – | 6903.000 | – |
| Cable gland | 1 | 6902.770 | | – | 6902.770 | 190 |
| Mounting panel | 1 | 8614.675 | | – | 8614.675 | 231 |
| Component shelf, static installation | 1 | 8800.900 | | – | 8800.900 | – |
| Component shelf, pull-out | 1 | 6902.960 | | – | 6902.960 | – |
| Drawer tray | 1 | 6902.700 | | – | 6902.700 | – |
| Drawer extension lock | 1 | 6902.730 | | included | – | – |
| Mobile workstations | 1 | 4641.000 | | – | | – |
| Adaptor section 19" (482.6 mm) | 1 | 8613.070 | | – | | 245 |
| Gland plate Size | | 2 | 2 | 2 | 2 | |
| Gland plate Qty. | | 1 | 1 | 1 | 1 | |
| **Lock systems** | | | | | | |
| Standard double-bit lock insert may be exchanged for type F lock inserts, type B lock cylinder inserts, or comfort handle, see from page 217-220, for designer door only in conjunction with handle adaptor 8611.300, see page 211. Drawer with lock no. 3524 E. Other versions available upon request. | | | | | | |

Inch and pound measurements are rounded to the nearest whole number.

## Depth: 24" (600 mm), Height 35" (900 mm)

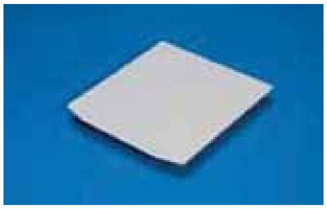
**Note:**
- Keyboard and front panels for keys integrated into the worktop
- Worktops in modified sizes
- All IW components as well as system accessories fully assembled, available upon request.

**For additional technical information, please visit www.rittal-corp.com**

## Combination options for enclosures/worktops

| **Height** inches (mm) | 35 (900) | 35 (900) | 35 (900) | 35 (900) | 35 (900) | 35 (900) | Page |
|---|---|---|---|---|---|---|---|
| **Width** inches (mm) | 24 (600) | 24 (600) | 24 (600) | 24 (600) | 24 (600) | 24 (600) | |
| **Depth** inches (mm) | 24 (600) | 24 (600) | 24 (600) | 24 (600) | 24 (600) | 24 (600) | |
| Enclosures Part No. | 6900.000 | 6900.100 | 6900.200 | 6900.400 | 6900.410 | 6900.600 | |
| **Worktop** | | | | | | | |
| 6902.000 | ■ | ■ | ■ | – | – | ■ | 188 |
| 6902.100 | ■ | ■ | ■ | ■ | ■ | ■ | 188 |
| 6902.300 | ■ | ■ | ■ | – | – | ■ | 188 |
| **Roof** | | | | | | | |
| 6902.400 | ■ | ■ | ■ | – | – | ■ | 187 |

To order worktops in the ESD version, please add the extension .XX8 to the Part No.



## Roof

Folded all-round, with brackets for screw-fastening to the enclosure from the inside.

**Material:**
Sheet steel 16 ga (1.5 mm)

**Finish:**
Spray-finished in textured RAL 7035 (light gray)

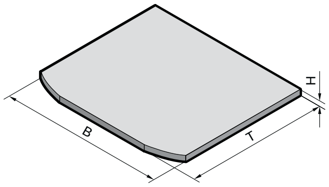
| | |
|---|---|
| **Height** (H) inches (mm) | 0.5 (13) |
| **Width** (B) inches (mm) | 24 (600) |
| **Depth** (T) inches (mm) | 25 (640) |
| Weight lb (kg) | 16 (7.4) |
| **Part No.** | **6902.400** |

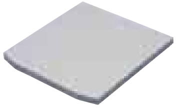
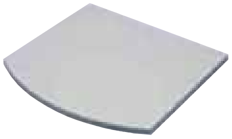
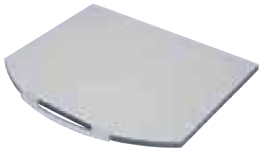
Inch and pound measurements are rounded to the nearest whole number.

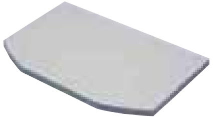
## Depth: 25 - 37" (645 - 950 mm), Height: 2" (38 mm)

### Worktops

**Material/Finish:**
Chipboard, plastic-laminated on both sides, similar to RAL 7035 (light gray), with tough plastic edging, similar to RAL 7015 (slate gray). Handle made from aluminum, powder coated in RAL 9006 (white aluminium).



| **Solid** |  |  |  |
|---|---|---|---|
| Version | Without handle<br>for enclosure | Without handle<br>for enclosure/worktop base | With handle<br>for enclosure |
| **Height** (H) inches (mm) | 2 (38) | 2 (38) | 2 (38) |
| **Width** (B) inches (mm) | 24 (610) | 39 (1000) | 47 (1200) |
| **Depth** (T) inches (mm) | 25 (645) | 35 (895) | 37 (950) |
| **Part No.** | **6902.300** | **6902.100** | **6902.000** |
| Weight lb (kg) | 26 (11.6) | 53 (24) | 75 (34) |

| **Prepared for mounting on**<br>**– Pedestal IW**<br>**– Enclosure for tower PC**<br>**– Worktop attachment** |  |
|---|---|
| Version | Without handle |
| **Height** (H) inches (mm) | 2 (38) |
| **Width** (B) inches (mm) | 37 (950) |
| **Depth** (T) inches (mm) | 24 (600) |
| **Part No.** | **6902.310** |
| Weight lb (kg) | 35 (16) |

Inch and pound measurements are rounded to the nearest whole number.

## Depth: 24" (600 mm), Height: 24" (600 mm)

### Monitor housing

For protected accommodation of 17" monitors.

**Material:**
Enclosure, rear door and component shelf: 0.6" (1.5 mm) sheet steel
Designer door: Vertical plastic decorative trim panels to UL 94-V0
Pane: Toughened safety glass 0.16" (4 mm)

**Finish:**
Enclosure and rear door: Textured RAL 7035 (light gray)
Designer door: Decorative trim panels RAL 7035 (light gray),
screen-printed mask on glass pane RAL 7015 (slate gray)
Component shelf: RAL 7015 (slate gray)

**Protection Ratings:**
NEMA 12 (IP 55 to EN 60 529/09.2000)

**Configuration:**
Front designer door with internal lock, unlatched behind the rear door via a lever with Bowden cable. Rear door with standard double-bit lock insert, may be exchanged for 1" (27 mm) lock inserts, type A, or lock cylinder inserts, type B, and for Ergoform-S lock system, see pages 217-220.
Enclosure with cut-out at the bottom and reinforcement for mounting

| | Housing for 21" monitors |
|---|---|
| **Height** inches (mm) | 24 (600) |
| **Width** inches (mm) | 24 (600) |
| **Depth** inches (mm) | 24 (600) |
| **Part No.** | **6902.500** |
| Weight lb (kg) | 94 (42.5) |

Delivery times available upon request.

Base prepared for the mounting of feet for desktop. Fitted component shelf, slotted, height-adjustable on a 25 mm pitch pattern, prepared for mounting fan expansion kit 7980.000, and a socket strip, 19" (482.6 mm) long, see www.rittal-corp.com.

**For additional technical information, please visit www.rittal-corp.com**

Inch and pound measurements are rounded to the nearest whole number.

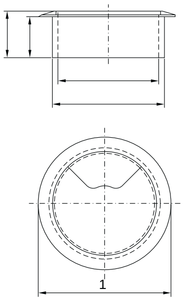
## Cable gland

**for Industrial Workstation worktops**
To fit drilled 2.4" (60 mm) drilled holes. For the entry of cables with pre-assembled connectors, the rotating flap and cover are easily removed.

**Material:**
Plastic

**Color:**
RAL 7035 (light gray)

| PU | Part No. |
|---|---|
| 1 | **6902.770** |



## Optipanel

A stylish enclosure of extruded aluminium section. In installation depths 2, 4 and 6" (50, 100 and 150 mm), the width and height are sized to your specified panels.

Standard sizes are available off the shelf for TFT monitors 15 and 17" with safety glass or touchscreen, and also for conventional desktop TFT s up to 20.1", see page 94.

Full information on the Optipanel, see page 93.

## Support arm system CP-L

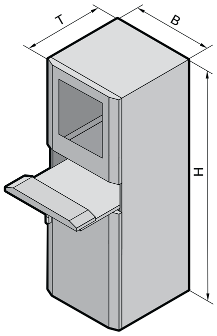
Using support section CP-L, Operator housings may be positioned in a rotatable and swivelling configuration depending on the respective ergonomic conditions, see page 132.

## Comfort Panel

Choose from 11 installation depths in a number of different variants. Whether screw-fastened or with a flat front frame, hinged, the Comfort Panel will always adapt to suit your requirements. An allround soft profile reduces the risk of injury. Simply compile your individual Comfort Panel or use the standard sizes, available off the shelf for TFT monitors 15” and 17”.

Full information on the Comfort Panel from page 83.

## Depth: 24" (620 mm), Height: 63" (1600 mm)



**Material:**
Stainless steel
Enclosure:
10-fold profiled, 16+ ga (1.8 mm)
Rear door: 14 ga (2.0 mm)
Gland plates: 16 ga (1.5 mm)
Monitor field with single-pane safety glass for screen diagonal 19" (482.6 mm).

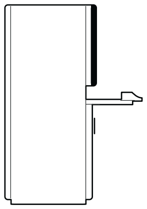
**Finish:**
Brushed, grain 240

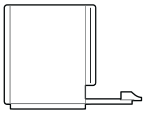
**Protection Ratings:**
NEMA 12
(IP 55 to EN 60 529/09.2000)

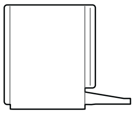
**Configuration:**
with keyboard drawer
- Lock insert, lock no. 3524 E
- Swing-down front for handrest
- Mouse pad support (also suitable for IP 67 mouse), may optionally be used on the left or right
- Hinged cable support

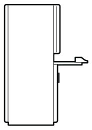
**Available on request:**
- Enclosure system PC with mounting compartment, large and drawer
- PC enclosure system with desk section
- PC enclosure system with drawer
- PC enclosure system with desk section

**For additional technical information, please visit www.rittal-corp.com**









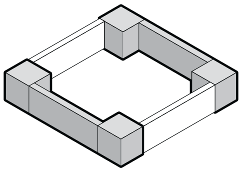
| Version | | PU | With keyboard drawer | Page |
|---|---|---|---|---|
| **Height** (H) inches (mm) | | | 63 (1600) | |
| **Width** (B1) inches (mm) | | | 24 (600) | |
| **Depth** (T) inches (mm) | | | 24 (620) | |
| **Part No.** | **Type 304** | 1 | **4650.000** | |
| | **Type 316L** | 1 | **4650.500** | |
| Weight lb (kg) | | | 253 (115) | |
| **Accessories** | | | | |
| Base/plinth | Height 4" (100 mm) | 1 | 2855.000 | 196 |
| | Height 8" (200 mm) | 1 | 2877.000 | 196 |
| Levelling feet, 4" (100 mm) high | | 1 set | 2859.000 | 201 |
| Base/plinth trim, modular | | 4 | 2913.000 | – |
| Adaptor pieces, 19" (482.6 mm) | | 8 | 4547.000 | – |
| **Lock systems** | | | | |
| Standard double-bit lock insert may be exchanged for 27 mm lock inserts, type A, see page 219 or lock cylinder inserts, type B, see page 217. | | | | |

Inch and pound measurements are rounded to the nearest whole number.

# Notes

# Accessories

## Base/Plinth Components and Trim



### Base/plinth components front and rear

**Sheet steel**

**For TS, CM, PC-TS, TP, IW**
Base/plinth component consisting of one trim panel and two pre-configured corner pieces. In 8" (200 mm) high base/plinth components, one trim panel is divided into two for cable entry.

**Material:**
Sheet steel, painted
Cover caps plastic RAL 9005 (jet black)/
RAL 7035 (light gray)

**Configuration:**
1 set = 2 base/plinth components, 4 cover caps, 4 screws and captive nuts M12 for mounting on the enclosure

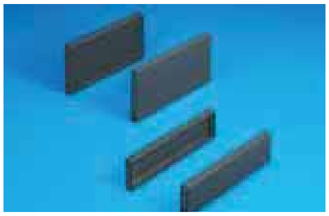
**Accessories:**
Base assembly plate 2817.000

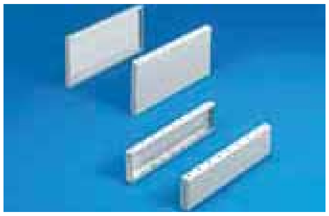
Filter mat for trim panel, vented

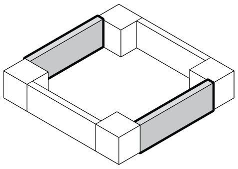
German patent no. 198 60 408

| For enclosure width inches (mm) | Version | Color | | **Part No.** | |
|---|---|---|---|---|---|
| | | RAL 7022 (umbra gray) | RAL 7035 (light gray) | 4" (100 mm) high | 8" (200 mm) high |
| 12 (300) | solid | ■ | – | **8601.915** | **–** |
| 16 (400) | solid | ■ | – | **8601.400** | **8602.400** |
| 20 (500) | solid | ■ | – | **8601.500** | **8602.500** |
| 24 (600) | solid | ■ | – | **8601.600** | **8602.600** |
| | solid | – | ■ | **8601.605**[1] | **8602.605** |
| | vented | – | ■ | **7825.601**[2] | **–** |
| | vented with designer cover | – | ■ | **7825.603** | **–** |
| 32 (800) | solid | ■ | – | **8601.800** | **8602.800** |
| | solid | – | ■ | **8601.805** | **8602.805** |
| | vented | – | ■ | **7825.801** | **–** |
| | vented with designer cover | – | ■ | **7825.803** | **–** |
| 39 (1000) | solid | ■ | – | **8601.000** | **8602.000** |
| 47 (1200) | solid | ■ | – | **8601.200** | **8602.200** |
| 63 (1600) | solid | ■ | – | **8601.920** | **8602.920** |
| 71 (1800) | solid | ■ | – | **8901.920** | **8901.930** |

[1] Version in RAL 9005 (jet black): 8601.602
[2] Version in RAL 9005 (jet black): 7825.605







### Base/plinth trim, side

**Sheet steel**
**For TS, CM, PC-TS, TP, IW**
For mounting between the base/plinth components. At 8" (200 mm) height, two 4" (100 mm) base/plinth trims may be used. Base/plinth trim panels (4" [100 mm] high) may be installed rotated 90° in order to stabilize bayed base/plinth components.

**Material:**
Sheet steel, painted

**Configuration:**
1 set = 2 base/plinth trim panels, including parts for attaching to the base/plinth components

**Additional parts needed:**
Base/plinth baying bracket 8601.100, when base/plinth components are installed by turning 90°

**Accessories:**
Assembly bolts for base/plinth

| For enclosure depth inches (mm) | Color | | **Part No.** | |
|---|---|---|---|---|
| | RAL 7022 (umbra gray) | RAL 7035 (light gray) | 4" (100 mm) high | 8" (200 mm) high |
| 12 (300) | ■ | – | **8601.030** | **8602.030** |
| 16 (400) | ■ | – | **8601.040** | **8602.040** |
| 20 (500) | ■ | – | **8601.050** | **8602.050** |
| 24 (600) | ■ | – | **8601.060** | **8602.060** |
| | – | ■ | **8601.065** | **8602.065** |
| 32 (800) | ■ | – | **8601.080** | **8602.080** |
| | – | ■ | **8601.085** | **8602.085** |

Inch and pound measurements are rounded to the nearest whole number.

## Base/plinth components front and rear

**Stainless steel**
**For TS, CM**

**Material:**
Type 304 and 316L stainless steel

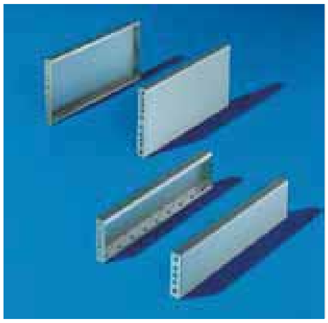
**Finish:**
Brushed, grain 400

**Configuration:**
Assembly parts including
4 screws and captive nuts M12 for mounting on the enclosure

**4" (100 mm) high:**
2 trim panels front/rear

**8" (200 mm) high:**
2 corner pieces with removable trim panel, 1 trim panel front/rear

| For enclosure width inches (mm) | Material | | **Part No.** | |
|---|---|---|---|---|
| | Type 304 stainless steel | Type 316L stainless steel | 4" (100 mm) high | 8" (200 mm) high |
| 24 (600) | ■ | – | **8701.600** | **8702.600** |
| | – | ■ | **8701.605** | **8702.605** |
| 32 (800) | ■ | – | **8701.800** | **8702.800** |
| | – | ■ | **8701.805** | **8702.805** |
| 47 (1200) | ■ | – | **8701.200** | **8702.200** |
| | – | ■ | **8701.205** | **8702.205** |



## Base/plinth trim, side

**Stainless steel**
**For TS, CM**
For mounting between the base/plinth components. At 8" (200 mm) height, two 4" (100 mm) base/plinth trims may be used. Base/plinth trim panels (4" [100 mm] high) may be installed rotated 90° in order to stabilize bayed base/plinth components.

**Material:**
Type 304 and 316L stainless steel

**Finish:**
Brushed, grain 400

**Configuration:**
1 set = 2 base/plinth trim panels, including parts for attaching to the base/plinth components

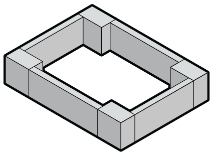
**Additional parts needed:**
Base/plinth baying bracket 8601.100, when base/plinth components are installed by turning 90°

**Accessories:**
Assembly bolts for base/plinth

| For enclosure width inches (mm) | Material | | **Part No.** | |
|---|---|---|---|---|
| | Type 304 stainless steel | Type 316L stainless steel | 4" (100 mm) high | 8" (200 mm) high |
| 16 (400) | ■ | – | **8701.040** | **8702.040** |
| | – | ■ | **8701.045** | **8702.045** |
| 20 (500) | ■ | – | **8701.050** | **8702.050** |
| | – | ■ | **8701.055** | **8702.055** |
| 24 (600) | ■ | – | **8701.060** | **8702.060** |
| | – | ■ | **8701.065** | **8702.065** |

Inch and pound measurements are rounded to the nearest whole number.

## Base/Plinth Complete Kits



### Base/plinth, complete

**Sheet steel**
**for AE, AP, ES, PC-ES**
consisting of:
Trim panels at the front and rear with fitted corner pieces and side trim panels.

**Material:**
Sheet steel, spray-finished

**Color:**
RAL 7022

**Configuration:**
Assembly parts including 4 screws and captive nuts M12 for mounting on the enclosure.

**4" (100 mm) high:**
4 corner pieces,
2 trim panels front/rear,
2 trim panels side.

**8" (200 mm) high:**
4 corner pieces,
1 trim panel front/rear x 8" (200 mm),
2 trim panels front/rear x 4" (100 mm),
4 trim panels side.

| For enclosures/consoles | | Base/plinth depth (T) inches (mm) | **Part No.** | |
|---|---|---|---|---|
| Width (b) inches (mm) | Depth inches (mm) | | **4" (100 mm)** | **8" (200 mm)** |
| 24 (600) | 16 (400) | 14 (350) | **2804.200** | **2805.200** |
| 24 (600) | 20 (500) | 18 (450) | **2807.200** | **2808.200** |
| 32 (800) | 16 (400) | 14 (350) | **2823.200** | **2824.200** |
| 32 (800) | 20 (500) | 18 (450) | **2829.200** | **2830.200** |
| 39 (1000) | 16 (400) | 14 (350) | **2909.200** | **2910.200** |
| 47 (1200) | 16 (400) | 14 (350) | **2836.200** | **2837.200** |
| 47 (1200) | 20 (500) | 18 (450) | **2839.200** | **2840.200** |
| 63 (1600) | 16 (400) | 14 (350) | **2905.200** | **2906.200** |
| 71 (1800) | 20 (500) | 18 (450) | **2903.200** | **2904.200** |

### Base/plinth, complete

**Stainless steel**
**for ES, PC-ES, AP one-piece console**

**Material:**
Stainless steel Type 304

**Surface finish:**
Brushed

**Configuration:**
Assembly parts including 4 screws and captive nuts M12 for mounting on the enclosure.

**4" (100 mm) high:**
2 trim panels front/rear,
2 trim panels side.

**8" (200 mm) high:**
2 corner pieces with removable trim panel,
1 trim panel front/rear, 4 trim panels side.

| For enclosures/consoles | | **Part No.** | |
|---|---|---|---|
| Width inches (mm) | Depth inches (mm) | **4" (100 mm)** | **8" (200 mm)** |
| 24 (600) | 16 (400) | **2865.000** | **2875.000** |
| 24 (600) | 20 (500) | **2868.000** | **2876.000** |
| 24 (600) | 20 (500) | **2855.000** | **2877.000** |
| 32 (800) | 16 (400) | **2869.000** | **2878.000** |
| 32 (800) | 20 (500) | **2866.000** | **2879.000** |
| 32 (800) | 24 (600) | **2856.000** | **2880.000** |
| 39 (1000) | 16 (400) | **2867.000** | **2885.000** |
| 47 (1200) | 16 (400) | **2870.000** | **2886.000** |
| 47 (1200) | 20 (500) | **2860.000** | **2887.000** |

**To order enclosures in stainless steel Type 316L, use Part No. XXXX.500**

Inch and pound measurements are rounded to the nearest whole number.

## Base assembly plate

**For base/plinth TS and base/plinth, complete**

For fastening the plinth to the floor without moving the enclosure or the bayed enclosure suite. For assembly screws up to 0.5" (12 mm) Ø.

**Material:**
Sheet steel, zinc-plated, passivated

| PU | Part No. |
|---|---|
| 10 | **2817.000** |

## Fastening bolts

**For**

- **Base/plinth TS**
- **Base/plinth, complete**
- **Base/plinth, stationary**

For mounting on base/plinth trim panels, side. The lockable assembly bolt allows the installation of cable clamp rails and standard C rails.

**Material:**
Hexagon steel, zinc-plated, passivated, width across flats 0.8" (19 mm)

| Base/plinth trim panel inches (mm) high | PU | Part No. |
|---|---|---|
| 4 (100) | 10 | **2819.000** |
| 8 (200) | 10 | **2819.200** |

## Base/plinth baying brackets

**For base/plinth TS**

Essential if the trim panels are mounted rotated through 90° for additional stabilization during the transportation of bayed enclosures.
Additionally required for each trim panel: 2 units.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Screws M8 x 0.6" (16 mm)

| PU | Part No. |
|---|---|
| 20 | **8601.100** |

## Base/Plinth Adaptors

### Base/plinth adaptor

**For leveling feet**

Connection component for fastening M12 leveling feet 4612.000 to the TS base/plinth.

**Material:**
Sheet steel, zinc-plated, passivated

| PU | Part No. |
|---|---|
| 4 | **8800.220** |

**Additional parts needed:**

Leveling feet, 4612.000, see page 201.

### Base/plinth adaptor

**For twin castors**

Connection component for mounting twin castors to the TS base/plinth.

**Material:**
Sheet steel, zinc-plated, passivated

| PU | Part No. |
|---|---|
| 4 | **8800.290** |

**Additional parts needed:**

Base/plinth side trim, see pages 194-195, whenever a twin castor is installed.

### Floor stand kits

**For AE, WM**

For mounting wallmount enclosures to the floor, in accordance with floormount standards. Easy installation - just drill holes in the bottom of enclosure and bolt to the enclosure. Includes sealing washers.

**Material/Finish:**
Carbon Steel: 12 ga, RAL 7035 (light gray)
Stainless Steel: 12 ga
Type 304, 316L

**Configuration:**
2 stands
Mounting hardware

| Height inches (mm) | Depth inches (mm) | Part No. Carbon steel | Part No. Stainless 304 | Part No. Stainless 316L |
|---|---|---|---|---|
| 12 (305) | 6 (152) | **FSK1206C** | **FSK12064** | **FSK12066** |
| 18 (457) | 6 (152) | **FSK1806C** | **FSK18064** | **FSK18066** |
| 24 (610) | 6 (152) | **FSK2406C** | **FSK24064** | **FSK24066** |
| 12 (305) | 8 (203) | **FSK1208C** | **FSK12084** | **FSK12086** |
| 18 (457) | 8 (203) | **FSK1808C** | **FSK18084** | **FSK18086** |
| 24 (610) | 8 (203) | **FSK2408C** | **FSK24084** | **FSK24086** |
| 12 (305) | 10 (254) | **FSK1210C** | **FSK12104** | **FSK12106** |
| 18 (457) | 10 (254) | **FSK1810C** | **FSK18104** | **FSK18106** |
| 24 (610) | 10 (254) | **FSK2410C** | **FSK24104** | **FSK24106** |
| 12 (305) | 12 (305) | **FSK1212C** | **FSK12124** | **FSK12126** |
| 18 (457) | 12 (305) | **FSK1812C** | **FSK18124** | **FSK18126** |
| 24 (610) | 12 (305) | **FSK2412C** | **FSK24124** | **FSK24126** |
| 12 (305) | 16 (406) | **FSK1216C** | **FSK12164** | **FSK12166** |
| 18 (457) | 16 (406) | **FSK1816C** | **FSK18164** | **FSK18166** |
| 24 (610) | 16 (406) | **FSK2416C** | **FSK24164** | **FSK24166** |
| 12 (305) | 20 (508) | **FSK1220C** | **FSK12204** | **FSK12206** |
| 18 (457) | 20 (508) | **FSK1820C** | **FSK18204** | **FSK18206** |
| 24 (610) | 20 (508) | **FSK2420C** | **FSK24204** | **FSK24206** |

Inch and pound measurements are rounded to the nearest whole number.

## Base/Plinth Brackets and Cross Members

### Reinforcement bracket

**For TS, ES, AP universal console**

For use in addition to clamping straps for stabilization when populated enclosures are screw-fastened through the base tray to the base/plinth or pallet for transportation purposes.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

| PU | **Part No.** |
|---|---|
| 4 | **8800.830** |

### Cross-member

**For TS, CM, TP, PC, IW, ES, AP adjustable**

To increase stability, the cross-member is positioned 5.4" (138 mm) above the base frame of the enclosure at the front and rear. For deeper enclosures, the rear part may be extended and screw-fastened again. For screw-fastening to the floor and enclosure with mounting hole at the sides, front and rear. The castors and leveling feet may be secured to the welded nuts M12.

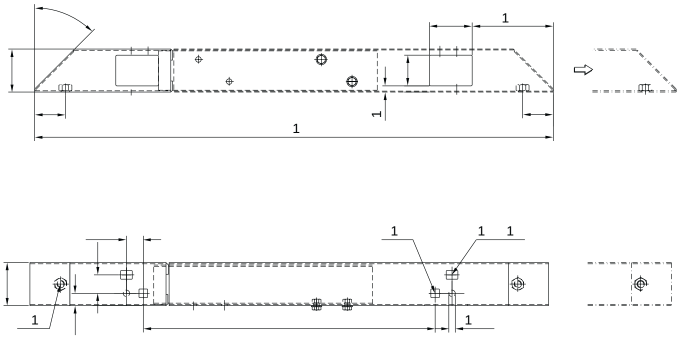
**Material:**
Sheet steel, spray-finished

**Color:**
RAL 7015 (slate gray)

**Note:**
For mobile use, the cross-member must be screw-fastened in the corners of the enclosure.

| For | Enclosure depth inches (mm) | L1 | L2 | PU | **Part No.** |
|---|---|---|---|---|---|
| TS, CM, TP, PC, IW, ES, AP Universal Console | 16 (400) | 644 | 275 | 2 | **8601.450** |
| | 20 (500) | 744 | 375 | | |
| | 24 (600) | 844 | 475 | 2 | **8601.680** |
| | 32 (800) | 1044 | 675 | | |

8601.450, 8601.680



Inch and pound measurements are rounded to the nearest whole number.

## Base/Plinth Drains and Seals

### Cover plate

**For CM**

To conceal the entire base opening or as a lid with a fitted enclosure rotated by 180°.

**Material:**
Sheet steel

**Color:**
Textured RAL 7035 (light gray)

**Configuration:**
Assembly hardware

| For enclosure | | Part No. |
|---|---|---|
| B (W) inches (mm) | T (D) inches (mm) | |
| 24 (600) | 16 (400) | **5001.130** |
| 32 (800) | | **5001.140** |
| 39 (1000) | | **5001.150** |
| 47 (1200) | | **5001.160** |

### Condensate drain

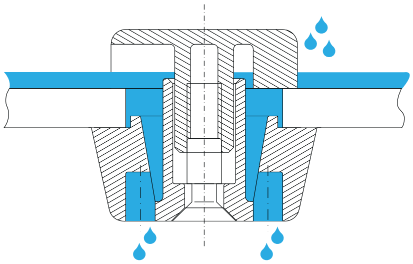
For reliable discharge from the inside and protection against splashes from the outside (labyrinth effect).

A hole diameter of 0.6" (16 mm) is required. (With AE/WM sheet steel, the holes are already provided in the base).

**Material:**
Polyamide

**Color:**
Similar to RAL 7035 (light gray)

| PU | Part No. |
|---|---|
| 6 | **2459.000** |



### Oiltight hole seals

Oiltight hole seals are used to seal unused or empty pushbutton holes, conduit openings, and knockout openings from the entry of dirt, dust, oil and water.

**Material:**
Carbon Steel:
RAL 7035 (light gray)
Type 304 stainless steel

**Hole Seals:**

- 12 sizes
- Covers holes with a 0.19" diameter
- Can be used on material thickness up to 0.31"
- Oil-resistant gasket
- UL/cUL Type 12, 4/4X and 13

**Oiltight Hole Seals - Carbon Steel**

| Description | Part No. |
|---|---|
| Miniature Oiltight Pushbutton Hole 22.5 mm (IEC) | **OHSMPBC** |
| 0.50" Conduit Hole | **OHS050C** |
| 0.75" Conduit Hole | **OHS075C** |
| Standard Oiltight Pushbutton Hole 30.5 mm (NEMA) | **OHSSPBC** |
| 1.00" Conduit Hole | **OHS100C** |
| 1.25" Conduit Hole | **OHS125C** |
| 1.50" Conduit Hole | **OHS150C** |
| 1.75" Conduit Hole | **OHS175C** |
| 2.00" Conduit Hole | **OHS200C** |
| 2.50" Conduit Hole | **OHS250C** |
| 3.00" Conduit Hole | **OHS300C** |
| 3.50" Conduit Hole | **OHS350C** |
| 4.00" Conduit Hole | **OHS400C** |

**Oiltight Hole Seals - Stainless Steel 304**

| Description | Part No. |
|---|---|
| Miniature Oiltight Pushbutton Hole 22.5 mm (IEC) | **OHSMPB6** |
| 0.50" Conduit Hole | **OHS0506** |
| 0.75" Conduit Hole | **OHS0756** |
| Standard Oiltight Pushbutton Hole 30.5 mm (NEMA) | **OHSSPB6** |
| 1.00" Conduit Hole | **OHS1006** |
| 1.25" Conduit Hole | **OHS1256** |
| 1.50" Conduit Hole | **OHS1506** |
| 1.75" Conduit Hole | **OHS1756** |
| 2.00" Conduit Hole | **OHS2006** |
| 2.50" Conduit Hole | **OHS2506** |
| 3.00" Conduit Hole | **OHS3006** |
| 3.50" Conduit Hole | **OHS3506** |
| 4.00" Conduit Hole | **OHS4006** |

See pages 72-76 for Pushbutton Enclosures

Inch and pound measurements are rounded to the nearest whole number.

## Leveling feet

**1 – 2" (18 – 43 mm) high**

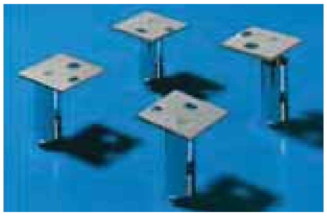
To compensate for uneven floors. Thread length 2" (40 mm). Assembly thread M12.
Maximum static load:
Approximately 661 lb (300 kg) per leveling foot.

**For:**

- TS8 modular enclosure system
- PC enclosure system
- Pedestal base plate 6137.035 – 6137.535
- Pedestal 6141.XXX
- Industrial workstations

| PU | **Part No.** |
|---|---|
| 4 | **4612.000** |

**Additional parts needed:**
For mounting on the TS base/plinth:
Base/plinth adaptor 8800.220,
see page 198.



## Leveling feet

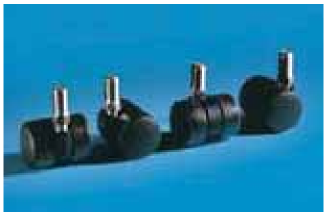
**3 – 5" (85 – 115 mm) high**

For mounting on TS, ES and PC enclosures, for easier floor cleaning and to compensate for uneven floors.
Height: 4" (100 mm).
Maximum static load:
772 lb (350 kg) per leveling foot.

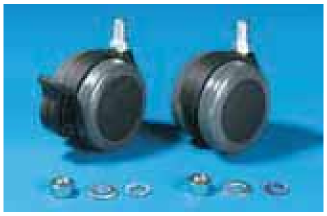
| PU | **Part No.** |
|---|---|
| 4 | **2859.000** |

**Material:**
Feet: Brass, nickel-plated Threaded bolts
Mounting panels: Type 304 stainless steel

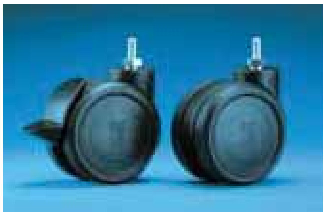
**Configuration:**
Assembly hardware to the enclosure.



1



2



3

## Twin castors

**Mounting thread 1" (M12 x 20)**

| Maximum permissible static load (per castor) lb (kg) | Ground clearance inches (mm) | Lock | PU | | Color | **Part No.** |
|---|---|---|---|---|---|---|
| 88 (40) | 2 (50) | 4 without | 1 set | 1 | black | **4611.000** |
| 165 (75) | 3 (85) | 2 with,<br>2 without | 1 set | 2 | black with gray wheels | **6148.000** |
| 265 (120) | 5 (125) | 2 with,<br>2 without | 1 set | 3 | black | **7495.000** |

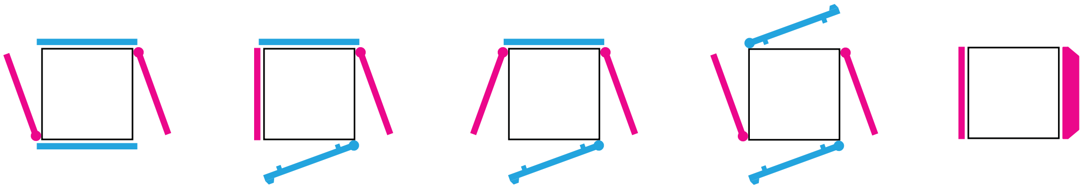
**For:**

- TS8 modular enclosure system
- PC enclosure system
- Pedestal base plate 6137.035 – 6137.535
- Pedestal 6141.XXX
- Industrial workstations
- Data rack

**Additional parts needed:**
For mounting on the TS base/plinth:
Base/plinth adaptor for twin castors 8800.290,
see page 198.

Inch and pound measurements are rounded to the nearest whole number.

## Side Panels



The TS sidewall provides new dimensions in convenient access to the TS interior, due to the option of hinging.

**Important:**
Sidewalls, hinged and unhinged, must always be opposite of one another. Doors and rear walls must always be opposite of one another.

Only one surface on each vertical enclosure section may be hinged.

**Note:**
Climate control sidewalls with integrated cooling module may be retrofitted instead of an enclosure sidewall.

### Sidewalls, screw-fastened, sheet steel

**For TS**

Easy positioning on the frame with the location aid. Six or eight enclosure panel holders with grounding insert ensure automatic potential equalization and higher EMC protection. Grounding bolts with contact surface are pre-integrated.

**Material:**

16 ga (1.5 mm) sheet steel

**Finish:**

Dipcoat-primed, powder coated in textured RAL 7035 (light gray) on the outside.

**Protection Ratings:**

UL Type 12 (IP 55 to EN 60 529/10.91)

**Configuration:**

Assembly hardware

**Note:**

Enclosure panel holders may be fitted from the inside or outside of the enclosure.
Area available for population:
External dimension – 4" (100 mm).

**Accessories:**

Ground straps, see page 243.

German patent no. 198 01 720

| For enclosures | | PU | **Part No.** |
|---|---|---|---|
| Height inches (mm) | Depth inches (mm) | | |
| 32 (800) | 24 (600) | 2 | **8173.235** |
| 39 (1000) | 24 (600) | 2 | **8174.235** |
| 47 (1200) | 24 (600) | 2 | **8170.235** |
| 47 (1200) | 32 (800) | 2 | **8175.235** |
| 55 (1400) | 20 (500) | 2 | **8145.235** |
| 55 (1400) | 24 (600) | 2 | **8146.235** |
| 55 (1400) | 32 (800) | 2 | **8148.235** |
| 63 (1600) | 20 (500) | 2 | **8165.235** |
| 63 (1600) | 24 (600) | 2 | **8166.235** |
| 63 (1600) | 32 (800) | 2 | **8168.235** |
| 71 (1800) | 16 (400) | 2 | **8184.235** |
| 71 (1800) | 20 (500) | 2 | **8185.235** |
| 71 (1800) | 24 (600) | 2 | **8186.235** |
| 71 (1800) | 32 (800) | 2 | **8188.235** |
| 79 (2000) | 16 (400) | 2 | **8104.235** |
| 79 (2000) | 20 (500) | 2 | **8105.235** |
| 79 (2000) | 24 (600) | 2 | **8106.235** |
| 79 (2000) | 32 (800) | 2 | **8108.235** |
| 87 (2200) | 24 (600) | 2 | **8126.235** |
| 87 (2200) | 32 (800) | 2 | **8128.235** |

**To order primed version, use Part no. XXXX.300.**

### Sidewalls, screw-fastened, stainless steel

**For TS**
To finish a complete enclosure. Easy attachment on the inside vertical enclosure frame upright. Grounding inserts ensure automatic potential equalization and a higher degree of EMC protection. Ground studs with contact surfaces are included.

**Material:**
Type 304 stainless steel, 16 ga (1.5 mm)

**Finish:**
Brushed, grain 240

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529/10.91)

**Configuration:**
Assembly hardware

| For enclosures | | PU | **Part No.** |
|---|---|---|---|
| Height inches (mm) | Depth inches (mm) | | |
| 71 (1800) | 16 (400) | 2 | **8700.840** |
| 71 (1800) | 20 (500) | 2 | **8700.850** |
| 79 (2000) | 24 (600) | 2 | **8700.060** |

**To order enclosures in Type 316 stainless steel, use Part no. 8705.XXX.**

Inch and pound measurements are rounded to the nearest whole number.

## Sidewalls, asymmetrical

**For TS**

The alternative to the standard sidewall for improved visual appearance in the event of back-to-back, back-to-side or corner baying. The gap (A) which occurs with standard sidewalls is reduced to a standard dimension (B), see technical drawing.

In the case of the TS8 corner enclosure, an asymmetrical sidewall is included in the supply. The number of additionally required asymmetrical sidewalls depends on the baying version which is selected.

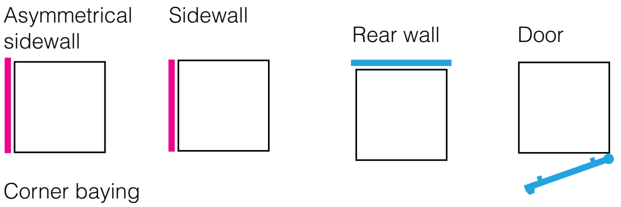
**Material:**
Sheet steel, 16 ga (1.5 mm)

**Color:**
RAL 7035 (light gray)

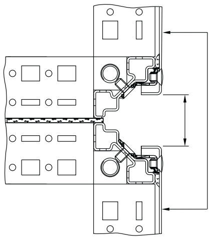
**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529/10.91)

**Configuration:**
Assembly hardware

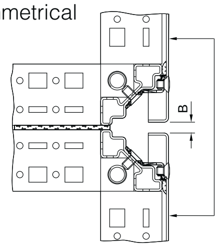
| Height inches (mm) | Depth inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 71 (1800) | 16 (400) | 2 | **8184.500** |
| 71 (1800) | 20 (500) | 2 | **8185.500** |
| 71 (1800) | 24 (600) | 2 | **8186.500** |
| 79 (2000) | 16 (400) | 2 | **8104.500** |
| 79 (2000) | 20 (500) | 2 | **8105.500** |
| 79 (2000) | 24 (600) | 2 | **8106.500** |
| 79 (2000) | 32 (800) | 2 | **8108.500** |
| 87 (2200) | 24 (600) | 2 | **8126.500** |



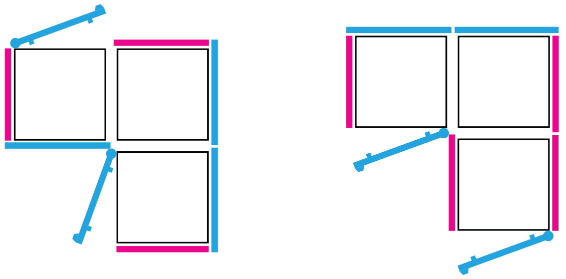
Sidewall Standard



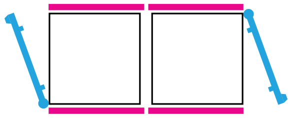
Sidewall asymmetrical



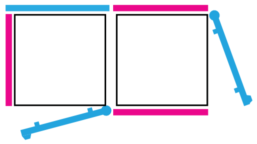
Corner baying



Back-to-back baying



Side-to-back baying



## Sidewalls for modular front design

**For TS**

Attachment on the inside vertical enclosure frame member. The 8106.235 sidewall retainers (see page 202) could conflict with the partial door fasteners.

**Material:**
14 ga (2 mm) sheet steel

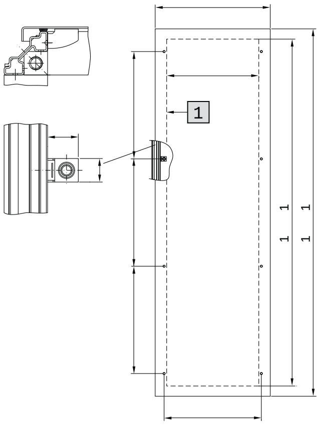
**Finish:**
Dip-coat primed, powder coated on the outside RAL 7035 (light gray), textured

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529/10.91)

**Configuration:**
2 sidewalls,
16 retainers with automatic potential equalization

**Note:**
Can also be used in enclosures without modular front design.

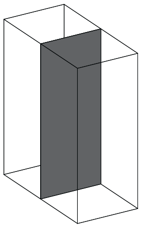
| For enclosure inches (mm) | | **Part No.** |
|---|---|---|
| Height | Depth | |
| 79 (2000) | 24 (600) | **8106.512** |
| 79 (2000) | 32 (800) | **8108.512** |

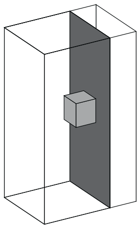


1 Usable interior area

Inch and pound measurements are rounded to the nearest whole number.

## Divider Panels/Paint

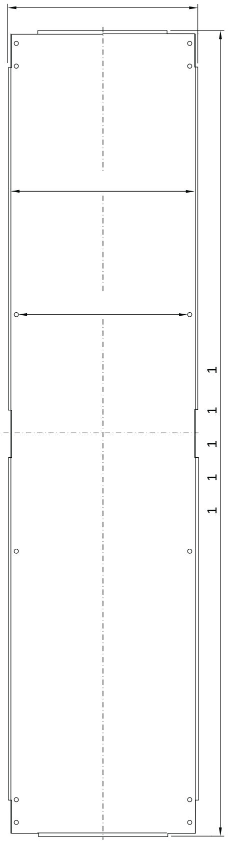




### Divider panel

**For TS**

For separating individual enclosure cells. Due to the symmetry of the frame system, the divider panel can also be used at the rear. Around the perimeter, double fold for stability and to hold the gasket. Notches in the corners and halfway up the sides permit the use of interconnecting brackets and baying brackets, even with a divider panel installed for mounting on the outer mounting level. This leaves the inner level free for additional population.



**Material:**
Sheet steel, 14 ga (2 mm), zinc-plated, passivated

**Protection Ratings:**
UL Type 12 (IP 54 to EN 60 529/10.91)

**Configuration:**
Assembly hardware

**Accessories:**
Cover with door.

Baying bracket 8800.470 for enclosures with installed divider panel, see page 251.

**Note:**
The divider panel may also be fitted to the rear. This allows, for example frequency converters for heat dissipation to be installed in a divider panel with the air conditioners facing outwards and protected/finished off with a cover.

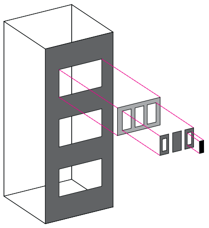
| For enclosures | | Part No. |
|---|---|---|
| Height inches (mm) | Depth inches (mm) | |
| 71 (1800) | 16 (400) | **8609.840** |
| 71 (1800) | 20 (500) | **8609.850** |
| 71 (1800) | 24 (600) | **8609.860** |
| 79 (2000) | 16 (400) | **8609.040** |
| 79 (2000) | 20 (500) | **8609.050** |
| 79 (2000) | 24 (600) | **8609.060** |
| 79 (2000) | 32 (800) | **8609.080** |
| 87 (2200) | 24 (600) | **8609.260** |

### Primer/paint

For touching up and repairing powder coated and wet-painted surfaces, air-drying.

| Color RAL | Part No. | | |
|---|---|---|---|
| | 0.6 oz touch-up pen | Spray Can | Quart can |
| 7022 (umbra gray) | **9095.008** | **9093.008** | **9094.008** |
| 7032 (pebble gray) | **9095.002** | **9093.002** | **9094.002** |
| 7035 (light gray) | **9095.006** | **9093.006** | **9094.006** |

Inch and pound measurements are rounded to the nearest whole number.



## The divider panel and module plate system

**More options:**
The cut-outs of a divider panel are individually equipped with module plates for 16-pole or 24-pole connectors, with module plates for cable entry and with solid module plates.

**Faster assembly:**
Usually only part of the total number of connector cut-outs are used. Due to the new divider panel technique, the cut-outs do not need to be covered individually. The solid module plate is used instead. The benefits: Less plates, less screws, less assembly work.

## Divider panel

**For module plates TS**

With cut-outs for the installation of module plates for connectors or for cable entry, and also for the entry of busbar systems and other installed equipment. There is a double fold around the perimeter for stability and to hold the seal. The symmetry of the enclosure frame allows divider panels to be fitted at the rear, dimensions permitting.

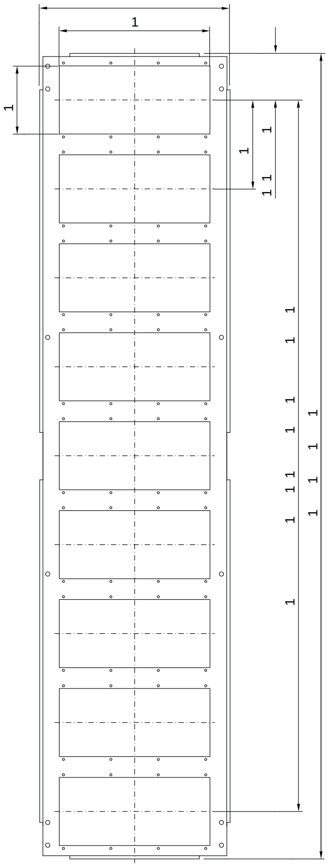
For mounting on the outer mounting level. This leaves the inner level free for further population.

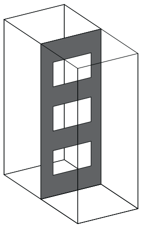
**Material:**
Sheet steel, 14 ga (2 mm), zinc-plated, passivated

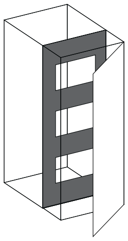
**Configuration:**
Assembly hardware and self-tapping socket screws, M5 x 1" (12 mm) for mounting the module plates.

**Note:**
Notches in the corners and half-way up the sides permit the use of interconnecting brackets and baying brackets, even with a fitted divider panel.

**Accessories:**
Module plates, see page 206.
Cover with door.
Baying bracket 8800.470 for enclosures with divider panel installed, see page 251.







| For enclosures | | Number of cut-outs | Part No. |
|---|---|---|---|
| Height inches (mm) | Depth inches (mm) | | |
| 71 (1800) | 20 (500) | 9 | **8609.100** |
| 71 (1800) | 24 (600) | 9 | **8609.110** |
| 79 (2000) | 20 (500) | 10 | **8609.120** |
| 79 (2000) | 24 (600) | 10 | **8609.130** |

Inch and pound measurements are rounded to the nearest whole number.

## Module plates

**Material:**
Sheet steel, 14 ga (2 mm), zinc-plated, passivated

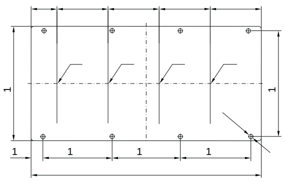
**Configuration:**
Gasket included

| Version | Cut-outs | PU | Part No. |
|---|---|---|---|
| Solid | – | 1 | **8609.160** |
| For 16-pole connectors | 4 | 1 | **8609.150** |
| For 24-pole connectors | 4 | 1 | **8609.140** |
| For cable entry | 1 | 1 | **8609.170** |
| For cable entry grommets | 4 | 1 | **8609.190** |

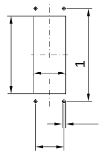
**Solid**
For sealing unused cut-outs. Easily machined for individual cut-outs.

**Accessories:**
Adaptor, cover
Cable gland for connector cut-outs

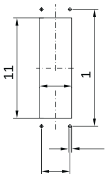
**For 16/24-pole connectors**
With cut-outs to accommodate connectors. In addition to mounting on divider panels, module plates may also be attached to the 1" (25 mm) system hole pattern of the enclosure and to the rails of the TS/PS system.



**Accessories:**
Adaptor, cover plate (see page 207)
Cable gland for connector cut-outs

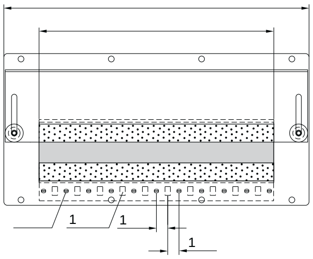


X 16-pole

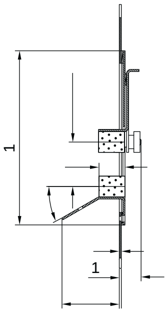


X 24-pole

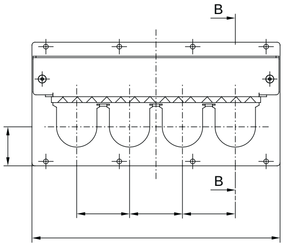
**For cable entry**
For the entry using pre-assembled cables. Sealed, routing is achieved using adjustable angle brackets with inserted foam cable clamp strip. Attachment bracket, punched, for cable clamping.



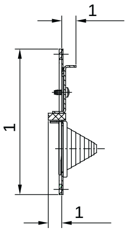
**Accessories:**
Cable tie for quick assembly 2597.000



**For cable entry grommets**
For mounting on the divider panel for TS module plates. Slide the grommets into the cut-outs, slide the clamp plate with seal down over them, and screw-fasten.



**Additional parts needed:**
Cable entry grommets or connector grommets



## Adaptor

**For connector cut-outs**

For using connectors with varying numbers of poles.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Seal for adaptor and assembly parts.

| For reduction | PU | Part No. |
|---|---|---|
| From 24 to 16 poles | 5 | **2479.000** |
| From 24 to 10 poles | 5 | **2480.000** |
| From 24 to 6 poles | 5 | **2481.000** |
| From 16 to 10 poles | 5 | **2401.000** |
| From 16 to 6 poles | 5 | **2402.000** |

## Cover plate

**For connector cut-outs**

For unused cut-outs.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Seal and assembly parts.

| For | PU | Part No. |
|---|---|---|
| 24-pole cut-outs | 20 | **2477.000** |
| 16-pole cut-outs | 20 | **2478.000** |

## Cover with door

**For TS**

To protect and finish off connectors or other installed equipment. 8” (200 mm) wide cover, with opening at the top or bottom for cable entry including a cover plate for unused openings.

**Material:**
Sheet steel
Cover: 16 ga (1.5 mm)
Door: 14 ga (2.0 mm)

**Color:**
7035 textured

**Configuration:**
Cover, door with locking rod and double-bit lock insert, 1 cover plate for the top or bottom.

**Note:**
May also be fitted at the rear to extend the enclosure depth. To cover the resultant gap, we recommend asymmetrical side panels (see page 203). In this way, for example, frequency converters to dissipate heat may be installed in a divider panel (see page 205) with the heat sinks facing outwards and protected/ concealed with a cover.

| For enclosures | | Part No. |
|---|---|---|
| Height inches (mm) | Depth inches (mm) | |
| 79 (2000) | 20 (500) | **8609.020** |
| 79 (2000) | 24 (600) | **8609.030** |

**For primed version, use Part No. 8609.0X1**

**Accessories:**
Lock inserts, version F
see page 220.
Comfort handle,
see page 217.
180° hinge,
see page 214.

Inch and pound measurements are rounded to the nearest whole number.

## Rain Canopies/Dust Guards

### Rain canopies

**For AE**

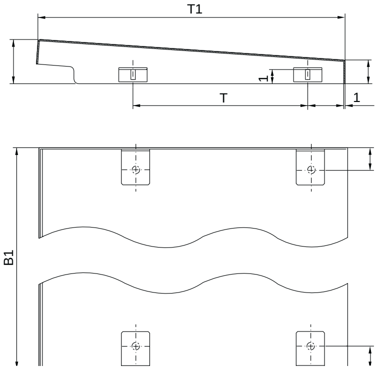
Reliable protection for outside installations – with water run-off to the rear. Easily retrofitted.

**Configuration:**
Assembly hardware

**Note:**
For outdoor installations, we generally recommend a rain canopy above the enclosure or the gap between the door or screw-fastened rear wall and the enclosure, in order to protect against water and UV radiation.

The tests of IP protection categories for water protection (2nd code number to EN 60 529) cannot be compared with an enclosure sited outdoors or under similar conditions.
Upon request, rain canopies of sheet steel, stainless steel or aluminum can also be produced for other enclosures.

**Accessories:**
Condensate drain, see page 200.



**B = Width**
**T = Depth**

**Sheet steel version**

| For AE enclosures | B1 | B2 | T1 | T2 | Part No. |
|---|---|---|---|---|---|
| 1031.500<br>1038.500<br>1380.500 | 15<br>(391) | 13<br>(340) | 9<br>(235) | 5<br>(120) | **2501.500** |
| 1039.500<br>1060.500<br>1076.500 | 24<br>(611) | 22<br>(560) | 9<br>(235) | 4<br>(95) | **2502.500** |
| 1339.500<br>1360.500<br>1376.500 | 24<br>(611) | 22<br>(560) | 15<br>(375) | 9<br>(235) | **2511.500** |

**Stainless steel version**

| For AE enclosures | B1 | B2 | T1 | T2 | Part No. |
|---|---|---|---|---|---|
| 1002.600<br>1035.500 | 8<br>(211) | 6<br>(160) | 7<br>(180) | 3<br>(65) | **2470.000** |
| 1005.600<br>1033.500<br>1034.500 | 12<br>(311) | 10<br>(260) | 9<br>(235) | 5<br>(120) | **2361.000** |
| 1004.600<br>1030.500 | 15<br>(391) | 13<br>(340) | 7<br>(180) | 2<br>(65) | **2471.000** |
| 1006.600<br>1008.600<br>1031.500<br>1038.500<br>1380.500 | 15<br>(391) | 13<br>(340) | 9<br>(235) | 5<br>(120) | **2472.000** |
| 1007.600<br>1050.500 | 20<br>(511) | 18<br>(460) | 9<br>(235) | 5<br>(120) | **2362.000** |
| 1009.600<br>1010.600<br>1012.600<br>1039.500<br>1060.500<br>1076.500 | 24<br>(611) | 22<br>(560) | 9<br>(235) | 4<br>(95) | **2473.000** |
| 1014.600<br>1073.500 | 30<br>(771) | 28<br>(720) | 13<br>(325) | 7<br>(185) | **2474.000** |
| 1016.600<br>1017.600<br>1180.500<br>1280.500 | 32<br>(811) | 30<br>(760) | 13<br>(325) | 7<br>(185) | **2475.000** |
| 1018.600<br>1019.600<br>1110.500<br>1114.500<br>1130.500<br>1213.500 | 40<br>(1011) | 38<br>(960) | 13<br>(325) | 7<br>(185) | **2363.000** |

### Dust guard trim

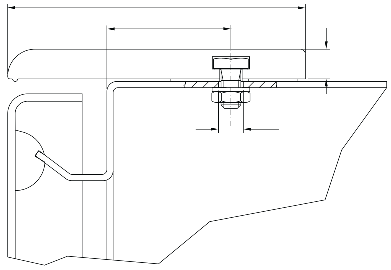
**For KL, EB, JB, AE, WM**

To protect against deposits on the upper edge of the door and between the enclosure and the door/lid. Cut the door protection strip to length according to the enclosure width. Drill the enclosure and mount the strip using the adhesive strips and screws.

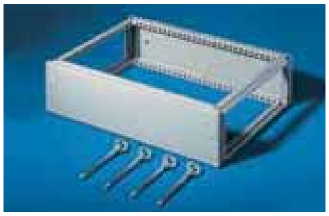
**Material:**
Plastic, UV-resistant

**Color:**
Similar to RAL 7024 (graphite gray)

| For enclosure | Length inches (mm) | A inches (mm) | Part No. |
|---|---|---|---|
| AE/WM | 47 (1200) | 1.0 (25) | **2426.500** |
| KL/EB/JB | | 0.8 (20.5) | |



Inch and pound measurements are rounded to the nearest whole number.



## Top-mounting module

### For TS

As a cable chamber for cable feed from above or for power distribution with busbar systems across bayed enclosures. The TS cover plate is used as standard to finish at the top. The enclosure height is increased by 8" (200 mm) with the top mounting module installed. The top baying cover cannot be fitted. Installation accessories for top and bottom, see diagram and explanations below.

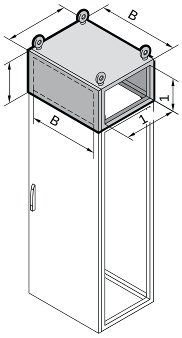
**Material:**
Sheet steel, 14 ga (2 mm)

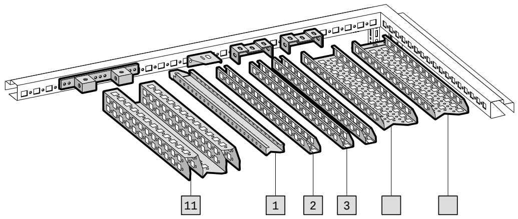
**Finish:**
Painted in textured
RAL 7035 (light gray)/RAL 7032 (pebble gray)

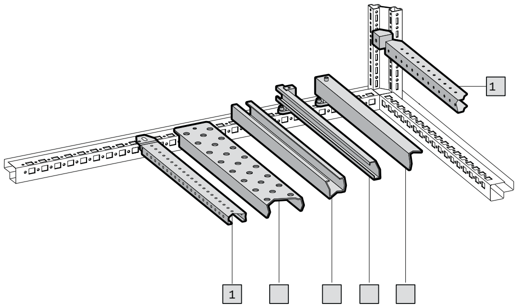
**Protection ratings:**
UL Type 12 (IP 55 to EN 60 529/10.91)
(in conjunction with sidewall for
top-mounting module)

**Configuration:**
1 frame module,
2 trim panels (front and rear),
8 holders with automatic potential equalization,
4 tapped rods with eyebolts.

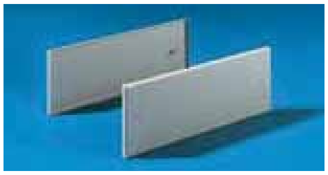
| For enclosures | | **Part No.** |
|---|---|---|
| Width (B) inches (mm) | Depth inches (mm) | **RAL 7035 (light gray)** |
| 16 (400) | 24 (600) | **8801.725** |
| 24 (600) | 24 (600) | **8801.735** |
| 32 (800) | 24 (600) | **8801.745** |
| 39 (1000) | 24 (600) | **8801.755** |
| 47 (1200) | 24 (600) | **8801.765** |







| Accessories |
|---|
| Description |
| **1** TS system bar 0.7 x 1.5" (18 x 38 mm) |
| **2** PS system bar 0.9 x 0.9" (23 x 23 mm) with angle bracket |
| **3** PS system bar 0.9 x 0.9" (23 x 23 mm) with support bracket PS |
| **4** PS system chassis without mounting flange, 0.9 x 2.9" (23 x 73 mm) with support bracket PS |
| **5** PS system chassis with mounting flange 0.9 x 2.9" (23 x 73 mm) |
| **6** Support rail |
| **7** System support rails |
| **8** C rail 30/15 with support bracket or spacer |
| **9** Cable clamp rail |
| **10** TS system bar 0.9 x 1.5" (25 x 38 mm) |
| **11** TS system chassis without mounting flanges, 1.8 x 3.5" (45 x 88 mm) |



## Sidewall

**For top-mounting module**
To finish off the side of a top-mounting module or bayed suite.

**Material:**
Sheet steel, 14 ga (2 mm)

**Finish:**
Painted in textured
RAL 7035 (light gray)

**Configuration:**
2 sidewalls,
8 holders with automatic potential equalization

| Version | PU | **Part No.** |
|---|---|---|
| RAL 7035 (light gray) | 2 | **8801.775** |

Inch and pound measurements are rounded to the nearest whole number.

# Spacers/Eyebolts

## Spacers

**For roof plate, TS**

To raise the TS8 roof for ventilation purposes, in three different heights. Not suitable for crane transportation.

| Height inches (mm) | PU | **Part No.** |
|---|---|---|
| 0.5 (10) | 4 | **2422.000** |
| 1.0 (20) | 4 | **2423.000** |
| 2.0 (50) | 4 | **7967.000** |

## Eyebolts

**For AE, CM**

For crane transportation of enclosures, with reinforcement plate to be inserted underneath.
Thread: M12

**Configuration:**
Eyebolts, reinforcement plates

| For | PU | **Part No.** |
|---|---|---|
| AE | 4 | **2509.000** |
| CM | 2 | **2590.500** |

## Eyebolts

**for TS, ES**

For crane transportation of enclosures, may already be included in the supply.
Thread: M12

| Packs of | **Part No.** |
|---|---|
| 4 | **4568.000** |

Inch and pound measurements are rounded to the nearest whole number.

## Viewing door

**For TS**

Instead of a sheet steel door or rear wall.

**Version:**
Frame:
Extruded aluminum section, die-cast zinc corner pieces, powder coated in RAL 7035 (light gray)
Single-pane safety glass, 0.1" (3 mm) thick, printed mask on the inside
RAL 7015 (slate gray)
Locking rod with double-bit insert
180° hinges (4)
Visible area:
H – 6" (160 mm),
W – 6" (140 mm).

**Protection Ratings:**
UL Type 12 (IP 55 to EN 60 529/10.91)

US design patent no. 418 608
German registered design No. M 98 03 844
IR reg. design no. DM/045 440 with validity for BE, FR, NL, HU, LU
UK reg. design no. 2 076 673
South Korean reg. design no. 0 240 621
Russian reg. design no. 46 300
Japanese reg. design no. 1 056 165

| For enclosures | | **Part No.** |
|---|---|---|
| Height inches (mm) | Width inches (mm) | |
| 71 (1800) | 24 (600) | **8610.680** |
| 71 (1800) | 32 (800) | **8610.880** |
| 79 (2000) | 24 (600) | **8610.600** |
| 79 (2000) | 32 (800) | **8610.800** |
| 87 (2200) | 24 (600) | **8610.620** |
| 87 (2200) | 32 (800) | **8610.820** |

**Additional parts needed:**
When mounting in place of the rear wall:
Lock components for frame 8800.040.

**Accessories:**
Lock inserts, see pages 218-220.

Comfort handle, see page 217.

## Handle adaptor

The handle adaptor compensates for the design slant in the door profile to enable installation of the comfort handle.

**Material:**
Plastic

**Configuration:**
1 adaptor plate,
1 extension for drive,
2 assembly screws

**For viewing door TS, PC, IW**

| Color | **Part No.** |
|---|---|
| RAL 7035 (light gray) | **8611.080** |

**For designer door IW and PC-TS bottom door**

| Color | **Part No.** |
|---|---|
| RAL 7035 (light gray) | **8611.300** |

**For viewing door IW**

| Color | **Part No.** |
|---|---|
| RAL 7035 (light gray) | **6903.170** |

## Lock components

**For frame TS**
For retrofitting a viewing door or sheet steel door in place of a rear wall.

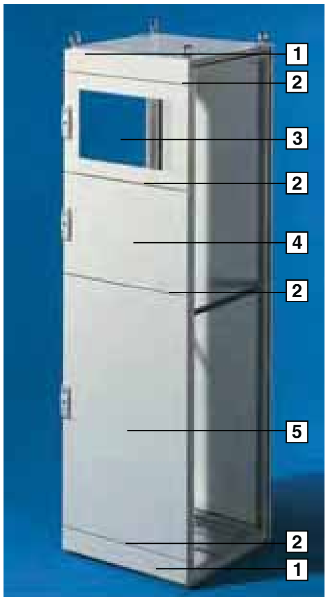
**Material:**
Die-cast zinc

| PU | **Part No.** |
|---|---|
| 4 | **8800.040** |

**Configuration:**
Assembly hardware

Inch and pound measurements are rounded to the nearest whole number.

## Modular Doors



### Modular front design

**For TS**

All 24 and 32" (600 and 800 mm) wide TS8 enclosures instead of a door or rear wall, as long as the modular front enclosure is positioned in a suite between two enclosures with normal doors. If positioned as a freestanding enclosure or at the end of an enclosure suite, special side panels such as 8106.512 (see www.rittal-corp.com) are required. The partial doors with and without viewing panels can be arbitrarily combined with cross members. A trim panel and a cross member are each required at the top and bottom. The requirements for your individual front design and the considerations which must be taken into account are illustrated on the sample configuration opposite page.

**Protection Ratings:**

UL Type 12 (IP 55 to EN 60 529/10.91)
(with a completed enclosure)

Additional parts needed:

1 Trim panels, height 4" (100 mm) or trim panel, hinged at the top, height

2 Cross member

**Accessories:**

3 Partial door with viewing window, height 16" (400 mm)

4 Partial door without viewing window, height 16" (400 mm)

5 Partial door without viewing window, height 39" (1000 mm)

### 1 Trim piece, hinged at the top

**For TS**

For the installation of control and display components.

**Material:**

Sheet steel, 14 ga (2 mm)

**Configuration:**

Hinges, cam locks with double-bit insert and assembly hardware

**Note:**

Not in combination with top-mounted module for TS (see page 209).

**Accessories:**

Door stop for trim piece, hinged at the top see page 216.
Lock inserts, version A, see page 219.

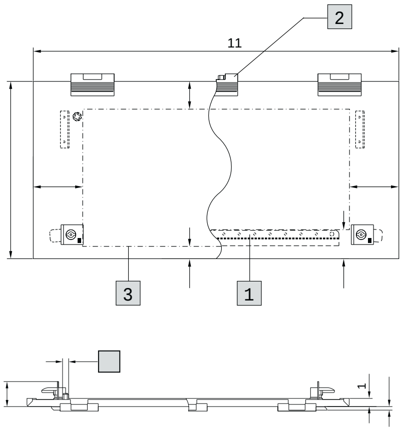
**Rittal Service:**

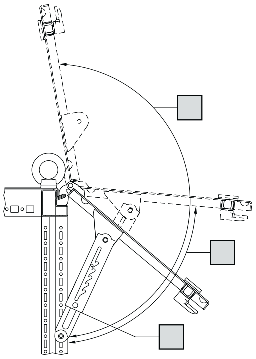
Combination with shortened door, enclosure with mounted trim instead of door, cut-outs for operator and display components on request.

| Height inches (mm) | Width inches (mm) | Color RAL | **Part No.** |
|---|---|---|---|
| 12 (300) | 24 (600) | 7035 (light gray) | **8801.230** |
| | 32 (800) | | **8801.240** |
| | 47 (1200) | | **8801.250** |

**Additional parts needed:**

Cross member: see page 213





1 Only for width 32 and 47" (800 and 1200 mm)

2 Only for width 47" (1200 mm)

3 Usable interior area

4 Optional: Door stop 8801.260

5 Maximum opening with support stay approximately 85°

6 Maximum opening without stay approximately 190°

7 Grounding bolt M8

Inch and pound measurements are rounded to the nearest whole number.

## 1 Trim panels

**For TS**
Required as upper and lower height trim.

**Material:**
Sheet steel, 14 ga (2 mm), textured

**Configuration:**
2 trim panels, assembly hardware

| Height inches (mm) | Color RAL | Part No. | |
|---|---|---|---|
| | | Width 24" (600 mm) | Width 32" (800 mm) |
| 4 (100) | 7035 | **8801.510** | **8801.110** |

**Additional parts needed:**
Cross member, see below.

## 2 Cross member

**For TS**
As sealing member between:

- Trim panels
- Partial doors
- Trim piece, hinged at the top

**Material:**
Sheet steel

| PU | Part No. | |
|---|---|---|
| | Width 24" (600 mm) | Width 32" (800 mm) |
| 5 | **8801.630** | **8801.830** |

**Color:**
RAL 7035 (light gray)

**Configuration:**
Assembly hardware

## 3 4 5 Partial doors

**For TS**
Door can be optionally hinged on the right or left side. In the case of doors without viewing panel (height 24 – 39" [600 – 1000 mm]) the installation of monitor frame 2305.000 is possible.

Standard double-bit lock insert may be exchanged for TS lock inserts, and from 24" (600 mm) height, for comfort handle.

**Material:**
Sheet steel, 14 ga (2 mm)

**Configuration:**
Door, hinges and lock

**Additional parts needed:**
Cross member, see above.

**Accessories:**
Monitor frame 2305.000, see www.rittal-corp.com.
TS lock inserts, see page 219.
Comfort handle, see page 217.

1 Height – 0.1" (2 mm)
2 Usable interior area
3 M6 bolt only for width 24" (600 mm)
4 Perforated strip only for width 32" (800 mm)

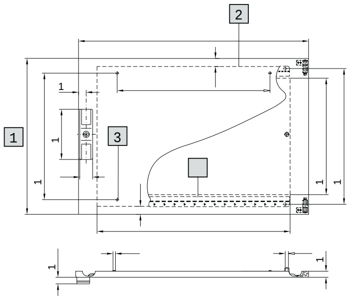
**Solid**

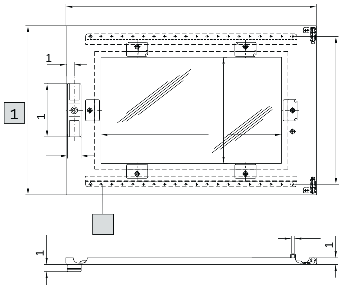
| Height inches (mm) | Part No. | |
|---|---|---|
| | Width 24" (600 mm) | Width 32" (800 mm) |
| | RAL 7035 | RAL 7035 |
| 8 (200) | **8801.520** | **8801.120** |
| 16 (400) | **8801.540** | **8801.140** |
| 24 (600) | **8801.560** | **8801.160** |
| 32 (800) | **8801.580** | **8801.180** |
| 39 (1000) | **8801.500** | **8801.100** |

**With 0.1" (3 mm) single-pane safety glass**

| Height inches (mm) | Part No. | |
|---|---|---|
| | Width 24" (600 mm) | Width 32" (800 mm) |
| | RAL 7035 | RAL 7035 |
| 16 (400) | **8801.550** | - |
| 24 (600) | **8801.570** | **8801.170** |
| 32 (800) | **8801.590** | - |

RAL 7035 (light gray)





Inch and pound measurements are rounded to the nearest whole number.

## Hinges

### Hinges 130°

**For ES**

For retrofitting a sheet steel door instead of the rear wall.

**Material:**
Die-cast zinc

**Configuration:**
Assembly hardware

| PU | Part No. |
|---|---|
| 6 | **4190.000** |

**Note:**

Lock components for frame should be ordered separately:

### Hinges 130°

**For TS**

For retrofitting a sheet steel door instead of the rear wall.

**Material:**
Die-cast zinc

**Configuration:**
Assembly hardware

| PU | Part No. |
|---|---|
| 4 | **8800.020** |

**Additional parts needed:**

Lock components for frame 8800.040, see page 211.

### Hinges 180°

**For TS**

For on-site conversion of sheet steel doors with 130° hinges

Easy assembly:
- Exchange the hinge parts on the frame side for 180° hinges (4 screws)
- Drill the door at the pre-marked points
- Screw-fasten the hinge parts onto the door
- Install the door
- Press in the captive hinge pins

**Material:**
Die-cast zinc

**Configuration:**
Assembly hardware

| Version | PU | Part No. |
|---|---|---|
| RAL 7035 (light gray) | 4 | **8800.190** |
| RAL 8019 (gray brown) | 4 | **8800.230** |
| Matt nickel-plated | 4 | **8701.180** |

**Note:**

Door assemblies such as the comfort handle may restrict the door opening angle. The hinge pins may only be actuated and the door removed with the door open.

The hinge cannot be dismantled from the outside with the door closed (access protection).

### Hinges 180°

**For TS modular bayed enclosure suites with comfort handle**

In TS modular bayed enclosure suites with comfort handle for semi-cylinder, the following door opening angles may be achieved:
Sheet steel door: Maximum 180°
Viewing door: Maximum 140°

**Material:**
Die-cast zinc

**Color:**
RAL 7035 (light gray)/RAL 9005 (white gray)

**Configuration:**
Assembly hardware

| Version for | PU | Part No. | |
|---|---|---|---|
| | | RAL 7035 (light gray) | RAL 9005 (gray white) |
| Sheet Steel door | 4 | **7824.520** | **7824.522** |
| Viewing door | 4 | **7824.525** | **–** |

**Note:**
- The protection ratings of the enclosure may be reduced
- Not for divided doors
- Door hinge remains the same within a bayed modular enclosure suite
- Not suitable for use with TS designer viewing doors

## Hinges, 180°

**For CM**

For retroactive conversion of standard doors with 130° hinges.  One pack is sufficient for one door – i.e., with two-door enclosures, two packs will be required.

**Material:**
Die-cast zinc

**Color:**
RAL 9011 (pebble black)/9006 (white aluminum)

**Configuration:**
Assembly parts

**Note:**
When baying two CM enclosures, position the hinges on the outside

| PU | **Part No.** |
|---|---|
| 3 | **5001.000** |

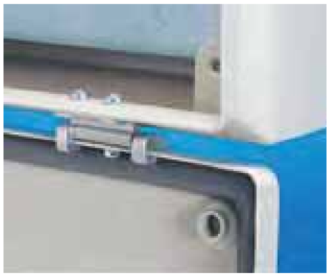
## Hinges

**For PK**

For hinged attachment of lids.
The supplied drilling template ensures problem-free assembly.

**Configuration:**
1 set = 2 hinges,
4 assembly screws,
3 polyethylene sealing plugs,
1 drilling template.

| For enclosure | Material | PU | **Part No.** |
|---|---|---|---|
| 9500.000 – 9513.000 | Polycarbonate | 10 sets | **9580.000** |
| 9514.000 – 9524.000 | Polystyrene | 10 sets | **9581.000** |



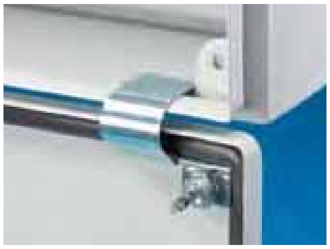
## Cover hinge

**For KL**

The cover hinge is simply screwed to the enclosure protection channel and to the edge fold.

**Configuration:**
Assembly parts

| Material | PU | **Part No.** |
|---|---|---|
| Die-cast zinc | 6 | **1592.000** |
| Stainless steel Type 316L | 2 | **1592.010** |



## Cover retainer

**For KL**

The cover retainer is easily fitted without drilling, and allows the covers to be opened upwards, even when the terminal box below is bayed.

| PU | **Part No.** |
|---|---|
| 3 pairs | **1591.000** |

## Hinges/Door Stops

### Hinges 180°

**For AE**

For retrospective conversion of standard doors with 130° hinges.

**Material:**

Die-cast zinc

**Configuration:**

Assembly hardware

| PU | Part No. |
|---|---|
| 2 | **2449.000** |

### Door stop

To secure the door in the open position.

- Only single door WMs H x W <900 x 900 mm
- Double door WMs ≤900 mm
- No Stainless Steel WMs

| For | Assembly | PU | Part No. |
|---|---|---|---|
| TS, ES, PC, AP universal console | Bottom | 5 | **4583.000** |
| AE (except 1032.500 and 1035.500), WM and all AE stainless steel enclosures[1] | Top | 5 | **2519.000** |

[1] With AE stainless steel, only in conjunction with perforated mounting strip.

### Door stop

**For trim panel, hinged at the top**

5 system hole pattern positions up to a maximum opening of approximately 85°.

**Material:**

Sheet steel, zinc-plated, passivated

| PU | Part No. |
|---|---|
| 2 | **8801.260** |

## The Rittal Comfort handle

**For TS, PC, IW**

The entire door area can be maximized for installing equipment, because the handle does not take up any of the swivel area, due to its folding action.

**Material:**
Die-cast zinc

**Finish:**
Powder coated

US design patent no. 428,322
German patent no. 198 01 720
German registered design no. M98 00 539
IR reg. design no. DM/045 065
with validity for BE, CH, ES, FR, IT, NL, HU, LU
Austrian design no. 32290
Czech design no. 28278
UK reg. design no. 2 075 910
Swedish design no. 64 750
South Korean design no. 241,505
Israel. design no. 30 123
Slovenian design no. 98 500 73
Russian design no. 46307
South African design no. 98/0865
Finnish design no. 20461
Chinese design no. 983 03439
Australian design no. 13887
Brazilian design no. DI 5801235-4
Jap. design no. 1 081 561
Taiwanese design no. 68683
European patent no. 1 049 842
with validity for FR, GB, IT
Jap. patent no. 3 485 892
US patent no. 6,418,762

## Comfort handle

**For lock inserts**
Prepared for the installation of lock inserts, safety and push-button inserts, see below.
Length: 12" (295 mm).

**Additional parts needed:**
Handle adaptor for mounting on a TS viewing door, PC-TS bottom door, IW designer door.

| Design | Part No. |
|---|---|
| RAL 7032 (pebble gray) | **8611.010** |
| RAL 7035 (light gray) | **8611.020** |
| RAL 8019 (gray brown) | **8611.250** |
| RAL 9005 (jet black) | **8611.350** |
| Matte, nickel-plated | **8611.330** |

## Comfort handle

**For padlock and lock inserts**
Prepared for the installation of lock inserts, safety and push-button inserts, and with additional shackle (hole diameter 0.3" [8 mm]) for a padlock.

Length: 12" (295 mm).

| Version | Part No. |
|---|---|
| RAL 7032 (pebble gray) | **8611.030** |
| RAL 7035 (light gray) | **8611.290** |
| RAL 8019 (gray brown) | **8611.260** |

**Additional parts needed:**
Handle adaptor for mounting on a TS viewing door, PC-TS bottom door, IW designer door (see pages 211).

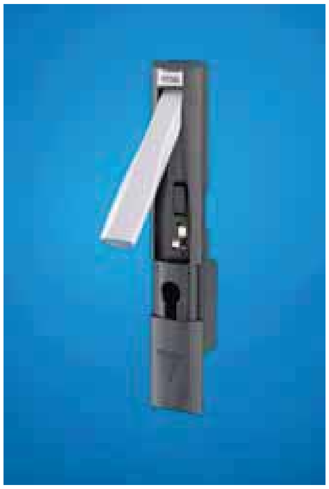
## Lock and push-button inserts

For installation in the comfort handle
for lock inserts.

| Version | Part No. |
|---|---|
| Security lock insert no. 3524 E | **8611.180**[1] |
| Push-button insert | **8611.190** |
| Push-button and lock inserts Lock no. 12321; No other lock is possible | **8611.200**[1] |

[1] With 2 keys

## Handles/Inserts



### Folding lever handle

**For CM**

Because the handle does not take up any swing space, due to its folding mechanism, the door surface area may be maximized for installed equipment.

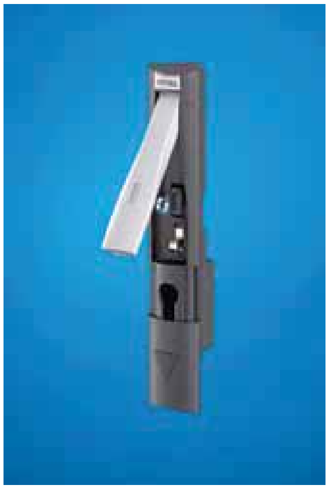
**Color:**
Handle body: Similar to RAL 9005 (jet black)

Lever: Similar to RAL 9006 (white aluminum)

**Prepared for the installation of:**

- Semi-cylinders with overall length of 1.6 or 1.8" (40 or 45 mm) (to DIN 18 254)
- All lock inserts
- As well as lock and push-button inserts

**Configuration:**
Assembly hardware



### Folding lever handle with padlock hasp

**For CM**

| Handle version | PU | Part No. |
|---|---|---|
| Basic | 1 | **5001.060** |
| Padlock | 1 | **5001.062** |

**Accessories**

Lock inserts

| Version | Part No. |
|---|---|
| 7 mm square | **8611.100** |
| 8 mm square | **8611.110** |
| 6.5 mm triangular | **8611.220** |
| 7 mm triangular | **8611.120** |
| 8 mm triangular | **8611.130** |
| Screwdriver | **8611.140** |
| 3 mm double-bit | **8611.160** |

**Lock and push-button inserts**

| Design | Part No. |
|---|---|
| Lock insert lock no. 3524 E | **2467.000**[1] |
| Push-button insert | **2468.000** |
| Lock and push-button insert, lock no. 2123 E; No other lock is possible | **2469.000**[1] |

[1] With 2 keys

### Lock and push-button inserts

**For installation in:**

- Ergoform-S standard
- CM hinged handle

| Version | Part No. |
|---|---|
| Security lock insert no. 3524 E | **2467.000**[1] |
| Push-button insert | **2468.000** |
| Lock and push-button inserts, Lock no. 2123 E; No other lock is possible | **2469.000**[1] |

[1] With 2 keys

### Ergoform lock system

**For AE/KS/TP Enclosures**

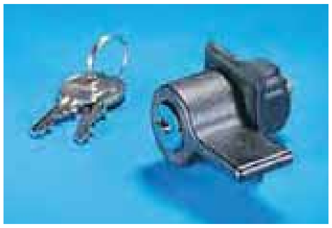
Prepared for the installation of semi-cylinders with a total length of 1.6" (40 mm) (to DIN 18 254), all 1.1" (27 mm) lock inserts, version A, and lock and push-button inserts, see above.

| Version | Part No. |
|---|---|
| RAL 7035 (light gray)<br>For AE (carbon > 40" H)/TP | **2435.000** |
| Nickel-plated<br>For AE (SS > 40" H)/TP | **2452.000** |
| RAL 7035 (light gray)<br>With brown handle (for KS > 24" H) | **1490.010** |

## Plastic handles

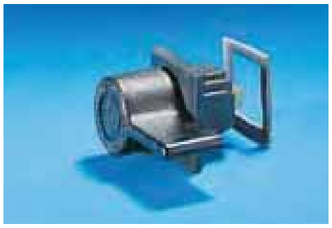
**For AE, WM, EB, JB**
With cylinder insert.
Lock no. 3524 E including assembly hardware, seal and 2 keys. For carbon steel enclosures only.

**Note:**
Universal lock systems allow the installation of a handle to suit almost any application or customer specification. Please check the product ordering page which shows the handles that can be fitted into each particular enclosure assembly.



**Version B**

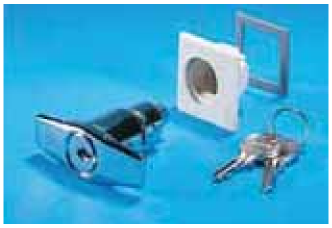
| Color | Part No. |
|---|---|
| RAL 9011 (graphite black) | **2576.000** |
| RAL 7030 (stone gray) | **2439.000** |



**Version B,**
**without key locking insert**

| Color | Part No. |
|---|---|
| RAL 9011 (graphite black) | **2533.000** |
| Type 316L stainless steel | **WMQTPLS6***|

* Padlockable handle



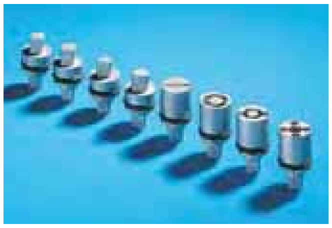
## T handles

**Material:**
Die-cast zinc, chrome-plated

**Configuration:**
Seal and 2 keys

**Version B**

| Version | Part No. |
|---|---|
| With lock insert, lock no. 3524 E | **2575.000** |
| Without lock insert | **2572.000** |



## Lock inserts

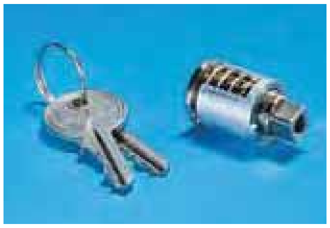
Universal lock systems allow the installation of a handle to suit almost any application or customer specification.

**Version A**

**Material:**
Die-cast zinc

**Note:**
Key sold separately
See page 220 for key options

| Length 27 mm | Part No. |
|---|---|
| 7 mm square | **2460.000** |
| 8 mm square | **2461.000** |
| 7 mm triangular | **2462.000** |
| 8 mm triangular | **2463.000** |
| Screwdriver | **2464.000** |
| 3 mm double-bit | **2466.000** |



## Cylinder inserts

**For AE, EB, WM (carbon steel only), JB (carbon steel only)**
**Material:**
Die-cast zinc

**Version B**
Lock no. 3524 E with 2 keys

| PU | Part No. |
|---|---|
| 1 | **2571.000** |

## Handles/Inserts

### L-Handle

**For WM**
A lock for 3 point latch wallmount enclosures.

**Material:**
Die-cast zinc, powder coated black or stainless steel

| | Carbon Steel Part No. | Stainless Steel Part No. |
|---|---|---|
| L-Handle | **WMLHNL** | **WMLHNLS6** |
| L-Handle Padlock | **WMLHPL** | **WMLHPLS6** |
| L-Handle Keylock | **WMLHKL** | **WMLHKLS6** |

### Turn-lock fastener

**For PK**
A quick, convenient screw fastening aid is obtained by clipping into the head of the lid screw.

**Material:**
Polyamide

**Configuration:**
1 pack

| PU | Part No. |
|---|---|
| 100 | **9582.000** |

### Lock inserts

**Material:** Die cast zinc.

For comfort handles and standard TS lock (in exchange for the standard double-bit lock insert).

**Version F**

| Version | Part No. |
|---|---|
| 7 mm square | **8611.100** |
| 8 mm square | **8611.110** |
| 6.5 mm triangular | **8611.220** |
| 7 mm triangular | **8611.120** |
| 8 mm triangular | **8611.130** |
| Screwdriver | **8611.140** |
| Daimler | **8611.150** |
| 3 mm double-bit | **8611.160** |
| Fiat | **8611.170** |

### Lock inserts

**Material:** Plastic.

**Version E**

| Version | Part No. |
|---|---|
| 7 mm triangular | **1485.000** |
| 8 mm triangular | **1486.000** |
| 8 mm square | **1488.000** |
| Screwdriver | **1489.000** |
| Double-bit | **1492.000** |

### Enclosure key

For lock inserts (one double-bit key is supplied with every enclosure).

| Version | Part No. |
|---|---|
| Double-bit key no. 5 | **2531.000** |
| Security key no. 3524 E | **2532.000** |
| 7 mm triangular | **2545.000** |
| 8 mm triangular | **2546.000** |
| 7 mm square | **2547.000** |
| 8 mm square | **2548.000** |
| Daimler key | **2521.000** |
| Fiat key | **2308.000** |

## Padlock cover

**For AE, WM, EB, JB**

For use with padlocks or multiple locks for on-site mounting on all AE/WM enclosures of sheet steel and with cam lock.

**Material:**
Die-cast zinc, nickel-plated, passivated

| PU | Part No. |
|---|---|
| 1 | **2493.000** |

## Padlock lockout

**For AE, WM, EB, JB**

For use with padlocks or multiple lock for on site mounting on all EB/JB or AE/WM enclosures

**Material:**
RAL 7035 (light gray) or
Type 316L stainless steel

| Material | For | PU | Part No. |
|---|---|---|---|
| RAL 7035 (light gray) | carbon steel | 1 | **WMPADCS** |
| Type 316L stainless steel | stainless steel | 1 | **WMPADS6** |
| Type 316L stainless steel (riveted) | carbon steel | 1 | **WMPADRCS** |
| Type 316L stainless steel (riveted) | stainless steel | 1 | **WMPADRS6** |

## Multiple lock

**For use with padlock lock cover**
The ideal solution in cases where individual access for several persons is required for maintenance and repair purposes. Accommodates up to six padlocks.

**Material:**
Sheet steel, zinc-plated, passivated

| PU | Part No. |
|---|---|
| 2 | **2493.500** |

## Lock cover

**For AE, WM, EB, JB**
Prepared for lead seal. For all enclosure types with Rittal-specific locks, such as AE, WM, EB and JB. For carbon steel enclosures only.

**Material:**
Polyamide

German registered design no. M 92 07 062

| Color | PU | Part No. |
|---|---|---|
| RAL 7035 (light gray) | 2 | **2476.000** |

## Electrical interlock

Fitted to doors, to protect against contact with live electrical equipment while the main switch is ON.

**Function:**

- Locks the door when the main switch is ON
- Mains power (voltage) is only enabled while the door is closed
- Monitoring of the lock magnet via an additional closing contact

**Configuration:**
Lock, actuator, angle bracket, assembly hardware.

**Additional parts needed:**
For double door enclosures part no. 4127.000 should also be ordered (see www.rittal-corp.com).

| Connection voltage for lock magnet | Part No. |
|---|---|
| 230 V AC 11 VA | **2416.000** |
| 24 V DC 8 W | **2418.000** |
| 120 V AC 8 VA | **2419.000** |

## Interlocking Hardware

1

2

3

### Door interlocking for bayed suites

For extending the door lock of **commercially available main switches** to TS bayed suites. Adjacent door cannot be opened until the main door has been opened.

The main switch can be positioned anywhere in the suite; its function is independent from the door hinge position. Subsequent locking of the adjacent doors in the suite is possible: They are thus automatically included in locking operation.

**1** Interlock activator
(Fitted in the enclosure with main switch and additionally in every fourth adjacent enclosure)

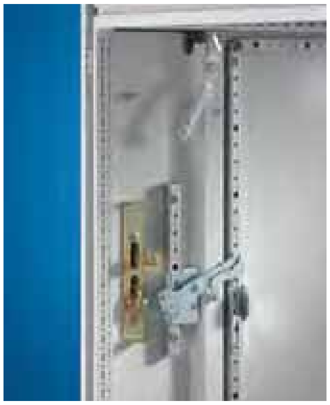
| | Part No. |
|---|---|
| Interlock activator | **4912.000** |

**2** Adjacent door locking
(Installation in adjacent enclosure)

| Adjacent door locking | Part No. |
|---|---|
| 1 Door | **4911.000** |
| 2 Door | **4911.100** |

**3** Interconnecting rods
To extend locking from the main enclosure to the adjacent enclosures of a bayed suite. An interconnecting rod corresponding to the width of the enclosure is required for each adjacent enclosure.

| For enclosure width inches (mm) | PU | Part No. |
|---|---|---|
| 24 (600) | 10 | **4916.000** |
| 32 (800) | 10 | **4918.000** |
| 47 (1200) | 10 | **4920.000** |



### Flange mount disconnect locking

For safety locking of enclosures and bayed suites in conjunction with up to 200A disconnect switches and up to 400A circuit breaker operating mechanisms.[1)]

- ABB DSFHN, K5FCH, OHF1C, K3FHD, K6FHD
- Allen Bradley 1494V, 1494C, 1494RC, 140U
- Cutler Hammer C361, C371, Flex Shaft
- General Electric STDA, SCH SpectraFlex
- Siemens VBF, VBNF, FHO, Max-Flex
- Square D 9422

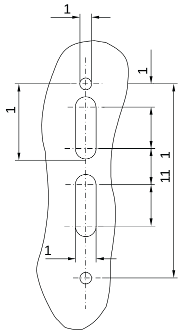
To complete the assembly you must order 4911.000 (see above) and the required interconnecting rods for bayed suites.

**Note:**
8611.310 includes interlock activator (4912.000 [see above]).

| Main door locking | Part No. |
|---|---|
| For TS | **8611.310** |

**Note:**
Included with master flange mount disconnect cabinet.

Cut-out for main switch



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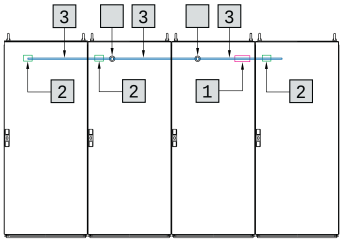
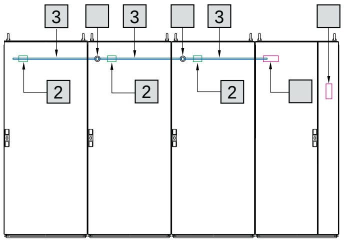
[1)] May work with some circuit braker operating mechanisms greater than 400A.

**Non-FMD door locking**



**FMD door locking**



**1** Interlock activator, installation in enclosure with main switch
**2** Adjacent door locking, installation in adjacent enclosure
**3** Interconnecting rod
**4** Connection component (included in the supply of interconnecting rod)
**5** FMD main door lock
**6** Interlock activator, installation in the main enclosure (included in the supply of the FMD main door lock position 5).

Inch and pound measurements are rounded to the nearest whole number.

## TS disconnect module

The TS disconnect module easily converts a standard TS modular enclosure into a flange-mount disconnect enclosure. Compatible with the following disconnects:

- Allen Bradley 1494 V-H1
- Square D 9422 A1
- ITE Siemens Max-Flex series/FHOH (only available in the USA)
- General Electric TDA Type 1 and 2
- Moeller NZM-XSHGVR 12-NA

**Benefits:**

- Compact desgin width of 3.9" (100 mm)
- Mounted in place of a standard side wall on a TS enclosure
- May be mounted on the left or right side of a TS enclosure
- The TS mounting panel infill (part number 4590.700/ 4591.700) may be used to increase the internal mounting panel surface by approximatly 14%.

**Material:**
Sheet steel

**Surface finish:**
Powder-coated, RAL 7035

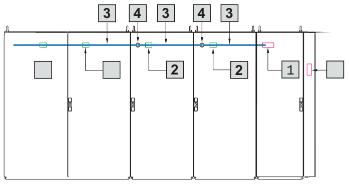
**Protection category:**
UL Type 12 / IP 55 to EN 60 529

| Width inches (mm) | Height inches (mm) | Depth inches (mm) | Part No. |
|---|---|---|---|
| 4 (100) | 71 (1800) | 16 (400) | **8900.840** |
| 4 (100) | 71 (1800) | 20 (500) | **8900.850** |
| 4 (100) | 79 (2000) | 20 (500) | **8900.050** |
| 4 (100) | 79 (2000) | 24 (600) | **8900.060** |

**Supply includes:**
Disconnect module with assembly hardware, main door interlock hardware.

**Accessories:**
Mounting panel infill

**Also required:**
Interlock activator, 4912.000, for enclosure with TS disconnect module and additionally every fourth adjacent enclosure. Adjacent door locking, 4911.000, 4911.100, for every adjacent enclosure. Interconnecting rods, for every adjacent enclosure in the appropriate enclosure width.



| | |
|---|---|
| **1** Interlock activator | **4** Connection component |
| **2** Adjacent door locking (single door) | **5** Main door latch |
| **3** Interlocking rod | **6** Adjacent door locking (two door) |

## System windows

Covers display and operating instruments or cut-outs to protect against dirt and liquids as well as unauthorized access.

**Consisting of the following components:**

**1. Base frame:**

- Easily screw-fastened to the door due to modified dimensions (tubular door frame may be used as a drilling template)
- Readily height-adjustable
- Stabilizes the door cut-out
- Conceals the cut edge
- The rain canopy:
  - Prevents dirt from landing on the seal
  - Protects the glass from being lifted out
  - Prevents the ingress of dirt and moisture when opening the window

**2. Viewing window:**

- Hinge with 180° opening angle, easily inserted
- Made from single-pane safety glass:
  - High level of resistance to Anti-static solvents and scratches
  - Reduced risk of injury if broken
- Integrated cam lock with double-bit insert, easily exchanged for all standard lock inserts and semi-cylinders in the Ergoform-S lock system (not with 2735.500 and .560)

**Material:**
System windows:
Extruded aluminum sections with die-cast zinc corner pieces and single-pane safety glass

**Finish:**
Base frame:
Powder coated in RAL 7035 (light gray).
Hinge and lock section:
Natural anodized.

**Protection Ratings:**
NEMA Type 12 (IP 54 to EN 60 529/10.91)

| To fit TS, ES, IW with width inches (mm) | Window size inches (mm) | | | | Part No. 30 section | Part No. 60 section |
|---|---|---|---|---|---|---|
| | Exterior | | Internal | | | |
| | H | B (W) | H | B (W) | | |
| 24 (600) | 11 (270) | 20 (500) | 8 (200) | 17 (430) | **2735.500** | – |
| | 15 (370) | | 12 (300) | | **2735.510** | **2735.510** |
| | 19 (470) | | 16 (400) | | **2735.520** | **2735.520** |
| | 22 (570) | | 20 (500) | | **2735.530** | **2735.530** |
| | 26 (670) | | 24 (600) | | **2736.540** | **2736.540** |
| 32 (800) | 11 (270) | 27 (700) | 8 (200) | 25 (630) | **2735.560** | – |
| | 15 (370) | | 12 (300) | | **2735.570** | – |
| | 19 (470) | | 16 (400) | | **2735.580** | **2735.580** |
| | 22 (570) | | 20 (500) | | **2735.590** | **2735.590** |
| | 26 (670) | | 24 (600) | | **2735.250** | **2735.250** |
| Other sizes[1] | | | | | **2735.509** | **2735.509** |

[1] Please also specify the external dimensions of the viewing window.

Inch and pound measurements are rounded to the nearest whole number.

## Viewing panel

**Stainless steel**
Fitted as standard with internal 130° hinges and seal around the perimeter.
Standard double-bit lock insert may be exchanged for 1" (27 mm) lock inserts, type A and Ergoform-S handle 2452.000.

**Material:**
Type 304 stainless steel
Single-pane safety glass

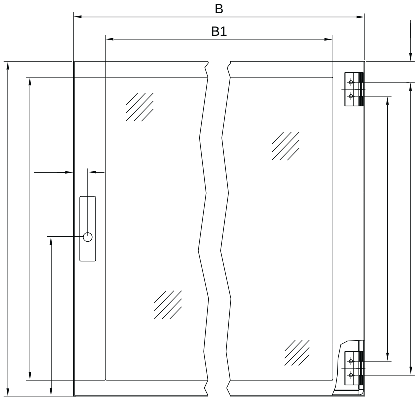
**Protection Ratings:**
NEMA Type 12 (IP 54 to EN 60 529/10.91)

**Configuration:**
Assembly hardware

**Note:**
Other sizes available on request.

**Accessories:**
Lock inserts 1" (27 mm), version A, see page 219.
Ergoform-S handle 2452.000, see www.rittal-corp.com.

| Inches (mm) | | | | |
|---|---|---|---|---|
| Height | Width (B) | Depth | B1 | **Part No.** |
| 24 (600) | 21 (522) | 2 (38) | 16 (408) | **2793.560** |
| 24 (600) | 29 (722) | 2 (38) | 24 (608) | **2793.760** |



## Window Kits

Rittal window kits can be installed in most Rittal enclosures of suitable size. Window kits include all necessary hardware. Oil-resistant gaskets ensure a tight seal around the entire window.

**Material/Finish:**
Carbon Steel: 14 ga, painted RAL 7035 (light gray)
Stainless Steel 304: 14 ga
Stainless Steel 316L: 14 ga

**Protection Ratings:**
NEMA Type 4 Carbon,
NEMA Type 4X Stainless

**Note:**
Allow for clearance of gaskets, gasket retainers, door stiffeners, print pockets, door handles, lock rods, and other parts attached to the door or cover when you determine the size of the window kit you require.

| Window Height inches (mm) | Window Width inches (mm) | Frame Height inches (mm) | Frame Width inches (mm) | **Carbon Steel Part No.** | **Type 304 Stainless Steel Part No.** | **Type 316L Stainless Steel Part No.** |
|---|---|---|---|---|---|---|
| 5 (127) | 3 (76) | 8 (191) | 6 (140) | **WK0503C** | **WK05034** | **WK05036** |
| 9 (229) | 6 (140) | 12 (292) | 8 (203) | **WK0905C** | **WK09054** | **WK09056** |
| 13 (330) | 3 (76) | 16 (394) | 6 (140) | **WK1303C** | **WK13034** | **WK13036** |
| 13 (330) | 8 (203) | 16 (394) | 11 (267) | **WK1308C** | **WK13084** | **WK13086** |
| 17 (432) | 6 (140) | 20 (495) | 8 (203) | **WK1705C** | **WK17054** | **WK17056** |
| 17 (432) | 11 (279) | 20 (495) | 14 (343) | **WK1711C** | **WK17114** | **WK17116** |
| 23 (584) | 15 (381) | 26 (648) | 18 (445) | **WK2315C** | **WK23154** | **WK23156** |
| 29 (737) | 19 (483) | 32 (800) | 22 (546) | **WK2919C** | **WK29194** | **WK29196** |
| 35 (889) | 23 (584) | 38 (953) | 26 (648) | **WK3523C** | **WK35234** | **WK35236** |

Inch and pound measurements are rounded to the nearest whole number.

## Interface flaps, modular

For universal use in all situations where rapid access to interfaces and sockets is needed. The enclosure remains closed and protected from the external environment and unauthorized access. Space-saving installation:

- in small enclosures and compact enclosures as a programming interface for controllers
- in IT and industrial enclosures as maintenance access for networks
- in PC enclosures and console systems for the temporary connection of additional equipment in mobile Industrial Workstations for rapid connection to existing network structures
- in Command Panel systems for programming and maintenance of integral components

The mounting frame has a flap which snaps into position at opening angles of 90° to 180°. A snap fastener ensures a reliable seal. This may be locked if required.

**Material:**
Mounting frame and metal flap:
Fine die-cast zinc, matte nickel-plated
Plastic flap: Polycarbonate
(semi-transparent)
Lock: Polycarbonate,
RAL 7024 (graphite gray)

**Protection Ratings:**
NEMA 12 (IP 65) with sealed flap and proper assembly

**Detailed drawings:**
visit www.rittal-corp.com

| Description | cUL | UL | PU | Part No. |
|---|---|---|---|---|
| **Mounting frame**[1] | | | | |
| 1 Single, with plastic flap (semi-transparent) | | | 1 | **2482.300** |
| 2 Double, with plastic flap (semi-transparent) | | | 1 | **2482.310** |
| 3 Single, with metal flap | ■ | ■ | 1 | **2482.320** |
| 4 Double, with metal flap | ■ | ■ | 1 | **2482.330** |
| **Socket modules** | | | | |
| 5 Germany (VDE), spring-action terminals max. 2 x 2.5 $mm^2$, connection at rear | | | 1 | **2482.400**[3] |
| 6 Germany (VDE), screw terminals max. 6 $mm^2$, connection at rear, color: yellow (RAL 1016), for installation in front of main switch | | | 1 | **2482.410**[3] |
| 7 USA NEMA 5-15, plug-in solder connection 4.8 x 0.8 mm | ■ | ■ | 1 | **2482.420**[4] |
| **Interface inserts** | | | | |
| 8 2 x SUB-D9 (jack/pin) | ■ | ■ | 1 | **2482.500** |
| 9 SUB-D9 (jack/jack) | ■ | ■ | 1 | **2482.510** |
| 10 2 x USB A (jack/jack) | ■ | ■ | 1 | **2482.540**[2] |
| 11 2 x RJ 45 (jack/jack, Cat. 5e) | ■ | ■ | 1 | **2482.550** |
| 12 RJ 45 (jack/jack, Cat. 5e), SUB-D9 (jack/jack), SUB-D9 (pin/pin) | ■ | ■ | 1 | **2482.560**[2] |
| 13 USB A (jack/jack), RJ 45 (jack/jack, Cat. 5e), SUB-D9 (jack/pin) | ■ | ■ | 1 | **2482.570**[2] |
| 14 RJ 45 (jack/jack, Cat. 5e), SUB-D9 (jack/pin), SUB-D25 (jack/pin) | ■ | ■ | 1 | **2482.580** |
| 15 Blanking plate (slimline), for individual population, usable area: 1.8 x 3.0" (45 x 75 mm) | ■ | ■ | 1 | **2482.590** |

[1] Electrically conductive. [2] Conductively linked to mounting frame. [3] Rated voltage: 250 V AC, rated current: 10 – 16 A
[4] Rated voltage: 125 V AC, rated current: 15 A (2482.420)
All SUB-D interfaces may be rotated while in operation. Other socket modules and interface inserts available on request.

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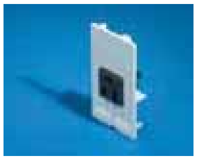

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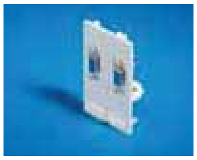

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## Interface Extension

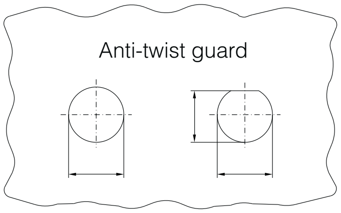
### Interface extension with wall connection and built-in RJ 45 module

For extending the internal enclosure interfaces – e.g., from industrial PCs and switches – to the outside of the enclosure. The wall connection only needs the same space as a switch.

**Benefits:**
Rapid access for maintenance work
The protection ratings of the enclosure is preserved
The lock nut cuts into the spray-finish creating a conductive connection
Screw-on protective cap

**Material:**
Enclosure: Brass, nickel-plated
Cover: Aluminium, anodized
Seal: Polyamide

**Protection Ratings:**
NEMA 4X (IP 66) with the protective cap closed



Material thickness: 1 – 6 mm

| Version | Wall Connection | Inside | Length meters | Packs of | **Part No.** |
|---|---|---|---|---|---|
| USB | Type A Jack | Type A connector | 0.5 | 1 | **2482.210** |
| | | | 1.0 | 1 | **2482.220** |
| | | | 2.0 | 1 | **2482.230** |
| RJ 45 | Jack | Connector | 0.5 | 1 | **2482.700** |
| | | | 1.0 | 1 | **2482.710** |
| | | | 2.0 | 1 | **2482.720** |
| RJ 45 | Jack | Jack | – | 1 | **2482.730** |

Other versions and lengths available upon request.

## Writing board

Holds prints during trouble shooting and maintenance work. The writing board can be bayed according to the door width.

For mounting on the tubular door frame.

**Material:**
Utility board: Polypropylene
Mounting bracket: Die-cast zinc

**Color:**
Similar to RAL 7035 (light gray)

**Configuration:**
Writing board (width 8" [210 mm])
Assembly hardware

| For enclosures | PU | **Part No.** |
|---|---|---|
| For TS, CM, TP, ES, PC | 1 | **4120.000** |

| For door width inches (mm) | Required/possible number of writing boards | |
|---|---|---|
| | Minimum | Maximum |
| 16 (400) | 1 | 1 |
| 20 (500) | 1 | 1 |
| 24 (600) | 2 | 2 |
| 32 (800) | 2 | 3 |
| 39 (1000) | 3 | 3 |

## Utility shelf

For programming units, etc. Prepared for mounting on the tubular door frame of TS, CM, ES, PC or on any sufficiently large surface. When required for servicing, it folds down quickly with a maximum support area, and after use is stowed between the tubular door frames in a space-saving design.

Load capacity: Maximum 66 lb (30 kg)

**Material:**
Sheet steel

**Color:**
RAL 7035 (light gray)

| Support area inches (mm) | | For door width inches (mm) | **Part No.** |
|---|---|---|---|
| Width | Depth | | |
| 16 (400) | 16 (400) | 24 (600) | **4638.600** |
| 24 (600) | 16 (400) | 32 (800) | **4638.800** |

## Plastic print pockets

For mounting to the inside of doors.

**Material:**
Polystyrene with self-adhesive fastening strips

**Color:**
Similar to RAL 7035 (light gray)

| For Format | Clearance opening inches (mm) | | | **Part No.** |
|---|---|---|---|---|
| | H | W | D | |
| A3 landscape | 11 (290) | 17 (440) | 2 (45) | **2513.000** |
| A4 portrait | 10 (260) | 9 (230) | 1 (20) | **2514.000** |
| A5 landscape | 7 (180) | 9 (230) | 1 (20) | **2515.000** |

## Wiring plan pockets of sheet steel

**For TS, CM, ES, PC, TP**

For mounting to tubular door frames at any height.

**Color:**
RAL 7035 (light gray)

**Configuration:**
Assembly hardware

| To fit door width inches (mm) | Clearance opening inches (mm) | | **Part No.** |
|---|---|---|---|
| | W | H | D 4" (90 mm) |
| 16 (400) | 10 (255) | 10 (260) | **4114.000** |
| 20 (500) | 14 (355) | 10 (260) | **4115.000** |
| 24 (600) | 18 (455) | 10 (260) | **4116.000** |
| 32 (800) | 26 (655) | 10 (260) | **4118.000** |
| 35 (900) | 30 (755) | 10 (260) | **4123.000** |
| 39 (1000) | 34 (855) | 10 (260) | **4124.000** |

Inch and pound measurements are rounded to the nearest whole number.

## Drawers/Shelves/Pockets

### Drawer

**For TS**

Height 8" (200 mm).
For mouse and keyboard with a maximum width of 20/28" (500/700 mm).

A high level of protection is retained, even with the door open. Standard double-bit lock insert may be exchanged for 1" (27 mm) lock inserts, version A, plastic handles, type B and T handles, type B.

**Material:**
Sheet steel

**Configuration:**
Door and assembly hardware

| Color | Part No. | |
|---|---|---|
| | Width 24" (600 mm) | Width 32" (800 mm) |
| RAL 7035 (light gray) | **8801.715** | **8801.915** |

**Additional parts needed:**
Cross member, use 8801.510 for 24" (600 mm) width, 8801.110 for 32" (800 mm) width.

**Accessories:**
1" (27 mm) lock inserts, type A, see page 219.
Plastic handles, type B, see page 219.
T handles, type B, see page 219.

### Desk section

**For TS**

Height 8" (200 mm).
For installing:

- Keyboard, IP 67 mouse and mousepad
- Display and control elements

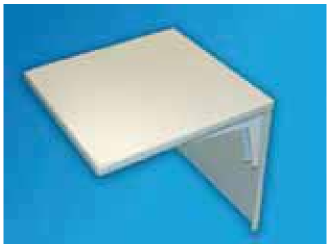
With screw-fastened cover plates top and bottom.

**Material:**
Sheet steel

**Configuration:**
Assembly hardware

| Color | Part No. |
|---|---|
| | Width 24" (600 mm) |
| RAL 7035 (light gray) | **8801.705** |

**Additional parts needed:**
Cross member, use 8801.510 for 24" (600 mm) width, 8801.110 for 32" (800 mm) width.



### Fold-down shelf

Collapsible shelf designed to support programming and monitoring equipment. Locks in raised position and folds down when not in use.

**Material:**
Sheet steel, 14 ga (2.0 mm)

**Finish:**
Dipcoat-primed, powder coated in textured RAL 7035 (light gray)

**Configuration:**
Continuous hinge
Mounting hardware included

| Height inches (mm) | Width inches (mm) | Depth inches (mm) | Weight lb (kg) | PU | **Part No.** |
|---|---|---|---|---|---|
| 12 (305) | 12 (305) | 2 (51) | 7.5 (16.5) | 1 | **FDS1212C** |
| 18 (457) | 18 (457) | 2 (51) | 14 (30.8) | 1 | **FDS1818C** |

### External data pocket

Based on the popular AE wallmount enclosure, this data pocket is designed to hold system-related documents.

**Material:**
Sheet steel, 16 ga (1.5 mm)

**Finish:**
Pocket and cover: Dipcoat-primed, powder coated in textured RAL 7035 (light gray)

**Configuration:**
Slotted head insert
Foamed in place gasket
Mounting hardware included

**Protection Rating:**
NEMA 4

| Height inches (mm) | Width inches (mm) | Depth inches (mm) | Weight lb (kg) | PU | **Part No.** |
|---|---|---|---|---|---|
| 16 (409) | 14 (356) | 3 (76) | 14 (29.7) | 1 | **EDP1614C** |
| 14 (356) | 19 (487) | 3 (76) | 15 (33.0) | 1 | **EDP1419C** |

Inch and pound measurements are rounded to the nearest whole number.

## Mounting panel

**For PK**

For individual configuration of the enclosure interior, the mounting panel offers a stable, secure and flexible design option.

**Version:**
Melamine phenol-coated laminated paper, 12 ga (2.5 mm) thick.

**Color:**
RAL 7035 (light gray)

**Configuration:**
Self-tapping assembly screws

| To fit | Height inches (mm) | Width inches (mm) | PU | Part No. |
|---|---|---|---|---|
| 9502.000/9503.000 | 2 (45) | 3 (74) | 12 | **9541.000**[1] |
| 9504.000/9505.000 | 3 (74) | 3 (74) | 12 | **9542.000**[1] |
| 9506.000/9507.000 | 4 (90) | 4 (90) | 12 | **9543.000**[1] |
| 9508.000/9509.000 | 3 (74) | 4 (110) | 12 | **9544.000**[1] |
| 9510.000/9511.000 | 4 (110) | 4 (110) | 10 | **9545.000** |
| 9512.000/9513.000 | 3 (74) | 6 (160) | 10 | **9546.000** |
| 9514.000/9515.000/9516.000 | 4 (90) | 6 (150) | 10 | **9547.000** |
| 9517.000/9518.000/9519.000 | 6 (150) | 6 (150) | 10 | **9548.000** |
| 9520.000/9521.000/9522.000 | 6 (150) | 9 (220) | 8 | **9549.000** |
| 9523.000/9524.000 | 9 (220) | 13 (331) | 4 | **9550.000** |

[1] With spacers

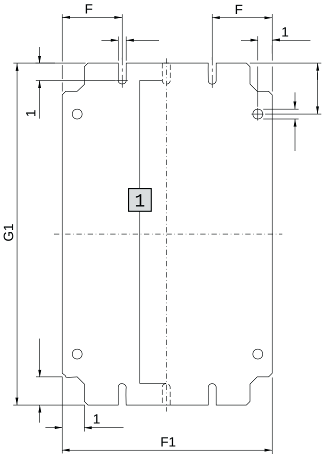
## Mounting panels

**For KL (or as a replacement panel for EB):**
For component installation outside of the enclosure. Assembly hardware included as accessories with the enclosure.

**Material:**
Sheet steel, 14 ga (2.0 mm), zinc-plated, passivated

**Accessories:**
Self-tapping screws 2487.000, see page 240.

**As an alternative, can be used:**
Support rails



1 Panels 5" (125 mm) wide are notched only in the center (represented by the dashed lines).

| For enclosure size inches (mm) W x H | For Part No. | Dimensions inches (mm) | | | Part No. |
|---|---|---|---|---|---|
| | | G1 | F1 | F2 | |
| 6 x 6 (150 x 150) | 1500.510, 1514.510, 1521.010 | 5 (135) | 5 (125) | – | **1560.700** |
| 8 x 6 (200 x 150) | 1528.510, 1529.510 | 7 (185) | 5 (125) | – | **1575.700** |
| 8 x 8 (200 x 200) | 1502.510, 1516.510, 1523.010 | 7 (185) | 7 (175) | 2.0 (50) | **1562.700** |
| 12 x 6 (300 x 150) | 1501.510, 1515.510, 1522.010, 1530.510 | 11 (285) | 5 (125) | – | **1561.700** |
| 12 x 8 (300 x 200) | 1503.510, 1517.510, 1524.010, 1531.510 | 11 (285) | 7 (175) | 2.0 (50) | **1563.700** |
| 12 x 12 (300 x 300) | 1507.510, 1526.010, 1535.510 | 11 (285) | 11 (275) | 2.0 (50) | **1567.700** |
| 16 x 6 (400 x 150) | 1589.510 | 15 (385) | 5 (125) | – | **1576.700** |
| 16 x 8 (400 x 200) | 1504.510, 1518.510, 1525.010, 1532.510 | 15 (385) | 7 (175) | 2.0 (50) | **1564.700** |
| 16 x 12 (400 x 300) | 1508.510, 1536.510 | 15 (385) | 11 (275) | 2.0 (50) | **1568.700** |
| 16 x 16 (400 x 400) | 1511.510, 1539.510 | 15 (385) | 15 (375) | 2.5 (62.5) | **1571.700** |
| 20 x 8 (500 x 200) | 1505.510, 1533.510 | 19.1 (485) | 7 (175) | 2.0 (50) | **1565.700** |
| 20 x 12 (500 x 300) | 1509.510, 1537.510 | 19.1 (485) | 11 (275) | 2.0 (50) | **1569.700** |
| 24 x 8 (600 x 200) | 1506.510, 1519.510, 1534.510 | 23 (585) | 7 (175) | 2.0 (50) | **1566.700** |
| 24 x 12 (600 x 300) | 1510.510, 1538.510 | 23 (585) | 11 (275) | 2.0 (50) | **1570.700** |
| 24 x 16 (600 x 400) | 1512.510, 1540.510 | 23 (585) | 15 (375) | 2.5 (62.5) | **1572.700** |
| 32 x 8 (800 x 200) | 1527.510, 1542.510 | 31 (785) | 7 (175) | 2.0 (50) | **1574.700** |
| 32 x 16 (800 x 400) | 1513.510, 1541.510 | 31 (785) | 15 (375) | 2.5 (62.5) | **1573.700** |

Inch and pound measurements are rounded to the nearest whole number.

## Mounting Panels

**For JB**

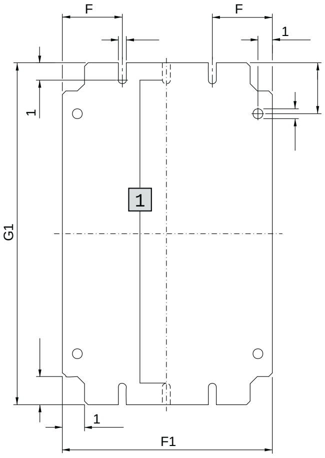
For component installation inside of the enclosure. Assembly hardware included as accessories with the enclosure.

**Material:**
Sheet steel or 316L stainless steel
14 ga (2.0 mm)

**Finish:**
Zinc-plated, passivated
White, painted smooth
Stainless, brushed

**Accessories:**
Self-tapping screws 2487.000, see page 240.

As an alternative, can be used:
Support rails



1 Panels 3" (75 mm) and 5" (125 mm) wide are notched only in the center (represented by the dashed lines).

| For enclosure size inches (mm) H x W | Dimensions inches (mm) | | Part No. | | |
|---|---|---|---|---|---|
| | G1 | F1 | **Zinc-Plated** | **White** | **Stainless** |
| 6 x 4 (150 x 100) | 5 (135) | 3 (75) | **JBMP0604** | **JBMP0604W** | **JBMP0604S6** |
| 6 x 6 (150 x 150) | 5 (135) | 5 (125) | **JBMP0606** | **JBMP0606W** | **JBMP0606S6** |
| 8 x 6 (200 x 150) | 7 (185) | 5 (125) | **JBMP0806** | **JBMP0806W** | **JBMP0806S6** |
| 8 x 8 (200 x 200) | 7 (185) | 7 (175) | **JBMP0808** | **JBMP0808W** | **JBMP0808S6** |
| 10 x 8 (250 x 200) | 9 (235) | 7 (175) | **JBMP1008** | **JBMP1008W** | **JBMP1008S6** |
| 10 x 10 (250 x 250) | 9 (235) | 9 (225) | **JBMP1010** | **JBMP1010W** | **JBMP1010S6** |
| 12 x 6 (300 x 150) | 11 (285) | 5 (125) | **JBMP1206** | **JBMP1206W** | **JBMP1206S6** |
| 12 x 10 (300 x 250) | 11 (285) | 9 (225) | **JBMP1210** | **JBMP1210W** | **JBMP1210S6** |
| 12 x 12 (300 x 300) | 11 (285) | 11 (275) | **JBMP1212** | **JBMP1212W** | **JBMP1212S6** |
| 14 x 12 (350 x 300) | 13 (335) | 11 (275) | **JBMP1412** | **JBMP1412W** | **JBMP1412S6** |
| 16 x 14 (400 x 350) | 15 (385) | 13 (325) | **JBMP1614** | **JBMP1614W** | **JBMP1614S6** |

## Dead Front Kits

**For AE, WM**

Provides a UL 1 safety barrier and mounting surface towards the front of WM and AE wallmount enclosures. Easy installation and can be retrofitted to existing enclosures.

**Material:**
Carbon Steel, RAL 7035 (light gray); aluminum

**Configuration:**
Mounting brackets, panel, and hardware

| Enclosure Height inches (mm) | Enclosure Width inches (mm) | Part No. Carbon Steel | Part No. Aluminum |
|---|---|---|---|
| 12 (305) | 12 (305) | **DFK1212C** | **DFK1212A** |
| 16 (406) | 12 (305) | **DFK1612C** | **DFK1612A** |
| 16 (406) | 16 (406) | **DFK1616C** | **DFK1616A** |
| 16 (406) | 20 (508) | **DFK1620C** | **DFK1620A** |
| 20 (508) | 16 (406) | **DFK2016C** | **DFK2016A** |
| 20 (508) | 20 (508) | **DFK2020C** | **DFK2020A** |
| 20 (508) | 24 (610) | **DFK2024C** | **DFK2024A** |
| 24 (610) | 16 (406) | **DFK2416C** | **DFK2416A** |
| 24 (610) | 20 (508) | **DFK2420C** | **DFK2420A** |
| 24 (610) | 24 (610) | **DFK2424C** | **DFK2424A** |
| 24 (610) | 30 (762) | **DFK2430C** | **DFK2430A** |
| 30 (762) | 20 (508) | **DFK3020C** | **DFK3020A** |
| 30 (762) | 24 (610) | **DFK3024C** | **DFK3024A** |
| 30 (762) | 30 (762) | **DFK3030C** | **DFK3030A** |
| 36 (914) | 24 (610) | **DFK3624C** | **DFK3624A** |
| 36 (914) | 30 (762) | **DFK3630C** | **DFK3630A** |
| 36 (914) | 36 (914) | **DFK3636C** | **DFK3636A** |
| 42 (1067) | 30 (762) | **DFK4230C** | **DFK4230A** |
| 42 (1067) | 36 (914) | **DFK4236C** | **DFK4236A** |
| 48 (1219) | 36 (914) | **DFK4836C** | **DFK4836A** |
| 60 (1524) | 36 (914) | **DFK6036C** | **DFK6036A** |

Inch and pound measurements are rounded to the nearest whole number.

## Partial mounting panels

**For TS**

- Universal interior installation, also in conjunction with system chassis with mounting flanges and support bars. Defective assemblies are quickly and easily replaced
- Additional mounting levels

Partial mounting panels are fastened directly onto the vertical enclosure sections with the inner mounting level using the assembly hardware supplied loose. In this mounting position (in both the width and the depth) they form one level with TS system chassis with mounting flanges 0.7 x 2.9" (17 x 73 mm) and TS support bars for the inner mounting level.

**Material:**
Sheet steel, 11 ga (3.0 mm), zinc-plated, passivated

**Configuration:**
Assembly hardware

**Accessories:**
TS system chassis with mounting flange 0.7 x 2.9" (17 x 73 mm) for the outer mounting level, see page 234.
TS support bar, see page 236.
Hinge attachment.
Self-tapping screws, 2487.000, see page 240.

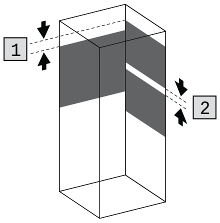
| For installation in enclosures with | | | | | | | | | Size inches (mm) | PU | **Part No.** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Width inches (mm) | | | | | Depth (side) inches (mm) | | | | | | |
| 16 (400) | 24 (600) | 32 (800) | 39 (1000) | 47 (1200) | 16 (400) | 20 (500) | 24 (600) | 32 (800) | | | |
| • | • | | | | • | | • | | 20 x 12 (500 x 300) | 1 | **8614.640** |
| | • | | | | | • | • | | 20 x 16 (500 x 400) | 1 | **8614.650** |
| | • | | | | | | • | | 20 x 20 (500 x 500) | 1 | **8614.660** |
| | • | • | | | | | • | • | 20 x 27 (500 x 700) | 1 | **8614.680** |
| | • | | | | | | • | | 20 x 31 (500 x 775) | 1 | **8614.675**[1] |
| • | | • | | | • | | | • | 27 x 12 (700 x 300) | 1 | **8614.840** |
| | | • | | | | • | | • | 27 x 16 (700 x 400) | 1 | **8614.850** |
| | | • | | | | | | • | 27 x 27 (700 x 700) | 1 | **8614.880** |
| • | | | • | | • | | | | 35 x 12 (900 x 300) | 1 | **8614.040** |
| | | | • | | | • | | | 35 x 16 (900 x 400) | 1 | **8614.050** |
| | • | | • | | | | • | | 35 x 20 (900 x 500) | 1 | **8614.060** |
| • | | | | • | • | | | | 43 x 12 (1100 x 300) | 1 | **8614.240** |
| | | | | • | | • | | | 43 x 16 (1100 x 400) | 1 | **8614.250** |
| | • | | | • | | | • | | 43 x 20 (1100 x 500) | 1 | **8614.260** |

[1] Also suitable for installing in:
- PC enclosures based on TS behind the lower front door
- IW enclosures, height 35 and 39" (900 and 1000 mm)

When **installing around corners** due to collision between the assembly components

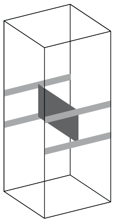
1 At least 3" (75 mm) (adjustable on a 1" [25 mm] system hole pattern). Maximum space utilization

2 0.04" (1 mm) (adjustable on a 1" [25 mm] pattern).



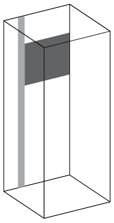
**Forward set installation position**

Quickly and easily achieved with four TS system chassis with mounting flanges 0.7 x 2.9" (17 x 73 mm) for the outer mounting level, see page 234.



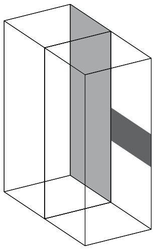
**Partial installation**

Partial utilization of the enclosure depth or width is also possible.



**Continuously flush**

In bayed enclosures, the partial mounting panel is in the rear most position flush with the standard mounting panel. This facilitates continuous component mounting.



## Partial mounting panels

**For TP**

For installation in:

- Console and desk unit on the interior installation system rails
- Punched sections with mounting flanges or support strips fitted to the side of the pedestal in the depth
- Other enclosures mounted on rails with 25 mm pitch pattern punchings

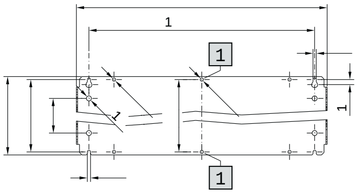
For easy mounting on pre-fitted assembly screws. Can be bayed using the side screws.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

| Width inches (mm) | Height inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 8 (200) | 17 (437) | 1 | **6730.310** |
| 20 (500) | 17 (437) | 1 | **6730.330** |
| 28 (700) | 17 (437) | 1 | **6730.340** |

1 From width 20" (500 mm)



## Mounting panel adjustment bracket

**For KS**

Infinitely adjustable.
Other equipment can also be installed to the brackets, instead of the mounting panel.

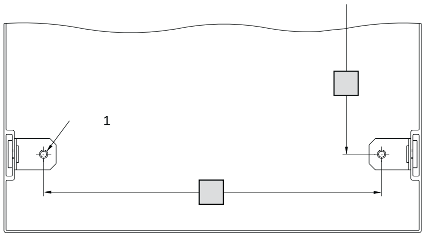
**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

Enclosure width:
– 3.0" (76 mm) (1481.000)
– 4.1" (104 mm) (1491.000)

Enclosure height:
– 5.9" (150 mm)

| For enclosures | PU | **Part No.** |
|---|---|---|
| 1423.600, 1432.600, 1434.600, 1444.600, 1446.600, 1448.600, 1449.600, 1466.600, 1467.600 | 4 | **1481.000** |
| 1453.600, 1454.600, 1468.600, 1469.600, 1479.600, 1480.600, 1400.600 | 4 | **1491.000** |



## Blanking panel, 19" (482.6 mm)

For the installation in electronic enclosures or housings.

**Material:**
Aluminium, natural-anodized

| U | PU | **Part No.** |
|---|---|---|
| 1 | 3 | **1931.200** |
| 2 | 3 | **1932.200** |
| 3 | 3 | **1933.200** |
| 4 | 3 | **1934.200** |
| 6 | 3 | **1936.200** |
| 7 | 3 | **1935.200** |
| 9 | 3 | **1939.200** |
| 12 | 3 | **1937.200** |

## Mounting panel infill

**For TS**

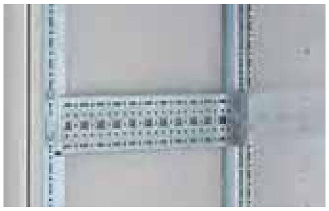
For a continuous mounting surface in bayed suites where the mounting panel is set forward.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

| For enclosure height inches (mm) | **Part No.** |
|---|---|
| 71 (1800) | **4590.700** |
| 79 (2000) | **4591.700** |
| 87 (2200) | **4592.700** |

Inch and pound measurements are rounded to the nearest whole number.



## Rails for interior installation

**For CM, TP**

For mounting on the existing threaded bolts. With TS system punchings on three sides.

**Material:**
Sheet steel, zinc-plated, passivated

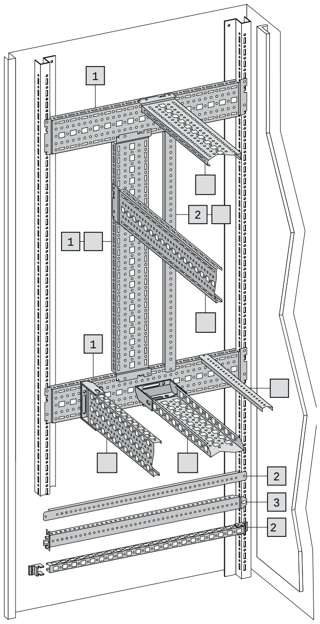
**Configuration:**
Assembly parts

| Width inches (mm) | | Height inches (mm) | | PU | **Part No.** |
|---|---|---|---|---|---|
| CM | TP[1)] | CM | TP[2)] | | |
| 24 (600) | 24 (600) | 24 (600) | 675 | 4 | **5001.050** |
| 32 (800) | 32 (800) | 32 (800) | – | 4 | **5001.051** |
| 39 (1000) | – | 39 (1000) | – | 4 | **5001.052** |
| 47 (1200) | 47 (1200) | 47 (1200) | – | 4 | **5001.053** |
| – | – | 55 (1400) | – | 4 | **5001.054** |
| – | 63 (1600) | – | – | 4 | **5001.055** |

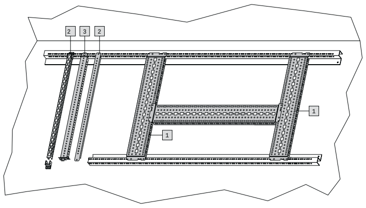
[1)] Only with TP console and desk unit (cover or rear panel/base).
[2)] Only with TP pedestal.

<table>
<tr><th colspan="2">Installation accessories</th><th colspan="5">Part No.</th></tr>
<tr><td colspan="2" rowspan="2">For CM and TP pedestal</td><td colspan="5"><b>For depth inches (mm)</b></td></tr>
<tr><td colspan="2">12 (300)</td><td colspan="2">16 (400)</td><td>20 (500)</td></tr>
<tr><td>1</td><td>TS punched section with mounting flange 0.7 x 2.9" (17 x 73 mm) for the outer level</td><td colspan="2">8612.130</td><td colspan="2">8612.140</td><td>8612.150</td></tr>
<tr><td>2</td><td>TS support strip for the outer level</td><td colspan="2">8800.125</td><td colspan="2">4694.000</td><td>4695.000</td></tr>
<tr><td>3</td><td>TS punched rail 0.7 x 1.5" (18 x 38 mm)</td><td colspan="2">–</td><td colspan="2">8612.240</td><td>8612.250</td></tr>
<tr><td>20</td><td>PS punched rail 0.9 x 0.9" (23 x 23 mm) with support bracket 8800.370</td><td colspan="2">–</td><td colspan="2">4169.000</td><td>4170.000</td></tr>
<tr><td colspan="2" rowspan="2">For CM and TP pedestal</td><td colspan="5"><b>For width inches (mm)</b></td></tr>
<tr><td>24 (600)</td><td>32 (800)</td><td>39 (1000)</td><td>47 (1200)</td><td>63 (1600)</td></tr>
<tr><td>4</td><td>TS punched section with mounting flange 0.7 x 2.9" (17 x 73 mm) for the inner level</td><td>8612.060</td><td>8612.080</td><td>8612.000</td><td>8612.020</td><td>–</td></tr>
<tr><td>5</td><td>TS support strip for the inner level</td><td>8800.130</td><td>4579.000</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>7</td><td>PS punched section without mounting flange 0.9 x 2.9" (23 x 73 mm) with support bracket TS (alternatively with one or two punched rails 0.9 x 0.9" [23 x 23 mm])</td><td>4376.000</td><td>4377.000</td><td>4382.000</td><td>4378.000</td><td>–</td></tr>
<tr><td colspan="5">For TP console and desk unit (except cover for height 650 mm)</td><td colspan="2"><b>May be installed in depth or height</b></td></tr>
<tr><td>1</td><td colspan="4">TS punched section with mounting flange 0.7 x 2.9" (17 x 73 mm) for the outer level</td><td colspan="2">8612.150</td></tr>
<tr><td>2</td><td colspan="4">TS support strip for the outer level</td><td colspan="2">4695.000</td></tr>
<tr><td>3</td><td colspan="4">TS punched rail 0.7 x 1.5" (18 x 38 mm)</td><td colspan="2">8612.250</td></tr>
<tr><td>20</td><td colspan="4">PS punched rail 0.9 x 0.9" (23 x 23 mm) with support bracket 8800.370</td><td colspan="2">4170.000</td></tr>
<tr><td colspan="5">For TP console (only cover for height 26" [650 mm])</td><td colspan="2"><b>May be installed in the height</b></td></tr>
<tr><td>1</td><td colspan="4">TS punched section with mounting flange 0.7 x 2.9" (17 x 73 mm) for the outer level</td><td colspan="2">8612.140</td></tr>
<tr><td>2</td><td colspan="4">TS support strip for the outer level</td><td colspan="2">4694.000</td></tr>
<tr><td>3</td><td colspan="4">TS punched rail 0.7 x 1.5" (18 x 38 mm)</td><td colspan="2">8612.240</td></tr>
<tr><td>20</td><td colspan="4">PS punched rail 0.9 x 0.9" (23 x 23 mm) with support bracket 8800.370</td><td colspan="2">4169.000</td></tr>
</table>

Compact system enclosures CM/TP pedestal

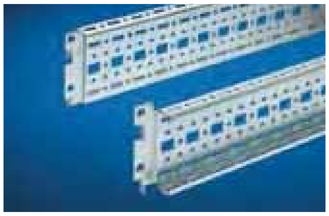


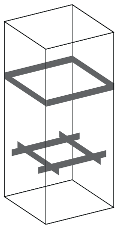
TP console and desk unit (cover or rear panel/base)

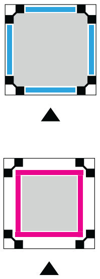


Inch and pound measurements are rounded to the nearest whole number.

## Rail Systems







### TS system chassis with mounting flange, 0.7 x 2.9" (17 x 73 mm)

Variable, with 5 rows of holes for open assembly structures or partial assembly. Simply mount into the TS system holes and secure.

**Installation options:**
- On the vertical TS enclosure section:
  - – On the outer mounting level, around the perimeter, at the same height
  - – On the inner mounting level, around the perimeter, height-offset
- In CM, TP via rail for interior installation:
  - – In the depth, for outer mounting level
  - – In the width, for inner mounting level

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

German patent no. 196 47 802

**Additional parts needed:**
For installation in CM, TP:
Rail for interior installation.

**Accessories:**
Screws, see page 240.
Cable tie for quick assembly 2597.000.

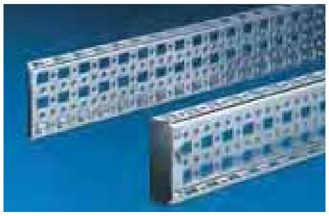
**For the outer mounting level**[1]

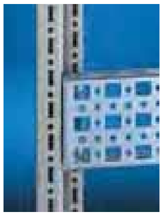
| For enclosure width/ depth inches (mm) | PU | **Part No.** |
|---|---|---|
| 12 (300) | 4 | **8612.130** |
| 16 (400) | 4 | **8612.140** |
| 20 (500) | 4 | **8612.150** |
| 24 (600) | 4 | **8612.160** |
| 32 (800) | 4 | **8612.180** |
| 40 (1000) | 4 | **8612.100** |
| 48 (1200) | 4 | **8612.120** |

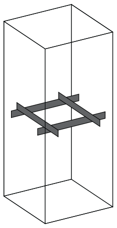
[1] **Note:**
In conjunction with plug-in-sidewalls, notched system chassis are required.

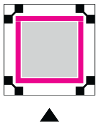
**For the inner mounting level**

| For enclosure width/ depth inches (mm) | PU | **Part No.** |
|---|---|---|
| 12 (300) | 4 | **8612.030** |
| 16 (400) | 4 | **8612.040** |
| 20 (500) | 4 | **8612.050** |
| 24 (600) | 4 | **8612.060** |
| 32 (800) | 4 | **8612.080** |
| 36 (900) | 4 | **8612.090** |
| 40 (1000) | 4 | **8612.000** |
| 48 (1200) | 4 | **8612.020** |









### TS system chassis with mounting flange, 0.9 x 2.9" (23 x 73 mm)

The alternative to the TS system chassis with mounting flange 0.7 x 2.9" (17 x 73 mm), with system holes for captive nuts/threaded blocks instead of the slotted holes top and bottom. Simply mount and secure.

**Installation options:**
- On the vertical TS enclosure section

**Material:**
Sheet steel, zinc-plated, passivated

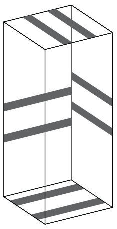
**Configuration:**
Assembly hardware

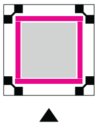
**Accessories:**
Screws, see page 240.
Threaded blocks, captive nuts, see page 246.

**For the inner mounting level**

| For enclosure width/ depth inches (mm) | PU | **Part No.** |
|---|---|---|
| 20 (500) | 4 | **8612.550** |
| 24 (600) | 4 | **8612.560** |
| 32 (800) | 4 | **8612.580** |
| 40 (1000) | 4 | **8612.500** |
| 48 (1200) | 4 | **8612.520** |

Inch and pound measurements are rounded to the nearest whole number.





## TS punched section without mounting flange 1.8 x 3.5" (45 x 88 mm)

Heavy top-mounted equipment mounted directly on the internal surfaces (e. g. roof) is supported. Mounted on the side or rear, the enclosure can then be screw-fastened securely to the machine. The twin profile with 11 rows of holes offers numerous additional opportunities for interior installation.

**Installation options:**

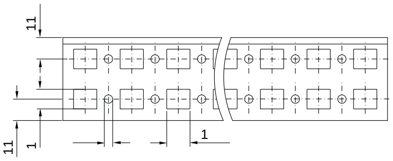
- On the vertical and horizontal TS enclosure section

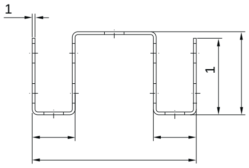
**Material:**
Sheet steel, zinc-plated, passivated

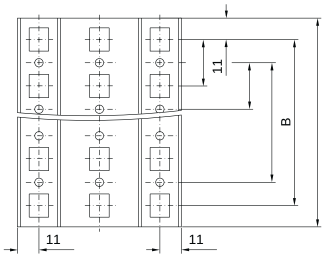
**Configuration:**
Assembly parts

| For enclosure width/depth inches (mm) | PU | **Part No.** |
|---|---|---|
| 20 (500) | 2 | **8612.650** |
| 24 (600) | 2 | **8612.660** |
| 32 (800) | 2 | **8612.680** |

Side punchings







| For enclosure width/depth inches (mm) | A | B | C |
|---|---|---|---|
| 20 (500) | 16 (398) | 15 (375) | 14 (350) |
| 24 (600) | 20 (498) | 19 (475) | 18 (450) |
| 32 (800) | 28 (698) | 27 (675) | 26 (650) |

Inch and pound measurements are rounded to the nearest whole number.

Interior Installation

Accessories

## TS system bars

## 1.0 x 1.5" (25 x 38 mm)

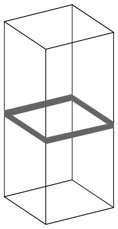
For heavy installations, with attachment holes.

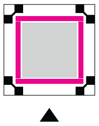
**Installation options:**

- On the vertical TS enclosure section
  With 0.4" (9 mm) round holes all around on a 1.0" (25 mm) system hole pattern, for the configuration of:
- Support rails
- System support rails
- C rails 30/15
- Cable clamp rails (right angle section)
- Your own assemblies

**Material:**
Sheet steel 11 ga (3.0 mm), zinc-plated, passivated

**Configuration:**
Assembly hardware

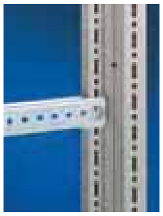




| For enclosure width/ depth inches (mm) | PU | **Part No.** |
|---|---|---|
| 20 (500) | 2 | **8612.750** |
| 24 (600) | 2 | **8612.760** |
| 32 (800) | 2 | **8612.780** |

**Additional parts needed:**
Snap-on nut M8, 8800.808, see pg. 238.

**Note:**
In conjunction with the snap-on nut, particularly well-suited for moveable connections.



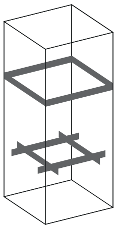
## TS support bars

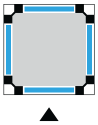
**Installation options:**

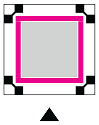
- On the vertical and horizontal TS enclosure section:
  - On the outer mounting level, around the perimeter, at the same height
  - On the inner mounting level, around the perimeter, height-offset
- On the tubular door frame TS, ES
- On the perforated door strip CM
- On the ES system holes, in the enclosure depth

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware







**For the outer mounting level**

| For enclosure width/depth inches (mm) | Length inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 12 (300) | 9 (240) | 20 | **8800.125** |
| 16 (400) | 14 (340) | 20 | **4694.000** |
| 20 (500) | 17 (440) | 20 | **4695.000** |
| 24 (600) | 21 (540) | 20 | **4696.000** |
| 32 (800) | 29 (740) | 20 | **4697.000** |

**Accessories:**
Screws, see page 240.
Cable tie for quick assembly 2597.000.

**For the inner mounting level and for mounting on doors**

| For enclosure width/ depth inches (mm) | For door width inches (mm) | Length inches (mm) | PU | **Part No.** |
|---|---|---|---|---|
| - | 16 (400) | 11 (290) | 20 | **4594.000** |
| 16 (400) | 20 (500) | 15 (390) | 20 | **4309.000** |
| 20 (500) | 24 (600) | 19 (490) | 20 | **4596.000** |
| 24 (600) | - | 23 (590) | 20 | **8800.130** |
| - | 32 (800) | 27 (690) | 20 | **4598.000** |
| 32 (800) | 35 (900) | 31 (790) | 20 | **4579.000** |
| - | 39 (1000) | 35 (890) | 20 | **4599.000** |

Inch and pound measurements are rounded to the nearest whole number.

## TS system bars
## 0.9 x 0.9" (23 x 23 mm)

**Installation options:**

- On the vertical enclosure section:
  - Directly with support brackets TS
  - With adaptor rail for PS compatibility in conjunction with angle brackets, mounting brackets or support brackets PS
- On the horizontal enclosure section:
  - Directly with angle brackets, mounting brackets or support brackets PS

**Material:**
Sheet steel, zinc-plated, passivated

**Additional parts needed:**
U nuts, see page 239.
Mounting brackets TS/PS, see below.

| Length inches (mm) | For H, W, or D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 12 (295) | 16 (400) | 12 | **4169.000** |
| 16 (395) | 20 (500) | 12 | **4170.000** |
| 20 (495) | 24 (600) | 12 | **4171.000** |
| 28 (695) | 32 (800) | 12 | **4172.000** |
| 35 (895) | 40 (1000) | 12 | **4173.000** |
| 43 (1095) | 48 (1200) | 6 | **4174.000** |
| 51 (1295) | 55 (1400) | 6 | **4393.000** |
| 59 (1495) | 63 (1600) | 6 | **4175.000** |
| 67 (1695) | 71 (1800) | 6 | **4176.000** |
| 75 (1895) | 79 (2000) | 6 | **4177.000** |
| 83 (2095) | 87 (2200) | 6 | **4178.000** |

**Accessories:**
Screws, see page 240.
Cable tie for quick assembly 2597.000.

## Mounting bracket TS

Offers variable mounting opportunities for the system bar 0.9 x 0.9" (23 x 23 mm).

For example for supporting external surfaces or creating an additional internal level.

**Material:**
Die-cast zinc

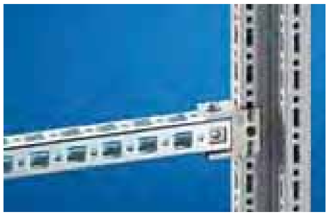
**Configuration:**
24 metal screws BZ 5.5 x 0.5" (13 mm)

| PU | **Part No.** |
|---|---|
| 24 | **8800.370** |

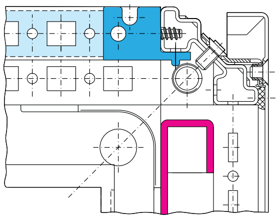
**Accessories:**
U nuts for system bars (recommended: M6), see page 239.

**Installation options:**

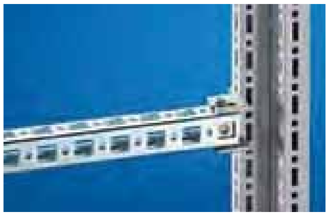
- On the vertical TS enclosure section:
  - Flush with the outer edge of the enclosure or
  - Flush with the enclosure clearance width.



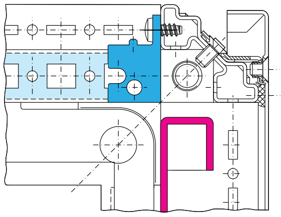
1.



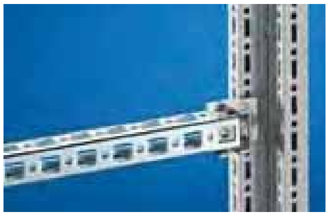
1. Support of the external surfaces with two mounting options:
   - Without mounting panel (photo)
   - With mounting panel (drawing)



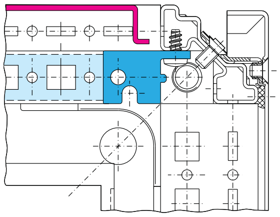
2.



Two installation options for the inner mounting level:
2. If there is no divider panel installed.



3.



3. With a divider panel installed, with or without mounting panel in a set forward position.

Inch and pound measurements are rounded to the nearest whole number.

## Rail Systems/Mounting Clips

### Snap-on nut

**For TS**
Metric thread for vertical TS enclosure section. To install, insert into slot and clip into position. The snap-on nut is then secure. By tightening the screw, it is securely tightened against the section, and potential equalization is automatically created.

**Installation options:**
- On the vertical TS enclosure section
– with metric thread M6 or M8
– the alternative to metal screws
– particularly well-suited for dynamically loaded connections

**Material:**
Precision-cast stainless steel

| Thread | PU | **Part No.** |
|---|---|---|
| M6 | 20 | **8800.806** |
| M8 | 20 | **8800.808** |

### Support rail

**For PK**
The two support rail sections provide flexibility for accommodating terminal blocks and installed components.

**Material:**
The support rails are designed in accordance with EN 50 022 (TS 35/7.5); the Finish is zinc-plated.

**Configuration:**
Two self-tapping assembly screws

| Rail | Maximum number of terminals with the following terminal sizes | | | Bar length inches (mm) | PU | **Part No.** |
|---|---|---|---|---|---|---|
| | 2.5 mm² | 4 mm² | 10 mm² | | | |
| TS 35/7.5 | 12 | 9 | 5 | 3 (81) | 12 | **9564.000** |
| | 17 | 13 | 8 | 4 (106) | 12 | **9565.000** |
| | 24 | 20 | 11 | 6 (144) | 12 | **9566.000** |
| | 38 | 32 | 19 | 9 (216) | 12 | **9567.000** |
| | 61 | 50 | 30 | 13 (336) | 12 | **9568.000** |

Calculation of the maximum number of terminals is based on two end holders and a cover.

### Mounting clip

**for support rails**

For fast, secure attachment of:
- Cable trunking
- Mounting panels
- Mounting angles on support rail TS 35/7.5 and TS 35/15 to EN 50 022.

Simply pre-assemble the mounting clip on the part to be installed, then snap into position on the support rail.

| PU | **Part No.** |
|---|---|
| 30 | **2309.000** |

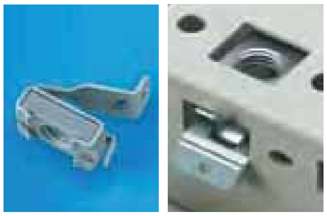
Inch and pound measurements are rounded to the nearest whole number.

## Cage nuts/threaded blocks

**Installation options:**
On enclosures and rails with square system punches 0.5 x 0.4" (12.5 x 10.5 mm),
for example on:

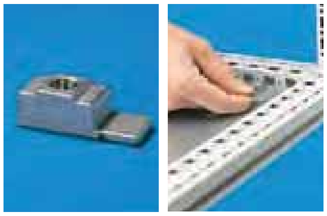
- TS enclosure section:
  - Vertical, with adaptor rail for PS compatibility
  - Horizontal, direct
- ES enclosure body, unibody construction
- System bars 0.9 x 0.9" (23 x 23 mm)
- System chassis without mounting flanges, 0.9 x 2.9" (23 x 73 mm)
- System chassis without mounting flanges, 1.8 x 3.5" (45 x 88 mm)
- System chassis with mounting flanges, 0.9 x 2.9" (23 x 73 mm)

**As an alternative, can be used:**
On the vertical TS enclosure section TS snap-on nut, see page 238.



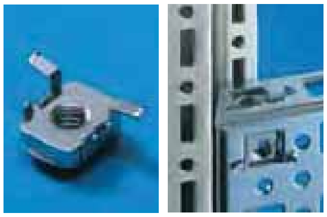
**Cage nuts**
The compression spring designed as an insertion aid ensures reliable, mechanical and electrical connection in the system holes.

| Thread | PU | **Part No.** |
|---|---|---|
| M6 | 50 | **4164.000** |
| M8 | 50 | **4165.000** |



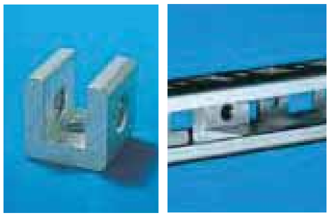
**Threaded blocks**
With snap-off insertion aid, die-cast zinc.

| Thread | PU | **Part No.** |
|---|---|---|
| M6 | 50 | **4162.000** |
| M8 | 50 | **4163.000** |



**Cage nuts**
The nuts are inserted from the same side as screw-fastening takes place. Consequently, attachment points in the same height or width may also be used around corners.
The spring cage also ensures electrical connection in the system holes.

| Thread | PU | **Part No.** |
|---|---|---|
| M6 | 50 | **8800.340** |
| M8 | 50 | **8800.350** |



## U nuts

Installation options:

- System bar 0.9 x 0.9" (23 x 23 mm)
- System chassis without mounting flange, 0.9 x 3" (23 x 73 mm)
- System chassis without mounting flange, 1.8 x 4" (45 x 88 mm)
- System chassis with mounting flange, 0.9 x 3" (23 x 73 mm)

For mounting system bars and system chassis without mounting flanges on angle brackets, mounting brackets and support brackets, we recommend U nuts with M6 thread (4179.000).

| Thread | PU | **Part No.** |
|---|---|---|
| M4 | 20 | **4119.000** |
| M5 | 20 | **4157.000** |
| M6 | 20 | **4179.000** |
| M8 | 20 | **4180.000** |

**Accessories:**
Multi-tooth screws M6 x 0.5" (12 mm), (for 4179.000), see page 240.

## Assembly Components

### Multi-tooth screws

**Torx T-25 Head**

M6 x 0.5" (12 mm) to fit:

- Snap-on nut (8800.806)
- U nuts for system bars (4179.000)
- Cage nuts (4164.000)
- Threaded blocks (4162.000)

M8 x 0.5" (12 mm) to fit:

- Snap-on nut (8800.808)

### Multi-tooth screws

**Torx T-25 Head**

For the round holes 0.2" (4.5 mm) diameter in the enclosure section, system bars and system chassis without mounting flanges.

### Self-tapping screws

For the round holes 0.2" (4.5 mm) diameter in the enclosure section, system bars and system chassis without mounting flanges.

### Self-tapping screws

Mark, drill and tighten in a single operation using electric or pneumatic tools.
For metal thickness: 22 – 11 ga (0.8 – 3 mm)
Length: 0.6" (16 mm)

Usable length: 0.4" (9.5 mm)
Width across flats: 0.3" (8 mm)

Multi-tooth drive for optimum transmission of torque, an extended tool life and increased safety and reliability when tightening and loosening screw connections.

| Type of screw | Dimensions inches (mm) | PU | **Part No.** |
|---|---|---|---|
| Multi-tooth screws | M6 x 0.5 (12)<br>M8 x 0.5 (12) | 300<br>300 | **2504.500**<br>**2504.800** |
| Multi-tooth screws | BZ 5.5 x 0.5 (13) | 300 | **2486.500** |
| Multi-tooth screws for stainless steel | BZ 5.5 x 0.5 (13) | 300 | **2486.300** |
| Self-tapping screws:<br>• Hex screws | M5 x 0.4 (10) | 500 | **2504.000** |
| • Posidrive raised countersunk screws | M5 x 0.5 (12) | 500 | **2488.000** |
| • Pan head screws, posidrive | M5 x 0.5 (12) | 500 | **2489.000** |
| • Pan-head screws, multi-tooth | M5 x 0.5 (12) | 500 | **2489.500** |
| Self-tapping screws | ST 4.8 x 0.6 (16) | 300 | **2487.000** |

## Enclosure lights

Rittal's fluorescent enclosure lights are designed for quick and easy installation. The external terminal block means no need to disassemble the light to make electrical connections. Available in 15 or 18 watt rating, they can be used with or without the Rittal 4127.000 door switch. Equipped with interference suppression capacitor or a RFI filter they also come with or without a lamp shade or 115 V U.S. style receptacle.

**Technical specifications:**
Rating: 120 V, 60 Hz
Color: RAL 7044 (silky gray)
Light medium: cool white
Includes installation hardware
Connection terminals: L1 N. GND
On/off rocker switch

| **Part No.** | | | |
|---|---|---|---|
| With interference suppression capacitor and no receptacle | With RFI filter, U.S. receptacle and lamp shade | Installation length A | Technical data |
| | | inches (mm) | 120 V 60 Hz |
| **9968.108** | **9968.111** | 18 (467) | 15 W |
| **9968.109** | **9968.112** | 24 (620) | 18W |

UL recognized for Canadian and U.S. requirements.

## Door operated switch

For use with enclosure lights 9968.108/.109/.111/.112 as well as climate control devices such as air conditioners, heat exchangers, fans and heaters.

| PU | **Part No.** |
|---|---|
| 1 | **4127.010** |

## Universal light with integrated motion sensor

| Technical Specifications | Socket | H inches (mm) | W inches (mm) | D inches (mm) | **Part No.** | Protection Ratings |
|---|---|---|---|---|---|---|
| 26 W. 110-240 V, 50-60 Hz | No | 4 (95) | 14 (345) | 2 (55) | **4155.500** | UL/CE |

With compact fluorescent lamp, TC-DEL 26 W, base G24q-3, length 7" (174 mm)

Additional parts needed: connection cable power supply part no. 4315.150 (see below)

## Connection cables

The following components can be used for time-saving and simple installation of the lights:

| Cable options | UL | Length inches (mm) | PU | Color | **Part No.** |
|---|---|---|---|---|---|
| Power cable for Universal Light 4155.500 (with outlet and strain relief, without plug) | Yes | 118 (3000) | 1 | Gray | **4315.150** |
| Through-wiring for Universal Light 4155.500 (with outlet and plug) | Yes | 24 (600) | 1 | Gray | **4315.450** |

Inch and pound measurements are rounded to the nearest whole number.

## Compact light

Narrower – Faster – Brighter

- Narrower: Around 50% less height and depth and also around 75% less volume than conventional lights.
- Faster: Universal fast attachment via clips, screws, or powerful magnets (optional). Simply slide in at the side or rear, fit the light, and it's done!
- Brighter: Up to 75% greater luminous efficiency from the lamp at the same output helps to cut electricity costs.
- Door-operated switch can also be connected via a 2-pole connection.
- Cable routing on the back of the light enables deflection, e. g., when mounted vertically in a TS8.

**Material:**
Body:
PC-ABS (halogen-free)
Light cover:
Polycarbonate (halogen-free)

**Color:**
Similar to RAL 7035 (light gray)

**Protection Ratings:**
IP 20

**Configuration:**
Compact light with clip and screw mounting kits

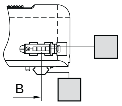
**Accessories:**
Mounting kit magnet,
see below.
Door-operated switch with connection cable,
see below.

| **Part No.** | **4140.210** | **4140.220** | **4140.110** | **4140.120** |
|---|---|---|---|---|
| **Rated voltage** | **100 – 240 V AC ± 10 % at 50 – 60 Hz** | | **24 V DC ± 10 %** | |
| Wattage | 8 | 14 | 8 | 14 |
| Protection ratings | II (all-insulated) | | | |
| Width (B1) inches (mm) | 18 (455) | 28 (705) | 18 (455) | 28 (705) |
| Mounting distance (B2) inches (mm) clip/magnet | 16 (400) | 26 (650) | 16 (400) | 26 (650) |
| Mounting distance (B3) inches (mm) | 19 (475) | 29 (725) | 19 (475) | 29 (725) |
| Connection cable | 3 m (open end) | | | |
| Cover color | Gray | | Yellow | |
| Rated current (A)<br>– at 230 V AC<br>– at 110 V AC<br>– at 24 V DC | <br>0.045 – 0.088<br>0.083 – 0.149<br>– | <br>0.073 – 0.127<br>0.149 – 0.216<br>– | <br>–<br>–<br>0.35 | <br>–<br>–<br>0.57 |
| Light | Fluorescent lamp T5 | | | |
| Operating unit | Wide-range electronic ballast | | Electronic ballast | |
| Switches | Integral, on/off/door-operated switch mode | | | |
| Light cover | Transparent, grooved on the inside | | | |
| cURus | ■ | ■ | | |

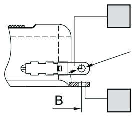
**A** Side attachment

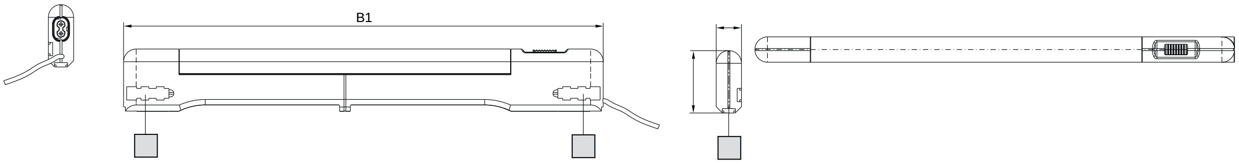
**B** Rear attachment

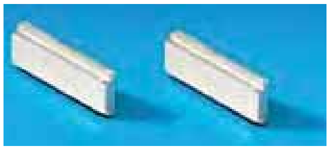
Clip/magnet attachment



Screw attachment







## Mounting kit magnet

For reliable adhesion on all sheet steel surfaces.

| PU | **Part No.** |
|---|---|
| 2 | **4140.000** |

## Door operated switch

Color: Gray

| Length inches (mm) | PU | **Part No.** |
|---|---|---|
| 24 (600) | 1 | **4315.720** |

## Ground rail, horizontal

**Potential equalization rail**
Current carrying capacity approximately 200 A.

**Configuration:**
Ground rail made from E-Cu 57 to DIN 1759,
DIN 40 500, 15 x 0.2" (5 mm),
20 connection points with M5 screws,
2 ground connections 25 mm$^2$,
2 isolators, including assembly hardware.

| Length inches (mm) | PU | **Part No.** |
|---|---|---|
| 18 (450) | 1 | **7113.000** |

## Ground straps

For configuring a reliable grounding connection with perfect contact.

- With ring terminals in M6 and M8 to match the grounding screw
- Length-optimized and ready to install

| For | Door/lid | Enclosures |
|---|---|---|
| KL, EB, JB<br>AE 1032.XXX,<br>AE 1035.XXX | M6 | M6 |
| AE, TP, WM | M6 | M6 |
| TS, ES, PC,<br>AP universal console | M8 | M8 |

| Connection | Cross Section mm$^2$ | Length inches (mm) | PU | **Part No.** |
|---|---|---|---|---|
| M8 – M8 | 4 | 7 (170) | 5 | **2564.000** |
| M8 – M8 | 16 | 7 (170) | 5 | **2565.000** |
| M8 – M8 | 25 | 7 (170) | 5 | **2566.000** |
| M6 – M6 | 10 | 8 (200) | 5 | **2565.100** |
| M8 – M8 | 4 | 12 (300) | 5 | **2567.000** |
| M6 – M8 | 10 | 12 (300) | 5 | **2565.110** |
| M8 – M8 | 10 | 12 (300) | 5 | **2565.120** |
| M8 – M8 | 16 | 12 (300) | 5 | **2568.000** |
| M8 – M8 | 25 | 12 (300) | 5 | **2569.000** |

## Ground strap

Tin-plated copper, in various lengths and cross sections with press-fitted contact rings. Grounding straps counteract the current displacement effect at high frequencies, while at the same time offering highly flexible connection opportunities.

| Connection | Cross Section mm$^2$ | Length inches (mm) | PU | **Part No.** |
|---|---|---|---|---|
| M6 | 10 | 8 (200) | 10 | **2412.210** |
| M8 | 16 | 8 (200) | 10 | **2412.216** |
| M8 | 25 | 8 (200) | 10 | **2412.225** |
| M6 | 10 | 12 (300) | 10 | **2412.310** |
| M8 | 16 | 12 (300) | 10 | **2412.316** |
| M8 | 25 | 12 (300) | 10 | **2412.325** |

## Assembly hardware

For fastening the ground straps and grounding braids to:

- Horizontal TS enclosure sections
- ES system punchings

**Additional parts needed:**
For mounting on the horizontal TS enclosure section:
Captive nut, see page 246.

| Size | PU | **Part No.** |
|---|---|---|
| M6 | 10 sets | **2570.000** |
| M8 | 10 sets | **2559.000** |

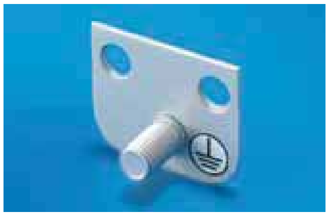
Inch and pound measurements are rounded to the nearest whole number.

## Grounding

### Contact washers

Toothed contact washers facilitate secure ground conductor connection. As a result, there is no need to manually strip paint in the connection area.

| Size | PU | Part No. |
|---|---|---|
| M5 | 100 | **2343.000** |
| M6 | 100 | **2334.000** |
| M6 | 100 | **2335.000** |



### Central grounding point

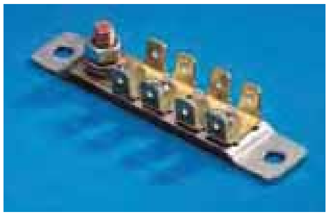
For connecting:
- Ground straps
- Grounding braids

to the vertical and horizontal enclosure profile. The connection bracket is mounted to the enclosure frame with 2 screws and is securely contacted. Ground connection is carried out via the threaded bolt M8 x 0.8" (20 mm).

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
1 connection bracket,
2 screws BZ 5.5 x 0.5" (13 mm),
2 serrated washers,
1 nut M8,
1 contact washer M8,
1 washer

| PU | Part No. |
|---|---|
| 1 | **7829.200** |



### Grounding plate

For installation in:
- Command Panel
- VIP 6000
- Optipanel
- TS

One grounding cable can be screw-fastened to the threaded bolt and can be distributed to up to 8 components via 0.2" (6.3 mm) flat-pin connectors.

**Configuration:**
Assembly hardware

| PU | Part No. |
|---|---|
| 1 | **2570.500** |

## Mounting rails, 19" (482.6 mm)

For the installation of subracks and other equipment.
Mounting angles are easily shortened for partial assemblies.

**Finish:**
Conductive, corrosion-protected coating.

**Configuration:**
Assembly parts

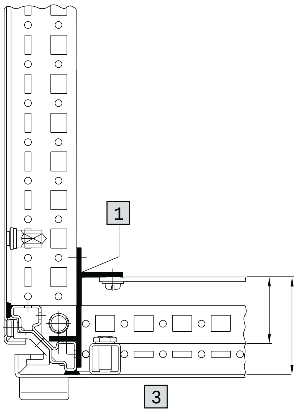
**Accessories:**
Infill panels.
Captive nuts, see page 246.
Assembly screws, see page 240.
Slide rails with one-sided mounting.
Slide rails with two-sided mounting.

| For enclosure height inches (mm) | PU | For enclosure system TS[1] | |
|---|---|---|---|
| | | U | Aluminum Extruded section |
| | | | **Part No.** |
| 63 (1600) | 4 | 33 | **8613.060** |
| 71 (1800) | 4 | 38 | **8613.080** |
| 79 (2000) | 4 | 42 | **8613.000** |
| 87 (2200) | 4 | 47 | **8613.020** |
| For PC enclosure[2] | 4 | 17 | **8613.070** |

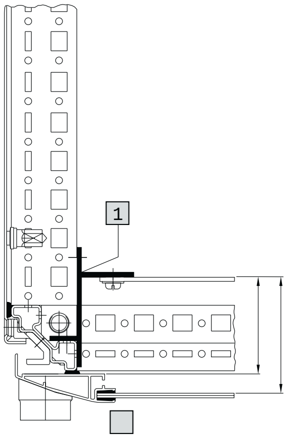
[1] For the rear of electronic enclosures, see page 30.
[2] Behind bottom door.

**Assembly examples of TS:**

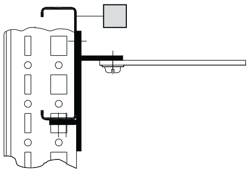
**Drawing 1**



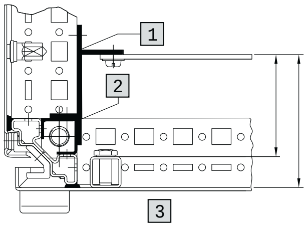
**Drawing 2**



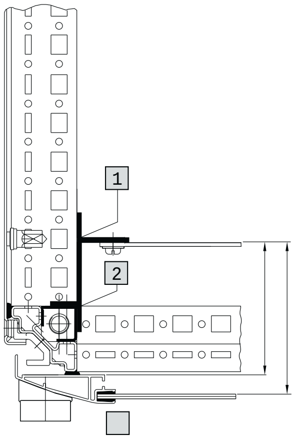
**Drawing 3**



**Drawing 4**



**Drawing 5**



**Drawing 1 and 2:**
Mounting angle or adaptor piece fitted in the foremost installation position, directly on the vertical section. When installing slide rails with two-sided mounting, the same mounting angles or adaptor pieces must also be mounted on the vertical section at the rear.

**Drawing 3:**
Mounting on two vertically installed PS punched sections permits fully flexible use of the enclosure depths.

**Drawing 4 and 5:**
Greater distance from the door is achieved by mounting on adaptor rails for PS compatibility. In this position, the slide rails can be fitted with one-sided mounting.

1 Mounting angles/piece
2 Adaptor rail
3 TS sheet steel door
4 TS glazed door
5 Punched section without mounting flange

Inch and pound measurements are rounded to the nearest whole number.

## 19" Rail Systems

### Assembly screws

**M5 x 0.6" (16 mm)/M6 x 0.6" (16 mm)**
For electronic equipment, 19" (482.6 mm) installed components and blanking plates.

**Configuration:**
Plastic washers

| Version | PU | **Part No.** |
|---|---|---|
| Phillips-head screw M5 | 100 | **2099.500** |
| Cheese-head screw M6 | 100 | **2093.200** |
| Phillips-head screw M6 | 100 | **2089.000** |

### Captive nuts M5/M6

For the attachment of rack-mounted electronic equipment, 19" (482.6 mm) installed equipment and blanking plates to mounting angles,19" (482.6 mm).
For use with metal thickness from 22 – 14 ga (0.8 – 2.0 mm).
In areas of narrow tolerance, captive nuts for metal thicknesses of 18 – 16 ga (1.2 – 1.5 mm) should be used. Optionally with or without contact of the installed equipment to the 19" (482.6 mm) section/ enclosure.

**Captive nut M5**

| Version | For metal thicknesses ga (mm) | PU | **Part No.** |
|---|---|---|---|
| With contact | 22 - 14 (0.8 - 2.0) | 50 | **2094.500** |
| Without contact | 22 - 14 (0.8 - 2.0) | 50 | **2092.500** |

**Captive nut M6**

| Design | For metal thicknesses ga (mm) | PU | **Part No.** |
|---|---|---|---|
| With contact | 22 - 14 (0.8 - 2.0) | 50 | **2094.200** |
| Without contact | 22 - 14 (0.8 - 2.0) | 50 | **2092.200** |
| With contact | 18 - 16 (1.2 - 1.5) | 50 | **2094.300** |
| Without contact | 18 - 16 (1.2 - 1.5) | 50 | **2092.300** |

### Mounting angles, 19" (482.6 mm)

The L-shaped mounting angles accommodate the installation kits of 19" (482.6 mm) systems. The integral U markings in the front facilitate systematic assembly within the 19" (482.6 mm) attachment level.

**Technical specifications:**
2 mm sheet steel, with integral 19" (482.6 mm) punchings and side round and square holes. Zinc-plated, passivated for conductive connection of the 19" (482.6 mm) installed equipment.

**Configuration:**
Assembly parts

**Note:**
The mounting angles can also be used to accommodate 21, 23 and 24" attachment dimensions.

| Full installation | | | |
|---|---|---|---|
| Rack height inches (mm) | U | PU | **Part No.** |
| 24 (600) | 11 | 2 | **7827.061** |
| 32 (800) | 15 | 2 | **7827.081** |
| 40 (1000) | 20 | 2 | **7827.101** |
| 47 (1200) | 24 | 2 | **7827.121** |
| 55 (1400) | 29 | 2 | **7827.141** |
| 63 (1600) | 33 | 2 | **7827.161** |
| 71 (1800) | 38 | 2 | **7827.181** |
| 79 (2000) | 42 | 2 | **7827.201** |
| 87 (2200) | 47 | 2 | **7827.221** |

### Nylon loop

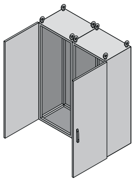
Ensures orderly cable routing.
Supplied on a reel for cutting to the required length.

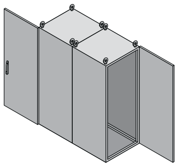
- Protects the cable sheathing
- Easily reopened
- Reusable

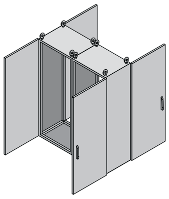
| Length inches (mm) | Width inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 197 (5000) | 0.6 (16) | 1 | **2203.400** |

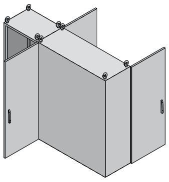
Inch and pound measurements are rounded to the nearest whole number.

## Baying at Installation Site



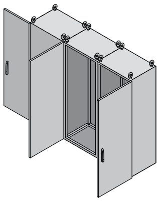


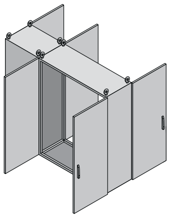


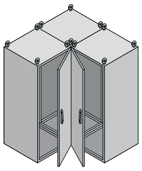


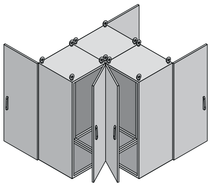
### Bayable on all sides

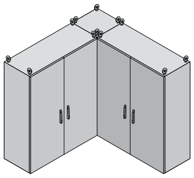
Whether around corners, forwards, backwards, to the left or right or even upwards if required, the baying possibilities are unlimited.

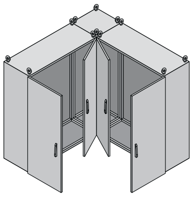


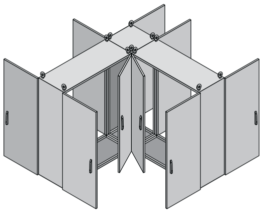


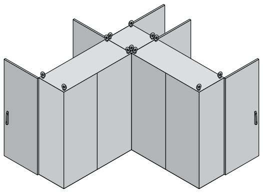


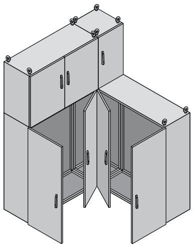


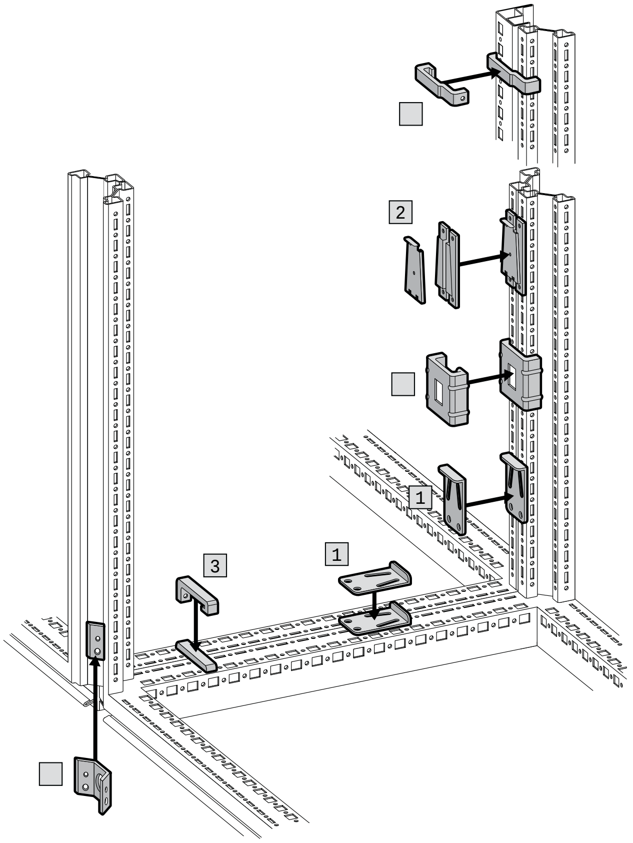












### For baying at the installation site or for provisional siting in the workshop

1 Quick-fit baying clamps, one-piece

2 Quick-fit baying clamps, three-piece

3 Baying clamp, horizontal

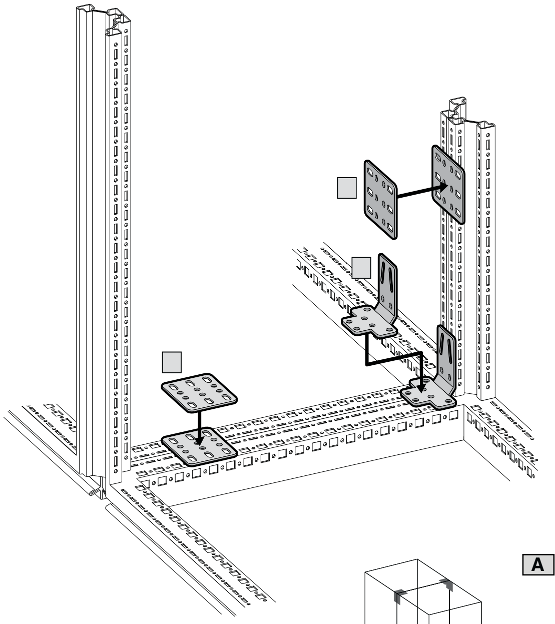
4 Baying clamp, vertical for TS/TS

5 Baying clamp, vertical for TS/PS

6 Baying connector, external

**Notes** on the transport of bayed enclosures, see page 248.

## Baying for Transport



## When transporting bayed enclosures

**7** Corner baying bracket for TS/TS

**8** Flat baying bracket for TS/TS and for TS/PS

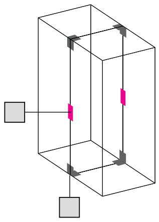
**Note:**

- In addition, the outer baying connector (see page 250), can be used
- When transporting large, heavy enclosure combinations by crane, we also recommend the use of combination angles 4540.000.

**Additional parts needed:**

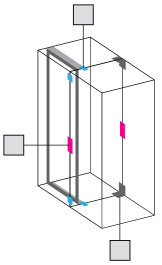
For protection ratings UL Type 12 (IP 55): One connector/clamp is required half-way up the enclosure height, see page 249. Baying clamp, see pages 249-250.

**For additional technical information, visit www.rittal-corp.com**



**A** 2 quick-connect wedges **8800.500** (see page 249).

**B** 4 corner baying brackets **8800.430** (see page 250).



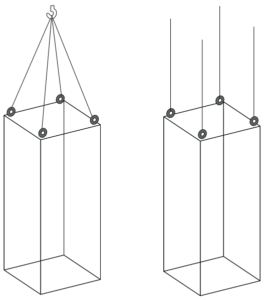
**A** 2 quick-connect wedges **8800.500** (see page 249).

**B** 2 corner baying brackets **8800.430** (see page 250).

**C** 4 flat baying brackets **4582.500** (see page 250).

If the corner baying brackets cannot be fitted in the foremost installation position due to installed equipment such as large swing frames.

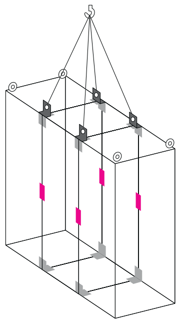
## Notes on the transport of bayed enclosures



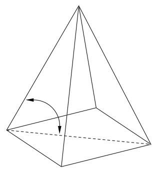
Individual enclosures are securely transported using the eyebolts included with the supply. For symmetrical loads, the following maximum loads apply:
At 45° sling angle 4800 N (1079 lbf),
At 60° sling angle 6400 N (1439 lbf),
At 90° sling angle 13,600 N (3057 lbf).

**Note:**

For larger baying combinations, we recommend the use of a transport base/plinth.

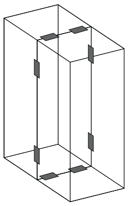


For the enclosure combination with interconnecting (angular baying) brackets, quick-connect wedge and combination angles shown here, the load capacity with a sling angle of 60° is as follows:
For the left enclosure: 7000 N (1574 lbf),
For middle enclosure: 14,000 N (3147 lbf),
For right enclosure: 7000 N (1579 lbf).



The sling angle between the roof plate and the sling has a significant influence on the total permissible load.

The sling angle must not be less than 45°, but must be less than 60° whenever possible.



## 1 Quick-fit baying clamps, one-piece

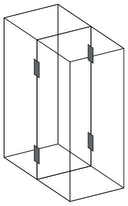
**For TS/TS**
Simply attach the screws, insert the quick-fit baying clamp, tap in with a hammer and lock.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

| PU | Part No. |
|---|---|
| 6 | **8800.500** |

**Note:**
Should not be used in conjunction with TS divider panel



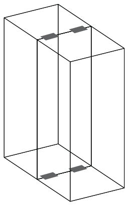
## 2 Quick-fit baying clamps, three-piece

**For TS/TS**
Simply locate, connect with the lock plate, and secure.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

| PU | Part No. |
|---|---|
| 6 | **8800.590** |



## 3 Baying clamp, horizontal

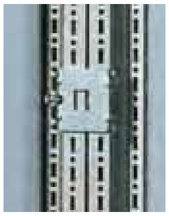
**For TS/TS, TS/PS**
For mounting on the horizontal enclosure sections.

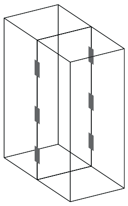
**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

| PU | Part No. |
|---|---|
| 4 | **8800.400** |

German patent no. 197 35 251
French patent no. 98 104 58
Jap. patent no. 2 965 975





## 4 Baying clamp, vertical

**For TS/TS**
For mounting on the vertical enclosure sections.

**Material:**
Sheet steel, zinc-plated, passivated

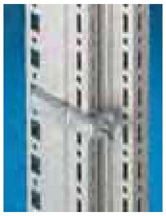
**Configuration:**
Assembly hardware

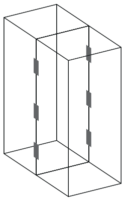
| PU | Part No. |
|---|---|
| 6 | **8800.410** |

German patent no. 197 35 251
French patent no. 98 104 58
Jap. patent no. 2 965 975

# Baying Systems

## Clamps/Brackets





### 5 Baying clamp, vertical

**For TS/PS**

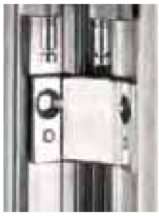
For mounting on the vertical enclosure sections.

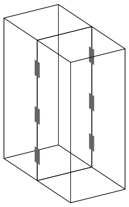
**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

| PU | **Part No.** |
|---|---|
| 6 | **8800.420** |

US patent no. 6,435,759
German patent no. 198 01 185
European patent no. 104 8098
with validity for FR, GB, IT





### 6 Baying connector, external

**For TS/TS**

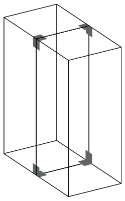
For mounting on the vertical enclosure sections. Simply position on the outside and screw-fasten either from the inside or outside.

**Material:**
Sheet steel, zinc-plated, passivated or Type 304 stainless steel

**Configuration:**
Assembly hardware

| Version | PU | **Part No.** |
|---|---|---|
| Sheet steel | 6 | **8800.490** |
| Stainless steel | 6 | **8700.000** |

German patent no. 197 37 668



### 7 Corner baying brackets

**For TS/TS**

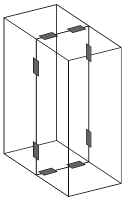
The strong connection when transporting bayed enclosure suites. Screw-fastening may be optionally:

- Horizontally and vertically with 8 screws
- Horizontally with 2 screws and M8 threaded blocks, vertically with 4 screws

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

| PU | **Part No.** |
|---|---|
| 4 | **8800.430** |



### 8 Flat baying brackets

**For TS/TS and TS/PS**

For additional stabilization, or in cases where:

- Mounting panel brackets
- Swing frames
- Busbar supports

Prevent the installation of angular baying brackets.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware

| PU | **Part No.** |
|---|---|
| 4 | **4582.500** |

**Accessories:**
For mounting on the vertical TS enclosure section:
Snap-on nut M8, 8800.808.

## Interconnecting brackets

The alternative to baying bracket 4582.500 and for individual interior installations.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Angular baying bracket, M8 screws and M8 threaded blocks

| PU | Part No. |
|---|---|
| 4 | **4582.000** |

**Additional parts needed:**
For mounting on:
Horizontal TS enclosure section
Captive nut/threaded block M8.
Snap-on nut M8, 8800.808.

## Eyebolt interconnecting bracket

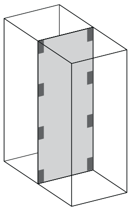
For optimum distribution of tensile forces during transportation of bayed enclosures by crane.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly hardware
Combination bracket, Transport bracket, Crane

| PU | Part No. |
|---|---|
| 4 | **4540.000** |

**Accessories:**
Baying cover, see page 252.
Notes on the transport of bayed enclosures, see page 248.



## Baying attachment, vertical

**For TS/TS with divider panel**

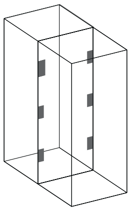
Only suitable for mounting in conjunction with the angle brackets of the divider panel (included with the supply).

**Material:**
Sheet steel, zinc-plated, passivated

| PU | Part No. |
|---|---|
| 8 | **8800.470** |

**Configuration:**
Assembly hardware

**Note:**
May also be used for side or wall attachment/ fastening of enclosures. In such cases, additional holes must be drilled in the side or rear wall.



## Baying attachment, vertical

**For TS/TS**

For baying two populated enclosures on the vertical enclosure section. Simply mount into the vertical TS system holes, secure and connect both brackets by using the hex screws (supplied loose). Using the fastening bolts, the enclosure is pulled into a defined end position, with a height or side offset of up to ± 2 mm.

| PU | Part No. |
|---|---|
| 6 | **8800.670** |

**Material:**
Sheet steel 11 ga (3 mm), zinc-plated, passivated.

**Configuration:**
Assembly hardware

## Baying clamp, horizontal

**For back-to-back mounting**

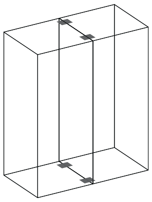
Two-piece, for on-site assembly of enclosures with mounting panel in the rear most installation position.

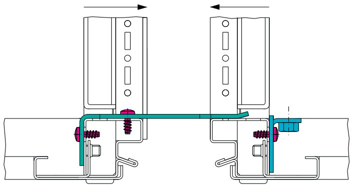
**Material:**
Sheet steel, zinc-plated, passivated

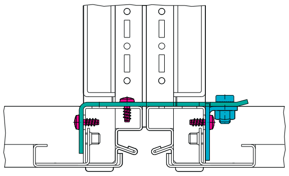
| PU | Part No. |
|---|---|
| 4 | **8800.170** |

**Configuration:**
Assembly hardware

German patent no. 10 157 979







## Baying Cover

### Baying cover, top

A cover with two end caps may be clipped over the gap between the two enclosures in addition to the sealing gasket. This prevents dirt and liquid from collecting on the baying seal.

**Material:**
Cover section: Sheet steel, painted or Type 304 stainless steel
End caps: Plastic

US patent no. 6,312,068
German patent no. 197 37 667
European patent no. 10 12,935
with validity for FR, IT

**Note:**
May also be fitted in the width with enclosure suites bayed back-to-back.

| For enclosure depth inches (mm) | PU | **Part No.** | |
|---|---|---|---|
| | | RAL 7035 (light gray) | Stainless steel |
| 16 (400) | 1 | **8800.840** | **8700.140** |
| 20 (500) | 1 | **8800.850** | **8700.150** |
| 24 (600) | 1 | **8800.860** | **8700.160** |
| 32 (800) | 1 | **8800.880** | – |
| 40 (1000) | 1 | **8800.892** | – |

Inch and pound measurements are rounded to the nearest whole number.

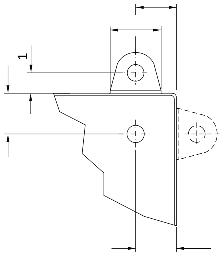
## Wallmounting bracket

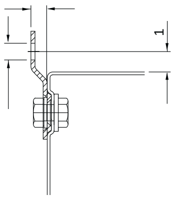
**For KL, EB, JB, BG and EL**

**Configuration:**
Assembly hardware for mounting on the enclosure

**Note:**
For hygiene reasons, and to ensure the protection category, the stainless steel enclosures do not have any drilled holes for the wallmounting brackets.

| Material | Wall distance inches (mm) | PU | **Part No.** |
|---|---|---|---|
| Brass nickel-plated | 0.3 (8) | 4 | **1580.000** |
| Sheet steel zinc-plated, passivated | 0.3 (8) | 4 | **1590.000** |
| Type 304 stainless steel | 0.3 (8) | 4 | **1594.000** |





## Wallmounting bracket

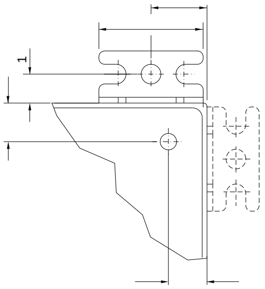
**For KL, EB, JB, BG, AE, WM, CM, TP**

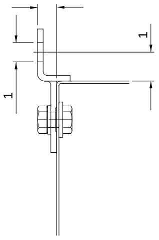
**Configuration:**
Assembly hardware for mounting on the enclosure.

**Note:**
For hygiene reasons, and to ensure the protection category, the stainless steel enclosures do not have any drilled holes for the wallmounting brackets.

| Material | Wall distance (A) inches (mm) | PU | **Part No.** |
|---|---|---|---|
| Sheet steel zinc-plated, passivated | 1.6 (40) | 1 | **2503.000**[1)] |
|  |  | 4 | **2503.200** |
|  | 0.4 (10) | 1 | **2508.000**[1)] |
|  |  | 4 | **2508.200** |
| Type 304 stainless steel | 0.4 (10) | 4 | **2433.000** |
| Type 316L stainless steel | 0.4 (10) | 4 | **2433.500** |

[1)] Without assembly hardware.





## Wallmounting bracket

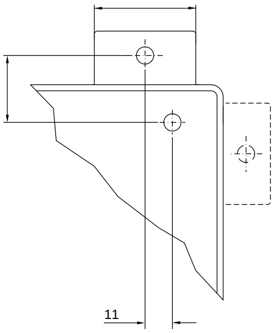
**For KS**

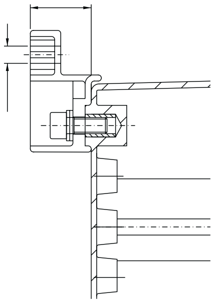
For attachment to the wall, only possible from the outside of the enclosure.

**Material:**
Fiberglass-reinforced polyamide

**Configuration:**
Assembly hardware for mounting on the enclosure

| Color | PU | **Part No.** |
|---|---|---|
| Similar to RAL 7035 (light gray) | 4 | **1483.010** |





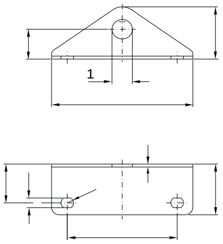
# Enclosure Mounting Hardware

## Wall/Pole Mounting

### Wall fixing angle

For compact enclosures (additional holes required in the enclosure).

| Material | Color | PU | **Part No.** |
|---|---|---|---|
| Sheet steel | RAL 7035 (light gray) | 1 | **2505.500** |
| Type 304 stainless steel | – | 1 | **2583.000** |



### Pole clamp

For reliable, convenient fastening to round or square poles.

For pole diameter/size:
Ø from 1.6 to 7.5" (40 to 190 mm)
☐ from 2.0 to 6" (50 to 150 mm)

**Material:**
Mounting rails, clamping section:
Sheet steel, zinc-plated, passivated
Clamping strap: Type 304 stainless

**For KL, EB, JB, AE, WM, KS**

**Configuration:**
2 mounting rails, 24" (600 mm) long,
4 clamping sections,
2 clamping straps,
4 clamping brackets,
4 screws and nuts M8
for attachment to the enclosure.

| PU | **Part No.** |
|---|---|
| 1 set | **2584.000** |

### Universal wallmounting bracket

**For AE, WM, EB, JB**

Used to install wallmounted enclosures using traditional NEMA hole patterns.

**Material:**
Sheet Steel, zinc-plated, passivated
Type 316L stainless steel

| Material | PU | **Part No.** |
|---|---|---|
| Zinc-plated | 4 | **WMUMB** |
| Stainless Steel | 4 | **WMUMB6** |

### Slotted wallmount bracket

**For AE, WM**

Designed to mimic a standard NEMA style flange where the slots on the lower brackets accommodate drop-on and lift-off mounting.

**Material:**
Sheet Steel, zinc-plated, passivated
Type 316L stainless steel

| Material | PU | **Part No.** |
|---|---|---|
| Zinc-plated | 1 set | **WMSMB** |
| Stainless Steel | 1 set | **WMSMB6** |

## Wallmounting brackets

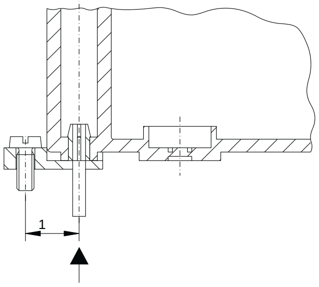
**For PK**
The enclosure can be screwed to the wall using four wallmounting brackets. Each bracket is attached to the enclosure by retaining pins.

**Material:**
Polyamide, gray

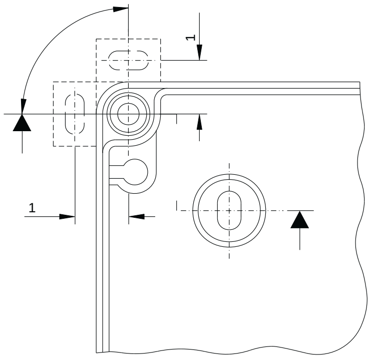
**Configuration:**
1 pack

| PU | Part No. |
|---|---|
| 40 | **9583.000** |

The assembly screw is located in the wallmounting bracket, making it accessible at all times.

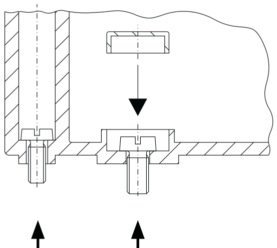


The wallmounting bracket may be fitted to the side or top.



**Wall attachment can also be made without the bracket**

**Option 1:**
Wall attachment in the cover screw channel is a simple, secure means of attachment.



**Option 2:**
By drilling the hole in the rear of the enclosure, mounting in the enclosure interior is also possible. The screws must be concealed using the sealing plugs supplied with the enclosure. The spacing between the attachment holes is marked on the rear wall of the enclosure.

## Cable Entry

### C rails 30/15

**to EN 60 715**
**For TS, ES**

**Installation options:**

- On the vertical TS enclosure section
  - Via snap-on nut 8800.808 (Fig. left)
  - Via adaptor rail for PS compatibility
- On the horizontal TS enclosure section (Fig. right)
- On the ES system punchings

**Material:**
Sheet steel, zinc-plated, passivated

| For enclosure width/depth inches (mm) | Length inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 20 (500) | 18 (455) | 6 | **4943.000** |
| 24 (600) | 22 (555) | 6 | **4944.000** |
| 32 (800) | 30 (755) | 6 | **4945.000** |
| 39 (1000) | 38 (955) | 6 | **4946.000** |
| 47 (1200) | 45 (1155) | 6 | **4947.000** |

**Accessories:**
Cable clamps,
see below
Support bracket or spacer,
Quick-assembly block, 4133.000,
Snap-on nut M8, 8800.808,
Adaptor rail, 8800.300, 8800.320, 8800.380
see www.rittal-corp.com

### Cable clamp rails

**Right angle section**
**For TS, ES, PC, AP universal console, base/plinths**
For strain relief with cable entry. Depth-variable mounting on a 1.0" (25 mm) pitch pattern on the horizontal enclosure section or in side base/plinth trim panels with assembly bolts.

**Material:**
Sheet steel, zinc-plated, passivated

**Configuration:**
Assembly parts

| Enclosure width mm | Length mm | PU | **Part No.** |
|---|---|---|---|
| 16 (400) | 15 (385) | 2 | **4193.000** |
| 24 (600) | 23 (585) | 2 | **4191.000** |
| 32 (800) | 31 (785) | 2 | **4192.000** |
| 34 (850) | 33 (835) | 2 | **4195.000** |
| 39 (1000) | 39 (985) | 2 | **4336.000** |
| 47 (1200) | 47 (1185) | 2 | **4196.000** |
| 63 (1600) | 62 (1585) | 2 | **4338.000** |
| 71 (1800) | 70 (1785) | 2 | **4339.000** |

(may also be used for AP and AE base/plinths)

| For cable diameter inches (mm) | PU | **Part No.** |
|---|---|---|
| 0.2 – 0.5 (6 – 12) | 25 | **2350.000** |
| 0.5 – 0.6 (12 – 16) | 25 | **2351.000** |
| 0.6 – 0.7 (14 – 18) | 25 | **2352.000** |
| 0.7 – 0.9 (18 – 22) | 25 | **2353.000** |
| 0.9 – 1.0 (22 – 26) | 25 | **2354.000** |
| 1.0 – 1.2 (26 – 30) | 25 | **2355.000** |
| 1.2 – 1.3 (30 – 34) | 25 | **2356.000** |
| 1.3 – 1.5 (34 – 38) | 25 | **2357.000** |
| 1.5 – 1.7 (38 – 42) | 25 | **2358.000** |
| 1.7 – 1.8 (42 – 46) | 25 | **2359.000** |
| 1.8 – 2.0 (46 – 50) | 25 | **2360.000** |

Inch and pound measurements are rounded to the nearest whole number.

## Cable entry grommets

In conjunction with the cable entry plate, simple and fast sealing of cables inserted in the base area of enclosures.

**Material:**
Body: Polypropylene
Cover: Thermoplastic elastomer

**Protection ratings:**
IP 55 subject to correct mounting

| Cables per grommet | Max. Ø inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 8 | 0.5 (13) | 25 | **4316.000** |
| 3 | 0.8 (21) | 25 | **4317.000** |
| 1 | 1.9 (47) | 25 | **4318.000** |

## Connector grommets

Suitable for cable diameters from 8 to 36 mm.

**Material:**
Outer cover: Polypropylene covered with thermoplastic elastomer
Seal: Cellular rubber

**Protection Ratings:**
IP 55 subject to correct mounting

| PU | **Part No.** |
|---|---|
| 10 | **4311.000** |

## Section for cable entry, center

**For TS, CM, TP**

For top-mounting on gland plates. A superior alternative to the foam rubber cable clamp strip, thanks to:

- Easier mounting
- Full-surface support
- High level of sealing of cables inserted into the enclosure

**Material:**
Extruded aluminium section, seal PU foam, cross-section: 1 x 1" (30 x 25 mm)

**Protection Ratings:**
IP 55 subject to correct mounting

| For enclosure width inches (mm) | PU | **Part No.** |
|---|---|---|
| 24 (600) | 1 set | **8802.060** |
| 32 (800) | 1 set | **8802.080** |
| 39 (1000) | 2 sets | **8802.100** |
| 47 (1200) | 2 sets | **8802.120** |
| 63 (1600) | 2 sets | **8802.160** |

**Note:**
1 set is sufficient for one base opening up to an enclosure width of 31" (800 mm).
From an enclosure width of 39" (1000 mm), two base openings are provided. 2 sets per enclosure may be fitted.

## Section for cable entry, rear

**For TS, CM, TP**

Unlike the section for cable entry, center, the rear section is mounted directly onto the base opening. In this way, when installing the mounting panel in the rear most position (TS) or with CM, the cables may be routed directly on a cable clamping rail with no large radii. In conjunction with the cable clamp rail, optimum adjustment between the cable entry and mounting panel can be achieved.

**Material:**
Extruded aluminium section, seal PU foam, cross-section: 1 x 1" (30 x 25 mm)

**Protection Ratings:**
IP 55 subject to correct mounting

| For enclosure width inches (mm) | PU | **Part No.** |
|---|---|---|
| 24 (600) | 1 set | **8802.065** |
| 32 (800) | 1 set | **8802.085** |
| 39 (1000) | 2 sets | **8802.105** |
| 47 (1200) | 2 sets | **8802.125** |
| 63 (1600) | 2 sets | **8802.165** |

**Note:**
1 set is sufficient for one base opening up to an enclosure width of 31" (800 mm). From an enclosure width of 39" (1000 mm), two base openings are provided. 2 sets per enclosure may be fitted.

Inch and pound measurements are rounded to the nearest whole number.

## Cable entry plates

**For TS, CM, TP, AP**

- Cable entry grommets
- Connector grommets

instead of segments of the standard divided gland plates.

**Material:**
Sheet steel, zinc-plated, passivated
Type 304 stainless steel, for TS stainless steel

**Configuration:**
Assembly parts

**For installation in TS and PC enclosures based on TS**

| Enclosure width inches (mm) | Cut-outs per plate | PU | **Part No.** |
|---|---|---|---|
| 24 (600) | 5 | 2 | **8800.060** |
| 32 (800) | 8 | 2 | **8800.080** |
| 33 (850) | 9 | 2 | **8800.085** |
| 39 (1000) | 4 | 4 | **8800.100** |
| 47 (1200) | 6 | 4 | **8800.120** |

**For installation in CM enclosures and TP TopConsole system**

| Enclosure width inches (mm) | Cut-outs per plate | PU | **Part No.** |
|---|---|---|---|
| 24 (600) | 5 | 1 | **5001.226** |
| 32 (800) | 8 | 1 | **5001.227** |
| 39 (1000) | 4 | 1 | **5001.228** |
| 47 (1200) | 6 | 1 | **5001.229** |
| 63 (1600) | 6 | 1 | **5001.237** |

**For installation in ES, PC enclosures based on ES and in AP universal consoles**

| Enclosure width inches (mm) | Cut-outs per plate | PU[1] | **Part No.** |
|---|---|---|---|
| 24 (600) | 5 | 2 | **4320.700** |
| 32 (800) | 8 | 2 | **4321.700** |
| 39 (1000) | 10 | 2 | **4323.700** |
| 47 (1200) | 6 | 4 | **4325.700** |

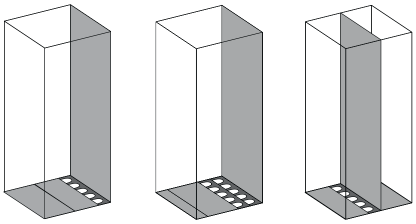
[1] Including compensating plate

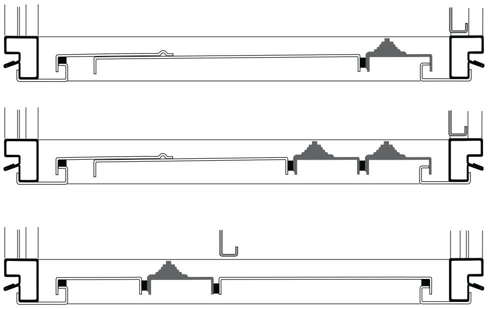
**For installation in TS, stainless steel**

| Enclosure width inches (mm) | Cut-outs per plate | PU | **Part No.** |
|---|---|---|---|
| 24 (600) | 5 | 2 | **8700.600** |
| 32 (800) | 8 | 2 | **8700.800** |
| 47 (1200) | 6 | 4 | **8700.120** |

**Three examples from a wide range of possibilities**
The diagrams show three TS examples for the positioning of cable entry plates instead of segments of the three-piece gland plates supplied as standard. This facilitates positioning to fit the mounting panel.

Thanks to the enclosure symmetry, where dimensions permit, cable entry plates may also be inserted in the enclosure depth, right and left, analogous to the gland plates.





Inch and pound measurements are rounded to the nearest whole number.

## Gland plates

**For CM, TP**

Select suitable gland plates depending on the application. The following examples illustrate how individually cable entry may be structured. Potential equalization is provided by assembly components and grounding points.

**Material:**
Sheet steel, zinc-plated

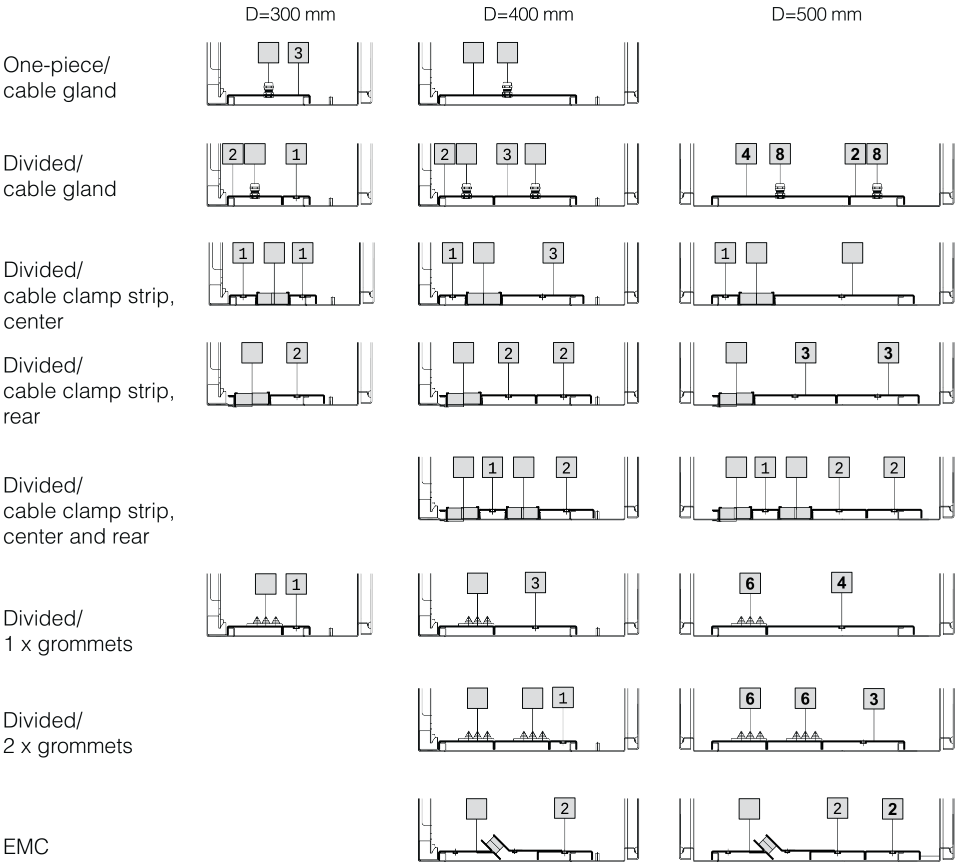
**Configuration:**
1 gland plate, including assembly hardware.

**Note:**
For greater stability and universal cable entry, the base opening is divided in the width for 39 and 47" (1000 and 1200 mm) wide enclosures and can be equipped individually.

| Option | For enclosure width inches (mm) | | | | |
|---|---|---|---|---|---|
| | 24 (600) | 32 (800) | 39 (1000) | 47 (1200) | 63 (1600) |
| | **Part No.** | | | | |
| 1 | **5001.210** | **5001.211** | **5001.212** | **5001.213** | **5001.233** |
| 2 | **5001.214** | **5001.215** | **5001.216** | **5001.217** | **5001.234** |
| 3 | **5001.218** | **5001.219** | **5001.220** | **5001.221** | **5001.235** |
| 4 | **5001.222** | **5001.223** | **5001.224** | **5001.225** | **5001.236** |
| 6 | **5001.226**[1] | **5001.227**[1] | **5001.228**[1] | **5001.229**[1] | **5001.237**[1] |

[1] Cable entry grommets, see page 257.

**Possible Combinations:**

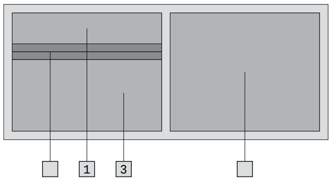


**Key:**

- 1 Gland plate, depth 2.0" (50 mm)
- 2 Gland plate, depth 3.9" (100 mm)
- 3 Gland plate, depth 6" (150 mm)
- 4 Gland plate, depth 10" (250 mm)
- 5 Section for cable entry, center, see page 257.
- 6 Cable entry plates, depth 3.9" (100 mm) see above, grommets, see page 258.
- 7 EMC gland plate, see page 257.
- 8 Cable glands, see page 261.
- 9 Section for cable entry, rear, see page 257.

**Order example:**
5120.500 (H x W x D: 47 x 39 x 16" [1200 x 1000 x 400 mm])

- On the left, divided gland plates with cable clamp strip
- On the right, one-piece gland plate



**You will need:**

- 5 2 sections for cable entry, center, 8802.100, see page 257 (PU 4)
- 1 1 gland plate, depth 2" (50 mm), Part no. 5001.212
- 3 1 gland plate, depth 6" (150 mm), Part no. 5001.220
- 4 1 gland plate, depth 10" (250 mm), Part no. 5001.224

Inch and pound measurements are rounded to the nearest whole number.

## Cable duct

**for vertical TS section**

For direct mounting on the vertical enclosure section.

**Width 2" (50 mm)**

For assembly on a vertical enclosure section in the area of the side panel.

**Width 4" (100 mm)**

For assembly on two bayed enclosure profiles in the baying area. Baying brackets and baying clamps which have already been fitted can be covered over with the cable duct.

The nominal break points of the members are also oriented towards combination with the cable ducts for mounting plates; in addition a further nominal break at the level of the mounting plate enables direct insertion into the cable duct.

The cable duct fastening points are co-ordinated with the TS system hole pattern; elaborate drilling, as in the case of DIN ducts, is dispensed with.

| Width inches (mm) | Height inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 2 (50) | 63 (1600) | 8 sets | **8800.570** |
| 2 (50) | 71 (1800) | 8 sets | **8800.520** |
| 4 (100) | 63 (1600) | 4 sets | **8800.540** |
| 4 (100) | 71 (1800) | 4 sets | **8800.510** |

**Technical specifications:**

Depth: 3" (80 mm)

Length:

- 63" (1600 mm) for enclosure height 71" (1800 mm)
- 71" (1800 mm) for enclosure height 79" (2000 mm)

can be shortened for other enclosure sizes.

Member width: 0.21" (5.5 mm)

Slot width: 0.18" (4.5 mm)

**Material:**

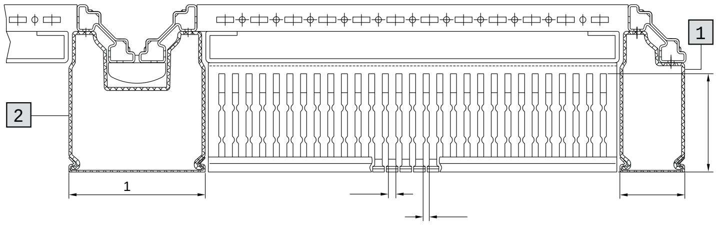
Hard PVC, flame-resistant, self-extinguishing, temperature-resistant to 140° F (+60° C)

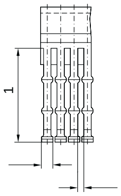
**Color:**

Similar to RAL 7030

**Supply includes:**

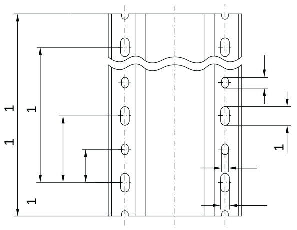
1 set = 1 cable duct with cover

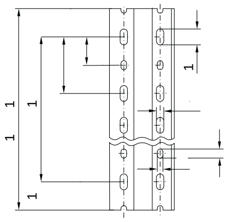




1 8800.570/8800.520

2 8800.540/8800.510





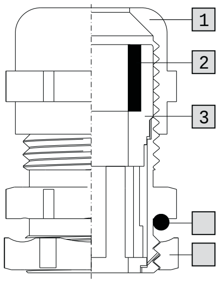
Inch and pound measurements are rounded to the nearest whole number.

## Cable gland, brass

**Benefits:**

- Because the gland and lock nut are sold together in a single pack, this saves additional ordering and storage space
- Clamping membranes for even tightening and strain relief which protects the cables
- Insulation because of plastic insert
- Optimum seal on the connection thread, due to O-ring
- The lock nut cuts automatically into the paint, thereby creating a conductive connection

| Size | Cable diameter inches (mm) | PU | **Part No.** |
|---|---|---|---|
| M12 x 1.5 | 0.1 – 0.3 (3 – 6.5) | 15 | **2411.800** |
| M16 x 1.5 | 0.2 – 0.4 (4.5 – 10) | 15 | **2411.810** |
| M20 x 1.5 | 0.2 – 0.5 (6 – 12) | 10 | **2411.820** |
| M25 x 1.5 | 0.4 – 0.7 (11 – 17) | 10 | **2411.830** |
| M32 x 1.5 | 0.6 – 0.8 (15 – 21) | 5 | **2411.840** |
| M40 x 1.5 | 0.7 – 1.1 (19 – 28) | 4 | **2411.850** |
| M50 x 1.5 | 1.0 – 1.5 (27 – 38) | 2 | **2411.860** |
| M63 x 1.5 | 1.3 – 1.7 (34 – 44) | 1 | **2411.870** |



1 Top-hat nut

2 Neoprene seal

3 Plastic insert

4 O-ring

5 Lock nut

**Material:**
Nickel-plated brass, neoprene seal

**Protection Ratings:**
IP 68 (5 bar, 30 min.) to EN 60 529/10.91

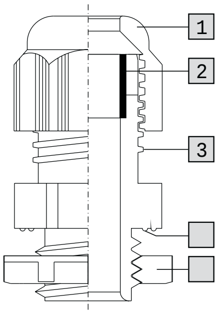
**Approval:**
VDE tested to EN 50 262

## Cable gland, polyamide

**Benefits:**

- Because the gland and lock nut are sold together in a single pack, this saves additional ordering and storage space
- Clamping membranes for even tightening and strain relief which protects the cables
- Spray-moulded sealing lip ensures an optimum seal against the enclosure
- Trapezoid thread for secure screw-fastening of the top-hat nut

| Size | Cable diameter inches (mm) | PU | **Part No.** |
|---|---|---|---|
| M12 x 1.5 | 0.1 – 0.3 (3 – 6.5) | 50 | **2411.600** |
| M16 x 1.5 | 0.2 – 0.4 (4.5 – 10) | 50 | **2411.610** |
| M20 x 1.5 | 0.2 – 0.5 (6 – 12) | 50 | **2411.620** |
| M25 x 1.5 | 0.4 – 0.7 (11 – 17) | 25 | **2411.630** |
| M32 x 1.5 | 0.6 – 0.8 (15 – 21) | 15 | **2411.640** |
| M40 x 1.5 | 0.7 – 1.1 (19 – 28) | 5 | **2411.650** |
| M50 x 1.5 | 1.0 – 1.5 (27 – 38) | 5 | **2411.660** |
| M63 x 1.5 | 1.3 – 1.7 (34 – 44) | 3 | **2411.670** |



1 Top-hat nut

2 Neoprene seal

3 Plastic insert

4 O-ring

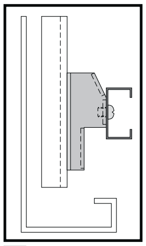
5 Lock nut

**Material:**
Polyamide 6, neoprene seal

**Color:**
RAL 7035 (light gray)

**Protection Ratings:**
IP 68 (5 bar, 30 min.) to EN 60 529/10.91

**Approval:**
VDE tested to EN 50 262



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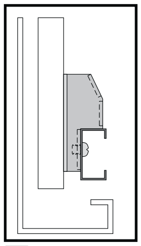

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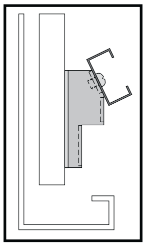


3

## Cable clamp rails

### C section

**For TS, CM, TP**
For strain relief with cable entry. The length of the cable clamp rail is tailored to the width of the mounting panel. The mounting bracket included with the supply supports three different installation situations on the mounting panel:

1 straight, at a distance of 0.9" (23 mm) from the mounting panel
2 straight, at a distance of 0.4" (10 mm) from the mounting panel
3 tilted, towards the mounting panel

**Material:**
Sheet steel

**Finish:**
Zinc-plated, passivated

**Configuration:**
Two mounting brackets and assembly screws

| For enclosure width inches (mm) | Length inches (mm ) | Part No. |
|---|---|---|
| 24 (600) | 20 (499) | **5001.080** |
| 32 (800) | 28 (699) | **5001.081** |
| 39 (1000) | 35 (899) | **5001.082** |
| 48 (1200) | 43 (1099) | **5001.083** |
| 63 (1600) | 59 (1499) | **5001.084**[1] |

[1] Including 3 mounting brackets.

## Cable conduit and cable conduit holder

For secure cable routing, e.g., from the enclosure or mounting panel to the door. Attachment facility for standard commercially available cable ties is provided on the cable conduit holder, so that cables may be attached upon entry to/exit from the cable conduit.

**Material:**
Cable conduit: Polyethylene
Cable conduit holder: Polyamide

**Cable conduit**

| Internal Ø inches (mm) | PU | Part No. |
|---|---|---|
| 0.6 (16) | 25 m | **2595.000** |
| 1.1 (29) | 25 m | **2589.000** |
| 1.4 (36) | 25 m | **2596.000** |
| 1.9 (48) | 25 m | **2590.000** |

**Cable conduit holder**

| For cable conduit Ø mm | PU | Part No. |
|---|---|---|
| 0.6 (16) | 20 | **2593.000**[1] |
| 1.1 (29) | 20 | **2591.000**[1] |
| 1.4 (36) | 20 | **2594.000** |
| 1.9 (48) | 20 | **2592.000** |

[1] Installation in compact enclosures AE with universal bracket 2373.000

Inch and pound measurements are rounded to the nearest whole number.

# Climate Control

# Climate Control

## Rittal Therm

### Sizing Software

Let Rittal take the guess work out of selecting the proper climate control for your application. Rittal Therm software is a complimentary, step by step guide to choosing the optimal climate control based on your specific environment. This software can be downloaded at www.rittal-corp.com/software.

## Rittal Services — Tailored to Meet Your Business Needs

**Installation and Start–Up Services**

Rittal offers installation and start–up services for all of our product lines. With our installation and start up services you are assured that the proper parameters are set and the equipment operates according to factory specifications.

**Repair and Field Services**

Our focus is on minimizing equipment downtime and maintaining optimum performance levels. Rittal field service extends from emergency interventions to customized preventive maintenance programs designed to meet your specific needs.

- Comprehensive product support
- Prompt, efficient service
- Factory trained technicians
- In-house repair
- Globally located staff

**Spare Parts Services**

As the leading manufacturer of Industrial and IT enclosures and climate control products, Rittal is able to support the performance of your equipment by offering genuine spare parts. The utilization of global warehouses and parts centers provides fast off–the–shelf delivery to any location, ensuring maximum uptime and reduced customer inventory.

**Service and Maintenance Agreements**

Rittal offers preventative maintenance programs to maximize your uptime:

| Rittal Service Packages | | | | |
|---|---|---|---|---|
| **Program Name** | **Basic** | **Comfort** | **Advanced** | **Full** |
| **Availability** | | | | |
| Hours Of Business | ■ | ■ | | |
| 24 / 7 / 365 | | | ■ | ■ |
| **Response Time** | | | | |
| Next Working Day | ■ | | | |
| Next Day | | ■ | ■ | |
| 8 Hours | | | | ■ |
| **Availability of Spare Parts** | | | | |
| Standard | ■ | ■ | | |
| 24 Hours | | | ■ | |
| Expedited | | | | ■ |
| **Maintenance** | | | | |
| 1 / Year | ■ | | | |
| 2 / Year | | ■ | ■ | |
| Individual (At Least 2 / Year) | | | | ■ |
| **Extended Warranty** | | | | |
| No | ■ | ■ | | |
| Yes | | | ■ | ■ |

Custom agreements tailored to your specific needs are available – please contact the Rittal Service Group at 800-477-4000 (option 3) to learn more.

# Filter Fan

## Features

Filter fan units are ideal for dissipating heat loads cost effectively. The prerequisite is that the ambient air must be relatively clean with a temperature below the desired enclosure internal temperature. The entire range of filter fan units is now available with EMC shielding and all required rated voltages.

## Fast assembly

**Quick clip-on mounting**

This guarantees quick, completely secure attachment of the filter fan unit. The prerequisites for ratings UL 12 (IP 54) are met as standard.

Changing the filter mat is quick and easy. The louvered grille is attached without screws providing quick access to the filter mat.

**Inlet or outlet**

The air direction may be quickly reversed from blowing (standard setting) to extracting. Simply rotate the fan by 180°.

## Application diversity and functions

**Not always full power**

Air displacement may be reduced at lower ambient temperatures. Noise generation is reduced by adapting the filter fan speed to match the temperature using a controller.

**Also available with EMC shielding**

All filter fan units and outlet filters are available with EMC shielding. The required conductive connection is achieved by a metallic coating on the filter fan unit housing and a special sealing frame.

**Hosed water protection**

Particularly for applications in the food industry, the hose-proof hood prevents the ingress of moisture. The ratings of UL 3R (IP 56) is achieved in conjunction with the filter mats.

## Benefits:

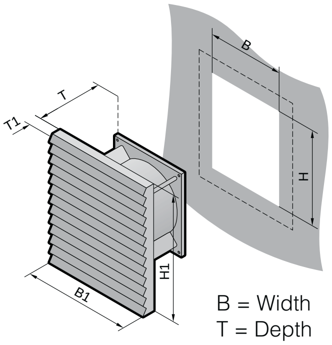
- Air displacement of 12 to 412 cfm (20 m³/h to 700 m³/h)
- Air flow direction may be reversed from blowing (standard setting) to extracting
- Quick assembly
- UL type 12 (IP 54) as standard
- All fans are also available with EMC shielding
- Made in USA

## Important:

- The prescribed heat loss and the maximum anticipated ambient temperature define the required volumetric flow
- Always use the filter fan units and outlet filters together

**For calculations and to download Therm software, refer to our website: www.rittal-corp.com**

## Air Displacement: 12 - 39 cfm



**Protection Ratings:**
UL, cUL recognized, CE, CSA

UL file: E76083

**Configuration:**
Filter fan unit ready for installation, including filter mats.

**Property Rights:**
German Registered Design
No. M 93 04 846

**For additional technical information, please visit www.rittal-corp.com**

| **Part No. RAL 7035** | | **3321.107** | **3321.117** | **3321.027** | **3321.047** | **3322.107** | **3322.117** | **3322.027** | **3322.047** |
|---|---|---|---|---|---|---|---|---|---|
| **Part No. RAL 9005**[1] | | **9963.647** | **9963.648** | **–** | | **9963.649** | **9963.650** | **–** | |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 24 (DC) | 48 (DC) | 230, 50/60 | 115, 50/60 | 24 (DC) | 48 (DC) |
| Dimensions inches (mm) | Height (H1)/ Width (B1) | 5 (116) | | | | 6 (148) | | | |
| | Height (H2)/ Width (B2) | 4 + 0.03 (92 + 0.8)[1] | | | | 5 (124)[1] | | | |
| | Depth (T1) | 0.4 (10) | | | | 0.4 (10) | | | |
| Max. installation depth inches (mm) | Depth (T2) | 2 (42) | | | | 2 (57) | | | |
| Air displacement, unimpeded air flow | | 12/15 cfm (20/25 $m^3$/h) | | 12 cfm (20 $m^3$/h) | | 32/39 cfm (55/66 $m^3$/h) | | 32 cfm (55 $m^3$/h) | |
| Air displacement with outlet filter including standard filter mat | | 1 x 3321.207: 9/11 cfm (15/18 $m^3$/h) | | | | 1 x 3322.207: 25/29 cfm (43/50 $m^3$/h) | | | |
| Axial fan | | Self-starting shaded pole motor | | DC motor | | Self-starting shaded pole motor | | DC motor | |
| Rated current maximum | | 69 mA<br>58 mA | 138 mA<br>115 mA | 125 mA | 90 mA | 0.12 A<br>0.11 A | 0.24 A<br>0.23 A | 0.35 A | 90 mA |
| Power | | 12.5/10.3 W | | 3.0 W | 4.1 W | 19.0/18.0 W | | 7.7 W | 4.4 W |
| Noise level | | 41/46 dB (A) | | 41 dB (A) | | 46/49 dB (A) | | 46 dB (A) | |
| Temperature range | | 13 to 131° F (–10 to +55° C) | | | | | | | |
| Color | | RAL 7035 (light gray)/ RAL 9005 (black) | | | | | | | |
| Environmental ratings | | UL Type 12 (IP 54) standard | | | | | | | |
| | | UL Type 3R (IP 56) when using a hose-proof hood | | | | | | | |
| Part No. outlet filter RAL 7035 | | 3321.207 | | | | 3322.207 | | | |
| Part No. outlet filter RAL 9005 | | 9963.661 | | – | | 9963.662 | | – | |

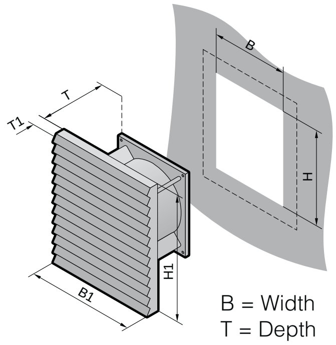
| **Accessories** | PU | | | | | | | | | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| Spare filter mats | 5 | 3321.700 | | | | 3322.700 | | | | 326 |
| Thermostat | 1 | 3110.000 | | | | | | | | 322 |
| Temperature indicator | 1 | 3114.200 | | | – | 3114.200 | | | – | 321 |
| Speed control | 1 | 3120.200 | | | | | | | | 322 |
| Stainless steel hose-proof hood | 1 | 3321.800 | | | | 3322.800 | | | | 328 |
| RAL 7035 hose-proof hood | 1 | 3321.835 | | | | 3322.835 | | | | 328 |

[1] For metal thickness > 13 ga (2.5 mm), the cut-out H2/B2 (W) must be 0.04" (1 mm) larger.
Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Filter Fan

## Air Displacement: 62 - 106 cfm



B = Width
T = Depth

**Protection Ratings:**
UL, cUL recognized, CE, CSA

UL file: E76083

**Configuration:**
Filter fan unit ready for installation, including filter mats.

**Property Rights:**
German Registered Design
No. M 93 04 846

**For additional technical information, please visit www.rittal-corp.com**

| **Part No. RAL 7035** | | **3323.107** | **3323.117** | **3323.027** | **3323.047** | **3324.107** | **3324.117** | **3324.027** | **3324.047** |
|---|---|---|---|---|---|---|---|---|---|
| **Part No. RAL 9005** | | **9963.651** | **9963.652** | **–** | | **9963.653** | **9963.654** | **–** | |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 24 (DC) | 48 (DC) | 230, 50/60 | 115, 50/60 | 24 (DC) | 48 (DC) |
| Dimensions inches (mm) | Height (H1)/ Width (B1) | 8 (204) | | | | 10 (255) | | | |
| | Height (H2)/ Width (B2) | 7 (177)[1] | | | | 9 (224)[1] | | | |
| | Depth (T1) | 1 (12) | | | | 1 (12) | | | |
| Max. installation depth inches (mm) | Depth (T2) | 3 (82) | | | | 4 (105) | | | |
| Air displacement, unimpeded air flow | | 62/71 cfm (105/120 $m^3$/h) | | 62 cfm (105 $m^3$/h) | | 106/94 cfm (180/160 $m^3$/h)[2] | | 106 cfm (180 $m^3$/h) | |
| Air displacement with outlet filter including standard filter mat | | 1 x 3323.207: 42/48 cfm (71/82 $m^3$/h) | | | | 1 x 3325.207: 68/56 cfm (115/95 $m^3$/h) | | | |
| | | 2 x 3323.207: 50/58 cfm (85/98 $m^3$/h) | | | | 2 x 3325.207: 97/82 cfm (165/140 $m^3$/h) | | | |
| | | 1 x 3325.207: 46/53 cfm (78/90 $m^3$/h) | | | | 1 x 3326.207: 91/78 cfm (155/130 $m^3$/h) | | | |
| Axial fan | | Self-starting shaded pole motor | | DC motor | | Self-starting shaded pole motor | | DC motor | |
| Rated current maximum | | 0.12 A | 0.24 A | 0.35 A | 90 mA | 0.19 A | 0.38 A | 0.3 A | 0.34 A |
| | | 0.11 A | 0.23 A | | | 0.20 A | 0.40 A | | |
| Power | | 19.0 W/18.0 W | | 8.0 W | 4.3 W | 30.0 W/35.0 W | | 7.2 W | 14.0 W |
| Noise level | | 46/49 dB (A) | | 46 dB (A) | | 52/48 dB (A) | | 52 dB (A) | |
| Temperature range | | 13 to 131° F (–10 to +55° C) | | | | | | | |
| Color | | RAL 7035 (light gray)/ RAL 9005 (black) | | | | | | | |
| Environmental ratings | | UL Type 12 (IP 54) standard | | | | | | | |
| | | IP 55 when using an additional fine filter mat | | | | | | | |
| | | UL Type 3R (IP 56) when using a hose-proof hood | | | | | | | |
| Part No. outlet filter RAL 7035 | | 3323.207 | | | | 3325.207 | | | |
| Part No. outlet filter RAL 9005 | | 9963.663 | | – | | 9963.664 | | – | |

| **Accessories** | PU | | | | | | | | | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| Spare filter mats | 5 | 3171.100 | | | | 3172.100 | | | | 326 |
| Fine filter mats | 5 | 3181.100 | | | | 3182.100 | | | | 326 |
| Thermostat | 1 | 3110.000 | | | | | | | | 322 |
| Temperature indicator | 1 | 3114.200 | | | – | 3114.200 | | | – | 321 |
| Speed control | 1 | 3120.200 | | | | | | | | 322 |
| Stainless steel hose-proof hood | 1 | 3323.800 | | | | 3324.800 | | | | 328 |
| RAL 7035 hose-proof hood | 1 | 3323.835 | | | | 3324.835 | | | | 328 |

[1] For metal thickness > 13 ga (2.5 mm), the cut-out H2/B2 (W) must be 0.04" (1 mm) larger.

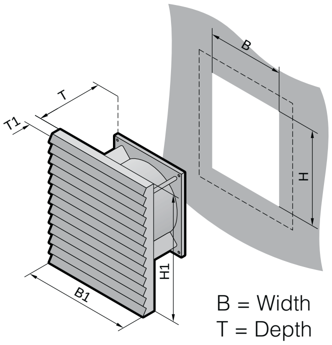
[2] In order to reduce the noise level of the fan, the shaded pole motor was modified so that the electrical and torque characteristics at 60 Hz would be decreased (as compared to 50 Hz).

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Filter Fan

## Air Displacement: 135 - 156 cfm



B = Width
T = Depth

**Protection Ratings:**
UL, cUL recognized, CE, CSA

UL file: E76083

**Configuration:**
Filter fan unit ready for installation, including filter mats.

**Property Rights:**
German Registered Design No. M 93 04 846

**For additional technical information, please visit www.rittal-corp.com**

| **Part No. RAL 7035** | | **3325.107** | **3325.117** | **3325.027** | **3325.047** |
|---|---|---|---|---|---|
| **Part No. RAL 9005** | | **9963.655** | **9963.656** | **–** | |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 24 (DC) | 48 (DC) |
| Dimensions inches (mm) | Height (H1)/ Width (B1) | 10 (255) | | | |
| | Height (H2)/ Width (B2) | 9 (224)[1] | | | |
| | Depth (T1) | 1 (12) | | | |
| Max. installation depth inches (mm) | Depth (T2) | 4 (105) | | | |
| Air displacement, unimpeded air flow | | 135/156 cfm (230/265 m³/h) | | 135 cfm (230 m³/h) | |
| Air displacement with outlet filter including standard filter mat | | 1 x 3325.207: 100/121 cfm (170/205 m³/h) | | | |
| | | 2 x 3325.207: 118/135 cfm (200/230 m³/h) | | | |
| | | 1 x 3326.207: 112/127 cfm (190/215 m³/h) | | | |
| Axial fan | | Self-starting shaded pole motor | | DC motor | |
| Rated current maximum | | 0.28 A | 0.53 A | 0.59 A | 0.31 A |
| | | 0.24 A | 0.49 A | | |
| Power | | 41.0/38.0 W | | 14.0 W | 15.0 W |
| Noise level | | 54/56 dB (A) | | 54 dB (A) | |
| Temperature range | | 13 to 131° F (–10 to +55° C) | | | |
| Color | | RAL 7035 (light gray)/ RAL 9005 (black) | | | |
| Environmental ratings | | UL Type 12 (IP 54) standard | | | |
| | | IP 55 when using an additional fine filter mat | | | |
| | | UL Type 3R (IP 56) when using a hose-proof hood | | | |
| Part No. outlet filter RAL 7035 | | 3325.207 | | | |
| Part No. outlet filter RAL 9005 | | 9963.664 | | – | |

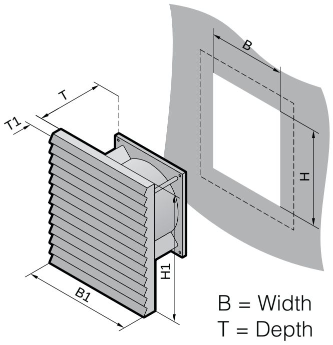
| **Accessories** | PU | | | | | Page |
|---|---|---|---|---|---|---|
| Spare filter mats | 5 | 3172.100 | | | | 326 |
| Fine filter mats | 5 | 3182.100 | | | | 326 |
| Thermostat | 1 | 3110.000 | | | | 322 |
| Temperature indicator | 1 | 3114.200 | | | – | 321 |
| Speed control | 1 | 3120.200 | | | | 322 |
| Stainless steel hose-proof hood | 1 | 3324.800 | | | | 328 |
| RAL 7035 hose-proof hood | 1 | 3324.835 | | | | 328 |

[1] For metal thickness > 13 ga (2.5 mm), the cut-out H2/B2 (W) must be 0.04" (1 mm) larger.
Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Filter Fan

## Air Displacement: 323 - 424 cfm



B = Width
T = Depth

**Protection Ratings:**
UL, cUL recognized, CE, CSA

UL file: E76083

**Configuration:**
Filter fan unit ready for installation, including filter mats.

**Property Rights:**
German Registered Design
No. M 93 04 846

**For additional technical information, please visit www.rittal-corp.com**

| **Part No. RAL 7035** | | **3326.107** | **3326.117** | **3327.107** | **3327.117** | **3327.147** |
|---|---|---|---|---|---|---|
| **Part No. RAL 9005** | | **9963.657** | **9963.658** | **9963.659** | **9963.660** | **–** |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 | 400/460, 3~, 50/60 |
| Dimensions inches (mm) | Height (H1)/ Width (W1) | 13 (323) | | | | |
| | Height (H2)/ Width (W2) | 12 (292)[1] | | | | |
| | Depth (D1) | 1 (12) | | | | |
| Max. installation depth inches (mm) | Depth (D2) | 5 (125) | | 6 (145) | | |
| Air displacement, unimpeded air flow | | 323/353 cfm (550/600 $m^3$/h) | | 412/424 cfm (700/720 $m^3$/h) | | |
| Air displacement with outlet filter including standard filter mat | | 1 x 3326.207: 212/230 cfm (360/390 $m^3$/h) | | 1 x 3326.207: 309/338 cfm (525/575 $m^3$/h) | | |
| | | 2 x 3326.207: 259/291 cfm (440/495 $m^3$/h) | | | | |
| Axial fan | | Capacity motor | | | | Rotary current motor |
| Rated current maximum | | 0.29 A | 0.58 A | 0.65 A | 1.5 A | 0.27 A |
| | | 0.35 A | 0.70 A | 0.95 A | 2.0 A | 0.37 A |
| Power | | 64.0/80.0 W | | 115.0/212.0 W | 167.0/230.0 W | 146.0/220.0 W |
| Noise level | | 59/61 dB (A) | | 75/76 dB (A) | | |
| Temperature range | | 13 to 131° F (–10 to +55° C) | | | | |
| Color | | RAL 7035 (light gray)/ RAL 9005 (black) | | | | |
| Environmental ratings | | UL Type 12 (IP 54) standard | | | | |
| | | IP 55 when using an additional fine filter mat | | | | |
| | | UL Type 3R (IP 56) when using a hose-proof hood | | | | |
| Part No. outlet filter RAL 7035 | | 3326.207 | | | | |
| Part No. outlet filter RAL 9005 | | 9963.583 | | | | – |

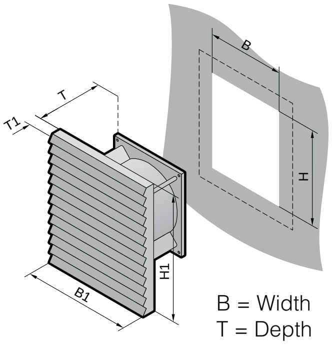
| **Accessories** | PU | | | | | | Page |
|---|---|---|---|---|---|---|---|
| Spare filter mats | 5 | 3173.100 | | 3327.700 | | | 326 |
| Fine filter mats | 5 | 3183.100 | | | | | 326 |
| Thermostat | 1 | 3110.000 | | | | – | 322 |
| Temperature indicator | 1 | 3114.200 | | | | – | 321 |
| Speed control | 1 | 3120.200 | | | | | 322 |
| Stainless steel hose-proof hood | 1 | 3326.800 | | | | | 328 |
| RAL 7035 hose-proof hood | 1 | 3326.835 | | | | | 328 |

[1] For metal thickness > 13 ga (2.5 mm), the cut-out H2/B2 (W) must be 0.04" (1 mm) larger.
Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Filter Fan - EMC Shielded

## Air Displacement: 12 - 71 cfm



**Configuration:**
Filter fan unit ready for installation, including drilling template, filter mat and assembly parts.

**Protection Ratings:**
UL, cUL recognized, CE, CSA

UL file: E76083

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | | **3321.607** | **3321.617** | **3322.607** | **3322.617** | **3323.607** | **3323.617** |
|---|---|---|---|---|---|---|---|
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 |
| Dimensions inches (mm) | Height (H1)/ Width (W1) | 5 (116) | | 6 (148) | | 8 (204) | |
| | Height (H2)/ Width (W2) | 4 + 0.03 (92 + 0.8)[1] | | 5 (124)[1] | | 7 (177)[1] | |
| | Depth (D1) | 0.4 (10) | | 1 (10.5) | | 1 (12.5) | |
| Max. installation depth inches (mm) | Depth (D2) | 2 (42) | | 2 (57) | | 3 (82) | |
| Air displacement, unimpeded air flow | | 12/15 cfm (20/25 m$^3$/h) | | 32/39 cfm (55/66 m$^3$/h) | | 62/71 cfm (105/120 m$^3$/h) | |
| Air displacement with outlet filter including standard filter mat | | 1 x 3321.267: 9/11 cfm (15/18 m$^3$/h) | | 1 x 3322.267: 25/29 cfm (43/50 m$^3$/h) | | 1 x 3323.267: 42/48 cfm (71/82 m$^3$/h) | |
| | | | | 2 x 3322.267: 28/32 (48/55 m$^3$/h) | | 2 x 3323.267: 50/58 cfm (85/98 m$^3$/h) | |
| | | | | 1 x 3323.267: 28/32 (48/55 m$^3$/h) | | 1 x 3325.267: 46/53 cfm (78/90 m$^3$/h) | |
| Axial fan | | Self-starting shaded pole motor | | | | | |
| Rated current maximum | | 69 mA/ 58 mA | 138 mA/ 115 mA | 0.12 A/ 0.11 A | 0.24 A/ 0.23 A | 0.12 A/ 0.11 A | 0.24 A/ 0.23 A |
| Power | | 12.5/10.3 W | | 19.0/18.0 W | | | |
| Noise level | | 41/46 dB (A) | | 46/49 dB (A) | | | |
| Temperature range | | 13 to 131° F (–10 to +55° C) | | | | | |
| Color | | RAL 7035 (light gray)[2] | | | | | |
| Environmental ratings | | UL Type 12 (IP 54) standard | | | | | |
| Part No. outlet filter - EMC | | 3321.267 | | 3322.267 | | 3323.267 | |

| **Accessories** | PU | | | | Page |
|---|---|---|---|---|---|
| Spare filter mats | 5 | 3321.700 | 3322.700 | 3171.100 | 326 |
| Fine filter mats | 5 | – | | 3181.100 | 326 |
| Thermostat | 1 | 3110.000 | | | 322 |
| Temperature indicator | 1 | 3114.200 | | | 321 |
| Speed control | 1 | 3120.200 | | | 322 |
| Stainless steel hose-proof hood | 1 | 3321.800 | 3322.800 | 3323.800 | 328 |
| RAL 7035 hose-proof hood | 1 | 3321.835 | 3322.835 | 3323.835 | 328 |

[1] For metal thickness > 13 ga (2.5 mm), the cut-out H2/B2 (W) must be 0.04" (1 mm) larger.

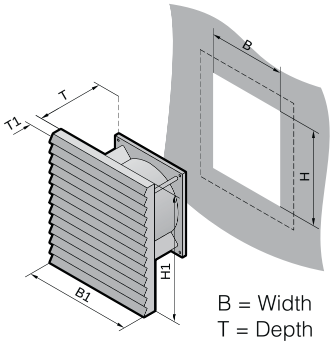
[2] RAL 9005 (black) by request.

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Filter Fan - EMC Shielded

## Air Displacement: 94 - 423 cfm



B = Width
T = Depth

**Configuration:**
Filter fan unit ready for installation, including drilling template, filter mat and assembly parts.

**Protection Ratings:**
UL, cUL recognized, CE, CSA

UL file: E76083

**For additional technical information, please visit www.rittal-corp.com**

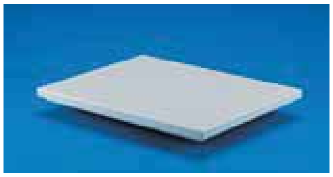
| **Part No.** | | **3324.607** | **3324.617** | **3325.607** | **3325.617** | **3326.607** | **3326.617** | **3327.607** | **3327.617** |
|---|---|---|---|---|---|---|---|---|---|
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 |
| Dimensions inches (mm) | Height (H1)/ Width (W1) | 10 (255) | | | | 13 (323) | | | |
| | Height (H2)/ Width (W2) | 9 (224)[1] | | | | 12 (292)[1] | | | |
| | Depth (D1) | 1 (12) | | | | 1 (12) | | | |
| Max. installation depth inches (mm) | Depth (D2) | 4 (105) | | | | 5 (129) | | 6 (145) | |
| Air displacement, unimpeded air flow | | 106/94 cfm (180/160 m$^3$/h)[3] | | 156/ 135 cfm (265/230 m$^3$/h) | | 353/324 cfm (600/550 m$^3$/h) | | 423/412 cfm (720/700 m$^3$/h) | |
| Air displacement with outlet filter including standard filter mat | | 1 x 3325.267: 68/56 cfm (115/95 m$^3$/h)<br>2 x 3325.267: 97/82 cfm (165/140 m$^3$/h)<br>1 x 3326.267: 91/77 cfm (155/130 m$^3$/h) | | 1 x 3325.267: 100/120 cfm (170/205 m$^3$/h)<br>2 x 3325.267: 118/135 cfm (200/230 m$^3$/h)<br>1 x 3326.267: 111/127 cfm (190/215 m$^3$/h) | | 1 x 3325.267: 100/120 cfm (170/205 m$^3$/h)<br>2 x 3325.267: 118/135 cfm (200/230 m$^3$/h)<br>1 x 3326.267: 212/230 cfm (360/390 m$^3$/h) | | 1 x 3326.267: 309/338 cfm (525/575 m$^3$/h) | |
| Axial fan | | Self-starting shaded pole motor | | | | Capacity motor | | | |
| Rated current maximum | | 0.19 A/ 0.20 A | 0.38 A/ 0.40 A | 0.28 A/ 0.24 A | 0.53 A/ 0.49 A | 0.29 A/ 0.35 A | 0.58 A/ 0.70 A | 0.65 A/ 0.95 A | 1.50 A/ 2.00 A |
| Power | | 30.0/35.0 W | | 41.0/38.0 W | | 64.0/80.0 W | | 155.0/212.0 W | 167.0/230.0 W |
| Noise level | | 52/48 dB (A) | | 54/56 dB (A) | | 59/61 dB (A) | | 75/76 dB (A) | |
| Temperature range | | 13 to 131° F (–10 to +55° C) | | | | | | | |
| Color | | RAL 7035 (light gray)[2] | | | | | | | |
| Environmental ratings | | UL Type 12 (IP 54) standard | | | | | | | |
| Part No. outlet filter - EMC | | 3325.267 | | | | 3326.267 | | | |

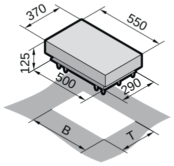
| **Accessories** | PU | 3324.607 | 3324.617 | 3325.607 | 3325.617 | 3326.607 | 3326.617 | 3327.607 | 3327.617 | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| Spare filter mats | 5 | 3172.100 | | | | 3173.100 | | 3327.700 | | 326 |
| Fine filter mats | 5 | 3182.100 | | | | 3183.100 | | | | 326 |
| Thermostat | 1 | 3110.000 | | | | | | | | 322 |
| Temperature indicator | 1 | 3114.200 | | | | | | | | 321 |
| Speed control | 1 | 3120.200 | | | | | | | | 322 |
| Stainless steel hose-proof hood | 1 | 3324.800 | | | | 3326.800 | | | | 328 |
| RAL 7035 hose-proof hood | 1 | 3324.835 | | | | 3326.835 | | | | 328 |

[1] For metal thickness > 13 ga (2.5 mm), the cut-out H2/B2 (W) must be 0.04" (1 mm) larger.
[2] RAL 9005 (black) by request.
[3] In order to reduce the noise level of the fan, the shaded pole motor was modified so that the electrical and torque characteristics at 60 Hz would be decreased (as compared to 50 Hz).
Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

## Air Displacement: 212 - 471 cfm





B = Width
T = Depth

## Roof-mounted fan and vent attachment

**for TS**

The active roof-mounted fan and the passive vent attachment (TS 8801.380) integrate perfectly into the system-wide mounting concept of the Rittal TopTherm platform. They fit precisely onto the cutouts of the small and medium performance category of TopTherm roof-mounted cooling units. Of course, they may also be mounted on any sufficiently large roof surface.

TS roof plates with prepared mounting cut-outs are additionally available.

**Roof-mounted fan supply includes:**
Unit ready to connect with built-in radial fan, sealing material and assembly parts.

**Vent attachment:**
see page 324.

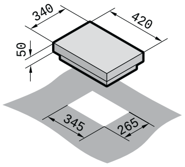
**Protection category:**
IP 43 to EN 60 529

**Protection rating:**
CSA Type 12, CE

**For additional technical information, please visit www.rittal-corp.com**

| Part No. | 3149.410 | 3149.420 | 3149.440[1] | 3149.810 | 3149.820 | 3149.840[1] | 8801.380 |
|---|---|---|---|---|---|---|---|
| Rated operating voltage V/Hz | 115, 50/60 | 230, 50/60 | 400, 3~, 50/60<br>460, 3~, 60 | 115, 50/60 | 230, 50/60 | 400, 3~, 50/60<br>460, 3~, 60 | Roof vent |
| Air throughput, unimpeded air flow | 235 cfm (400 m³/h) | | | 471 cfm (800 m³/h) | | | Without motor |
| Required mounting cut-out W x D inches (mm) | 18.7 x 10.2 (475 x 260) | | | | | | 19.3 x 15.4<br>(490 x 390) |
| Power consumption of fan | 120 W/170 W | | 95 W/140 W | 170 W/225 W | | 180 W/310 W | |
| Rated current of fan | 1.1/1.6 A | 0.55/0.88 A | 0.35/0.35 A | 1.5/2.2 A | 0.75/1.1 A | 0.35/0.55 A | |
| Temperature range | 13 to 131° F (–10 to +60° C) | | | | | | |
| Noise level | 68/69 dB (A) | | | 69/70 dB (A) | | | |
| Weight lb (kg) | 22 (10) | | | 24 (11) | | | 13 (6) |
| Color | RAL 7035 (light gray) | | | | | | |
| **Accessories** | | | | | | | |
| Roof plate 600 x 600 mm for TS 8 with cut-out | 8801.300 | | | | | | 8801.310 |
| Roof plate 600 x 800 mm for TS 8 with cut-out | 8801.320 | | | | | | 8801.330 |
| Roof plate 1200 x 600 mm for TS 8 with cut-out | – | | | | | | 8801.350 |
| Temperature indicator | 3114.200 | | – | 3114.200 | | – | |
| Speed control | 3120.200 | | – | 3120.200 | | – | |

[1] CSA pending



## Roof-mounted fan

- The roof-mounted fan is easily installed using 6 screws. The sealing tape supplied can be used to seal it against the enclosure.
- The attachment screws are invisible from the outside.
- The roof-mounted fan casing has a large air outlet surface and labyrinth air ducting.

**For additional technical information, please visit www.rittal-corp.com**

**Protection category:**
IP 43 to EN 60 529. By additionally installing the filter holder with filter mat 3175.000, with roof vent 3148.007 a protection category of IP 44 is achieved.

**Protection rating:**
CSA Type 12, CE

Fully wired unit ready for connection with built-in radial fan, sealing material and assembly parts, connection cable (3 m), drilling template.

**Accessory:**
Filter holder, see page 325.

| Part No. | 3149.007[1] | 3169.007 | 3148.007[1] |
|---|---|---|---|
| Rated operating voltage V/Hz | 230, 50/60 | 115, 50/60 | Without fan motor |
| Air throughput | 212 cfm (360 m³/h) | | |
| Rated current max. | 0.2 A | 0.55 A | |
| Power consumption | 42 W | 65 W | |
| Temperature range | 13 to 131° F (–10 to +60° C) | | |
| Noise level | 53 dB (A) | | |
| Weight lb (kg) | 1.7 (7.8) | | |
| Color | RAL 7035 (light gray), textured enamel | | |

[1] CSA pending

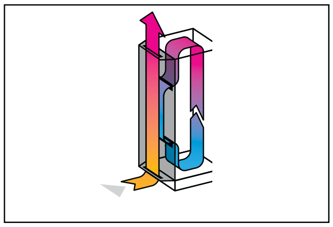
Special voltages available on request. We reserve the right to make technical modifications.

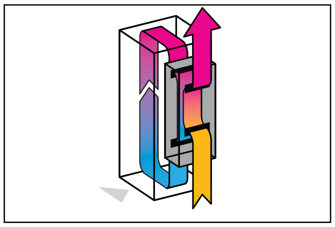
Inch and pound measurements are rounded to the nearest whole number.

## Features

As the footprint for electronics continue to decrease and internal and external temperatures continue to increase, proper cooling becomes essential to prolong the life of your electronics and prevent costly downtime. No matter the application or the cooling requirements, Rittal has solutions to meet your needs. Rittal's TopTherm air conditioners are the cost-effective, energy-efficient solution for protecting sensitive electronics from heat, dust and other significant risk factors.

## Selection criteria





**Roofmount air conditioners**

Up to four cold air outlet openings and the optional use of ducts allow the user to control cold air routing through the enclosure. Heated air is expelled to the rear, left, right and optionally upwards which allows enclosures to be bayed together or to be installed close to the wall.

**Wallmount air conditioners**

You can choose from internal mounting, partial internal mounting and external mounting based on your space requirements. Cold air effectively flows throughout the enclosure due to the large distances between the air intake and outlet openings.

**Rittal Efficiency Label**

The new Rittal Efficiency Label, created in accordance with DIN EN ISO 14021, is affixed to all of our cooling systems that have been proven to be environmentally friendly for your application and for your surroundings as well.

## Intelligent control

Choose from basic and comfort control versions. Both versions offer a comprehensive range of functions. Essential control electronics are well protected and cooled in the inner circuit.

Both versions have the following properties:

- Three voltage options: 115 V, 230 V, 400/460 V 3~
- Integrated start-up delay and door limit switch function
- Icing protection function
- Monitoring of all motors
- Phase monitoring for three phase units

**Basic Controller:**

- Visualization of the operating status by a LED display
- Switching hysteresis: 5 C
- Floating fault signal contact in case of over temperature
- Set-point adjustable from the outside by a potentiometer (setting range 68 – 131° F [20 – 55° C])

**Comfort Controller:**

- Switching hysteresis: 2 – 10 C preset to 5 C
- System alarm, individually configurable for 2 floating fault signal contacts
- Visualization of the current enclosure internal temperature and all system messages on the display
- System information available via download for diagnostics using 3159.100 RiDiag II software
- Optional extension card for integration into monitoring systems (CMC)
- Master slave operation possible for up to 10 air conditioners

## Roofmount air conditioners

**Flexible performance**

Only 3 mounting cut-outs for 6 different output categories in 28 design versions.

**Targeted air routing in the enclosure**

The internal air circulation is targeted and effective: The heated air is extracted centrally. Air exhaust occurs in the four corners, based on your specific requirements.

## Wallmount air conditioners

**Wallmount air conditioners – Practical and stylish**

The mounting cut-out is selected depending on the mounting type: External, internal or partial internal mount.

**Effective air routing inside the enclosure**

The large distance between the air intake and outlet in the internal circuit makes wallmount air conditioners particularly effective. This ensures optimum air dissipation inside the enclosure, and air short-circuits are avoided.

## Wallmount UL Type 4X air conditioners

**Exterior shroud for component protection in harsh environments**

Vents allow for effective airflow through the air conditioner while maintaining the protection provided by the shroud.

**Monitoring made easy**

Rittal air conditioners can be ordered with either basic or comfort controllers, even in UL Type 4X versions.

### Benefits:

- Useful cooling capacity from 1000 to 18400 BTU (300 to 5400 W)
- Extensive control and monitoring features, even with the basic version
- Three-phase air conditioners support multiple voltages as standard
- Uniform, output-related, cross-system mounting cut-outs, to match TopTherm air/air heat exchangers
- Targeted, individual air routing
- Made in USA

### Important:

- Avoid overloading the roofplate by using supports (see TS8 system accessories)
- Air intake and outlet openings in the internal and external circuit must not be blocked (allow a minimum distance of 8")

## Features

Standard Rittal TopTherm Plus air conditioners are available off the shelf with RiNano coating of the condenser coils and an integrated condensate evaporator utilizing PTC resistance technology.

## TopTherm Plus and RiNano

**RiNano coatings were tested at the Volkswagen gear-box manufacturing center in Kassel, Germany.**

**RiNano coating makes it harder for particles to stick to the condenser coil and consequently the condenser coil remains clean longer than untreated material.**

**Without RiNano, the oily ambient air leaves noticeable contamination.**

### An innovative finish for long lasting cooling performance

Layers of dust on the outer air circuit surfaces of air conditioners can diminish effectiveness by 30 to 50% due to an insulating effect. A revolutionary RiNano-finish helps prevent this because of its water, dirt and oil repelling properties; it will help provide long lasting, consistent cooling performance. Service and maintenance can be scheduled less frequently and cleaning will be much easier.

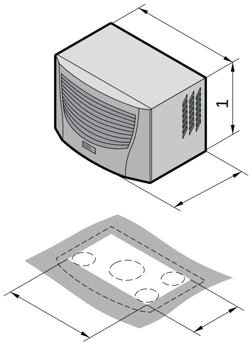
## TopTherm Plus and Integrated Condensate Evaporator

TopTherm Plus units come standard with an electronic condensate evaporator which prevents the collection of condensation on sensitive electronics. This eliminates the need to collect and dissipate condensation. (Applies to all roofmount air conditioners and all wallmount air conditioners with more than 3400 BTU.)

The integrated condensate evaporator provided in all TopTherm Plus air conditioners with more than 3400 BTU's adjusts its thermal output automatically, using PTC (Positive Temperature Coefficient) technology. The PTC technology is energy efficient and can evaporate up to 3.4 oz. of condensate per hour, eliminating the need for drain hoses or collection bottles.

# Air Conditioner - Roofmount

## Useful Cooling Capacity: 1581 - 3081 BTU (463 - 903 W)



**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Air conditioners with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**For additional technical information, please visit www.rittal-corp.com**

**Property rights:**
German registered design no. 402 02 324
German registered design no. 402 02 325

| | | | | | | |
|---|---|---|---|---|---|---|
| **Part No. with basic controller, RAL 7035 (light gray)** | | **3382.100** | **3382.110** | **3359.100** | **3359.110** | **3359.140** |
| **Part No. with comfort controller, RAL 7035 (light gray)** | | **3382.500** | **3382.510** | **3359.500** | **3359.510** | **3359.540** |
| **Part No. with basic controller, Type 304 stainless steel** | | **3382.200** | **3382.210** | **3359.200** | **3359.210** | **3359.240** |
| **Part No. with comfort controller, Type 304 stainless steel** | | **3382.600** | **3382.610** | **3359.600** | **3359.610** | **3359.640** |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 |
| Dimensions inches (mm) | H x W x D | 16 x 24 x 15 (417 x 597 x 380) | | | | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 1581 (463) | | 3081 (903) | | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 1708/1742 (500/510) | | 2561/2766 (750/810) | | |
| | $T_i$ 95 $T_a$ 122 | 922/1264 (270/370) | | 1861/2015 (545/590) | | |
| Rated current maximum | | 3.3 A/3.5 A | 6.7 A/7.2 A | 3.6 A/4.5 A | 7.2 A/9.0 A | 2.1 A/2.4 A |
| Starting current | | 9.2 A/10.2 A | 18.4 A/18.4 A | 10.0 A/10.7 A | 20.0 A/21.4 A | 5.8 A/6.2 A |
| Pre-fuse T | | 10.0 A | | | 16.0 A | 10.0 A |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 550 W/550 W | 510 W/560 W | 550 W/660 W | 560 W/675 W | |
| | $T_i$ 95 $T_a$ 122 | 550 W/590 W | 560 W/610 W | 630 W/740 W | 640 W/750 W | |
| Cooling coefficient j = $Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 1.0 | | 1.4 | | |
| Refrigerant | | R134a, 8.8 oz (250 g) | | R134a, 10.6 oz (300 g) | | |
| Maximum allowable operating pressure | | 363 psi (25 bar) | | | | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | | | | |
| Environmental rating | | UL Type 12 (IP 54) | | | | |
| Duty cycle | | 100% | | | | |
| Type of connection | | Plug-in terminal strip | | | | |
| Weight lb (kg) | | 66.1 (30) | 77.1 (35) | 70.5 (32) | 81.5 (37) | |
| Air displacement of fans (unimpeded air flow) | External circuit | 536 cfm (910 $m^3$/h) | | | | |
| | Internal circuit | 259 cfm (440 $m^3$/h) | | | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | | | |

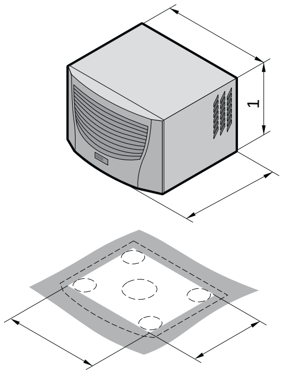
| **Accessories** | PU | | Page |
|---|---|---|---|
| Filter mats | 3 | 3286.500 | 328 |
| Metal filters | 1 | 3286.510 | 327 |
| Quick-change frame | 1 | 3286.700 | – |
| Door-operated switch | 1 | 4127.000 | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Air ducting system | 1 | 3286.870 | 319 |
| Shallow air ducting system | 1 | 3286.850 | 319 |
| Plugs for interior air outlet | 2 | 3286.780 | 320 |
| Condensate hose | 1 | 3301.612 | 324 |

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Roofmount

## Useful Cooling Capacity: 4462 BTU (1307 W)



**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Integration of the air conditioners with comfort controller into a monitoring system can be achieved with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

**Protection Ratings**:
UL and cUL recognized, CSA

UL file: SA8250

**For additional technical information, please visit www.rittal-corp.com**

**Property Rights:**
German registered design no. 402 02 324
German registered design no. 402 02 325

| | | | | |
|---|---|---|---|---|
| **Part No. with basic controller, RAL 7035 (light gray)** | | **3383.100** | **3383.110** | **3383.140** |
| **Part No. with comfort controller, RAL 7035 (light gray)** | | **3383.500** | **3383.510** | **3383.540** |
| **Part No. with basic controller, Type 304 stainless steel** | | **3383.200** | **3383.210** | **3383.240** |
| **Part No. with comfort controller, Type 304 stainless steel** | | **3383.600** | **3383.610** | **3383.640** |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 |
| Dimensions inches (mm) | H x W x D | 16 x 24 x 19 (417 x 597 x 475) | | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 4462 (1307) | | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 3415/3688 (1000/1080) | | |
| | $T_i$ 95 $T_a$ 122 | 2596/2800 (760/820) | | |
| Rated current maximum | | 4.9 A/5.1 A | 9.5 A/10.0 A | 2.8 A/2.8 A |
| Starting current | | 15.5 A/15.5 A | 25.3 A/24.3 A | 8.0 A/8.8 A |
| Pre-fuse T | | 10.0 A | 16.0 A | 10.0 A |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 690 W/790 W | 720 W/800 W | |
| | $T_i$ 95 $T_a$ 122 | 800 W/890 W | 810 W/900 W | |
| Cooling coefficient j = $Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 1.4 | | |
| Refrigerant | | R134a, 17.6 oz (500 g) | | |
| Maximum allowable operating pressure | | 363 psi (25 bar) | | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | | |
| Environmental rating | | UL Type 12 (IP 54) | | |
| Duty cycle | | 100% | | |
| Type of connection | | Plug-in terminal strip | | |
| Weight lb (kg) | | 88.2 (40) | 101.4 (46) | |
| Air displacement of fans | External circuit | 1036 cfm (1760 m$^3$/h) | | |
| | Internal circuit | 259 cfm (440 m$^3$/h) | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Filter mats | 3 | 3286.500 | 328 |
| Metal filters | 1 | 3286.510 | 327 |
| Door-operated switch | 1 | 4127.000 | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Air ducting system | 1 | 3286.870 | 319 |
| Shallow air ducting system | 1 | 3286.850 | 319 |
| Plugs for interior air outlet | 2 | 3286.880 | 320 |
| Condensate hose | 1 | 3301.612 | 324 |

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Roofmount

## Useful Cooling Capacity: 6009 - 8272 BTU (1760 - 2423 W)

**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Air conditioners with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

**Property Rights:**
German registered design no. 402 02 324
German registered design no. 402 02 325

**For additional technical information, please visit www.rittal-corp.com**

| **Part No. with basic controller, RAL 7035 (light gray)** | | **3384.100** | **3384.110** | **3384.140** | **3385.100** | **3385.110** | **3385.140** |
|---|---|---|---|---|---|---|---|
| **Part No. with comfort controller, RAL 7035 (light gray)** | | **3384.500** | **3384.510** | **3384.540** | **3385.500** | **3385.510** | **3385.540** |
| **Part No. with basic controller, Type 304 stainless steel** | | **3384.200** | **3384.210** | **3384.240** | **3385.200** | **3385.210** | **3385.240** |
| **Part No. with comfort controller, Type 304 stainless steel** | | **3384.600** | **3384.610** | **3384.640** | **3385.600** | **3385.610** | **3385.640** |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 |
| Dimensions inches (mm) | H x W x D | 16 x 24 x 19 (417 x 597 x 475) | | | | | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 6009 (1760) | | | 8272 (2423) | | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 5123/5191 (1500/1520) | | | 6830/7274 (2000/2130) | | |
| | $T_i$ 95 $T_a$ 122 | 3757/4132 (1100/1210) | | | 5362/5703 (1570/1670) | | |
| Rated current maximum | | 6.3 A/7.4 A | 13.7 A/15.3 A | 3.8 A/4.4 A | 6.3 A/7.2 A | 14.2 A/15.4 A | 3.7 A/4.2 A |
| Starting current | | 16.6 A/17.1 A | 30.7 A/29.1 A | 9.8 A/9.6 A | 16.8 A/18.4 A | 36.0 A/32.0 A | 10.0 A/12.0 A |
| Pre-fuse T | | 10.0 A | 20.0 A | 10.0 A | 10.0 A | 20.0 A | 10.0 A |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 955 W/1070 W | 990 W/1090 W | | 1140 W/1310 W | 1190 W/1390 W | |
| | $T_i$ 95 $T_a$ 122 | 1090 W/1290 W | 1140 W/1290 W | | 1240 W/1450 W | 1300 W/1520 W | |
| Cooling coefficient $j = Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 1.6 | 1.5 | | 1.8 | 1.7 | |
| Refrigerant | | R134a, 17.6 oz (500 g) | | | R134a, 33.4 oz (950 g) | | |
| Maximum allowable operating pressure | | 363 psi (25 bar) | | | | | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | | | | | |
| Environmental ratings | | UL Type 12 (IP 54) | | | | | |
| Duty cycle | | 100% | | | | | |
| Type of connection | | Plug-in terminal strip | | | | | |
| Weight lb (kg) | | 90.3 (41) | 103.6 (47) | | 92.6 (42) | 105.8 (48) | |
| Air displacement of fans | External circuit | 1036 cfm (1760 $m^3$/h) | | | 1071 cfm (1820 $m^3$/h) | | |
| | Internal circuit | 277 cfm (470 $m^3$/h) | | | | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | | | | |

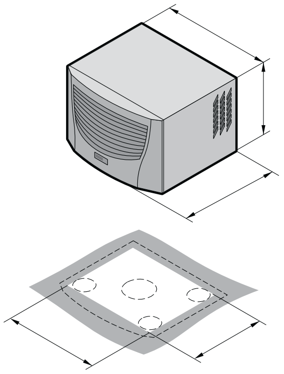
| **Accessories** | PU | | Page |
|---|---|---|---|
| Filter mats | 3 | 3286.500 | 328 |
| Metal filters | 1 | 3286.510 | 327 |
| Door-operated switch | 1 | 4127.000 | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Air ducting system | 1 | 3286.870 | 319 |
| Shallow air ducting system | 1 | 3286.850 | 319 |
| Plugs for interior air outlet | 2 | 3286.880 | 320 |
| Condensate hose | 1 | 3301.612 | 324 |

Special voltages available on request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Roofmount

## Useful Cooling Capacity: 12632 - 18436 BTU (3700 - 5400 W)



**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template, eyebolt and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Air conditioners with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

**Property Rights:**
German registered design no. 402 02 324
German registered design no. 402 02 325

**For additional technical information, please visit www.rittal-corp.com**

| | | | |
|---|---|---|---|
| **Part No. with basic controller, RAL 7035 (light gray)** | | **3386.140** | **3387.140** |
| **Part No. with comfort controller, RAL 7035 (light gray)** | | **3386.540** | **3387.540** |
| **Part No. with basic controller, Type 304 stainless steel** | | **3386.240** | **3387.240** |
| **Part No. with comfort controller, Type 304 stainless steel** | | **3386.640** | **3387.640** |
| Voltage V, Hz | | 400, 50/460, 60, 3~ | 400, 50/460, 60, 3~ |
| Dimensions inches (mm) | H x W x D | 19 x 31 x 23 (470 x 796 x 580) | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 12632 (3700) | 18436 (5400) |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 10246/11270 (3000/3300) | 13661/14344 (4000/4200) |
| | $T_i$ 95 $T_a$ 122 | 8401/9392 (2460/2750) | 11099/11919 (3250/3490) |
| Rated current maximum | | 3.4 A/3.4 A | 3.9 A/3.9 A |
| Starting current | | 8.0 A/9.0 A | 17.0 A/19.0 A |
| Pre-fuse T | | Motor circuit breaker 6.3 A/10.0 A | |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 1320 W/1630 W | 1760 W/2200 W |
| | $T_i$ 95 $T_a$ 122 | 1570 W/1910 W | 2010 W/2480 W |
| Cooling coefficient j = $Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 2.3 | |
| Refrigerant | | R134a, 56.4 oz (1600 g) | R134a, 63.5 oz (1800 g) |
| Maximum allowable operating pressure | | 363 psi (25 bar) | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | |
| Environmental ratings | | UL Type 12 (IP 54) | |
| Duty cycle | | 100% | |
| Type of connection | | Plug-in terminal strip | |
| Weight lb (kg) | | 154.3 (70) | 169.8 (77) |
| Air displacement of fans | External circuit | 2031 cfm (3450 $m^3$/h) | 2278 cfm (3870 $m^3$/h) |
| | Internal circuit | 753.4 cfm (1280 $m^3$/h) | 836 cfm (1420 $m^3$/h) |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Filter mats | 3 | 3286.600 | 328 |
| Metal filters | 1 | 3286.610 | 327 |
| Door-operated switch | 1 | 4127.000 | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Air ducting system | 1 | 3286.970 | 319 |
| Shallow air ducting system | 1 | 3286.850 | 319 |
| Plugs for interior air outlet | 2 | 3286.980 | 320 |
| Condensate hose | 1 | 3301.612 | 324 |

Special voltages available on request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Roofmount

## Useful Cooling Capacity: 4687 BTU (1373 W)

**Designed For Office Applications.**

Low noise level (considerably quieter than air conditioners for industrial applications). With nano-coated condenser and integrated condensate evaporator.

**Configuration:**
Fully wired ready for connection, including automatic condensate evaporation, drilling template and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Air conditioners with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

**Property Rights:**
German registered design no. 402 02 324
German registered design no. 402 02 325

**For additional technical information, please visit www.rittal-corp.com**

| **Part No. with comfort controller** | | **3273.500** | **3273.515** |
|---|---|---|---|
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 |
| Dimensions inches (mm) | H x W x D | 16 x 24 x 19 (417 x 597 x 475) | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 4687 (1373) | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 3756/4098 (1100/1200) | |
| | $T_i$ 95 $T_a$ 122 | 2903/2971 (850/870) | |
| Rated current maximum | | 5.2 A/5.4 A | 11.0 A/11.5 A |
| Starting current | | 15.5 A/16.5 A | 32.0 A/35.0 A |
| Pre-fuse T | | 10.0 A | 20.0 A |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 890 W/910 W | 920 W/940 W |
| | $T_i$ 95 $T_a$ 122 | 960 W/1100 W | 990 W/1140 W |
| Cooling coefficient j = $Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 1.2 | |
| Refrigerant | | R134a, 24.7 oz (700 g) | |
| Maximum allowable operating pressure | | 363 psi (25 bar) | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | |
| Environmental ratings | | UL Type 12 (IP 54)[2] | |
| Duty cycle | | 100% | |
| Type of connection | | Plug-in terminal strip | |
| Weight lb (kg) | | 92.6 (42) | 103.6 (47) |
| Color | | RAL 7035 (light gray) | |
| Air displacement of fans | External circuit | 1036 cfm (1760 $m^3$/h) | |
| | Internal circuit | 259 cfm (440 $m^3$/h) | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | |

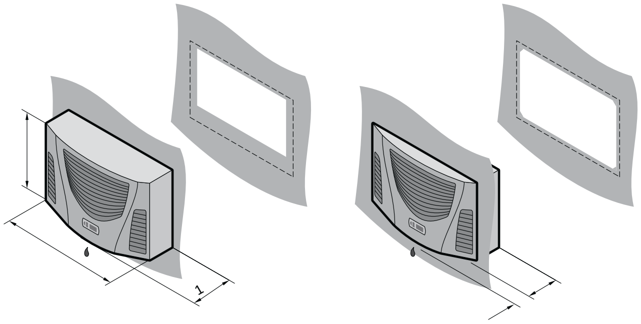
| **Accessories** | PU | | Page |
|---|---|---|---|
| Filter mats | 3 | 3286.100 | 328 |
| Metal filters | 1 | 3286.210 | 327 |
| Door-operated switch | 1 | 4127.000 | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Air ducting system | 1 | 3286.870 | 319 |
| Shallow air ducting system | 1 | 3286.850 | 319 |
| Plugs for interior air outlet | 2 | 3286.980 | 320 |
| Condensate hose | 1 | 3301.612 | 324 |

Special voltages available on request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Wallmount

## Useful Cooling Capacity: 809 BTU (237 W)



Mini air conditioners for horizontal mounting, ideal for cooling small equipment and operating housings with optimum space utilization.

**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

With nano-coated condenser.

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | | **3302.300** | **3302.310** |
|---|---|---|---|
| Voltage V, Hz | | 230, 50/60 | 115, 60 |
| Dimensions inches (mm) | H x W x D | 13 x 21 x 6 (340 x 525 x 153) | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 809 (237) | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 1025/1093 (300/320) | 1025 (300) |
| | $T_i$ 95 $T_a$ 122 | 512/546 (150/160) | 512 (150) |
| Rated current maximum | | 1.6 A/1.7 A | 4.0 A |
| Starting current | | 4.3 A/5.3 A | 12.0 A |
| Pre-fuse T | | 10 A | |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 285 W/300 W | 290 W |
| | $T_i$ 95 $T_a$ 122 | 320 W/340 W | 340 W |
| Cooling coefficient $j = Q_K/Pel$ | $T_i$ 95 $T_a$ 95 | 1.1 | |
| Refrigerant | | R134a, 3.5 oz (100 g) | R134a, 3.4 oz (95 g) |
| Maximum allowable operating pressure | | 363 psi (25 bar) | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | |
| Environmental ratings | | UL Type 12 (IP 54) | |
| Duty cycle | | 100% | |
| Type of connection | | Plug-in terminal strip | |
| Weight lb (kg) | | 28.7 (13) | |
| Color | | RAL 7035 (light gray) | |
| Air displacement of fans | External circuit | 203 cfm (345 $m^3$/h) | |
| | Internal circuit | 182 cfm (310 $m^3$/h) | |
| Temperature control | | Basic controller | |

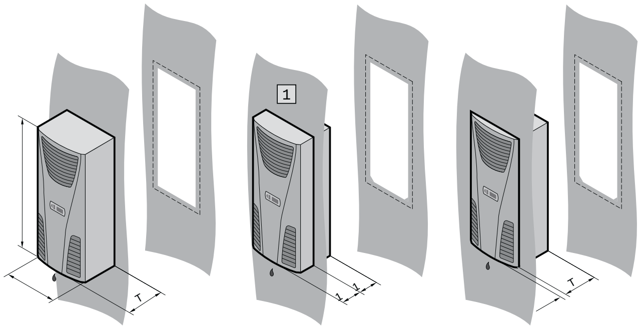
| **Accessories** | PU | | Page |
|---|---|---|---|
| Temperature indicator | 1 | 3114.200 | 321 |
| Condensate hose | 1 | 3301.608 | 324 |
| Filter mats | 3 | 3286.110 | 328 |
| Metal filters | 1 | 3286.120 | 327 |

Special voltages available upon request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Wallmount

## Useful Cooling Capacity: 864 - 2400 BTU (253 - 703 W)



**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

With nano-coated condenser.

**Note:**
Air conditioners with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

**Partial Internal Mounting Possible With 3303.XXX Only.**

**Property Rights:**
US design patent no. D 488,480
IR reg. design no. DM/061 967
with validity for FR, IT, ES
German registered designs
no. 402 02 324 and no. 402 02 325
Japanese registered design
no. 1 187 896
Indian registered design
no. 189 953

**For additional technical information, please visit www.rittal-corp.com**

| **Part No. with basic controller, RAL 7035 (light gray)** | | **3302.100** | **3302.110** | **3303.100** | **3303.110** |
|---|---|---|---|---|---|
| **Part No. with comfort controller, RAL 7035 (light gray)** | | **–** | **–** | **3303.500** | **3303.510** |
| **Part No. with basic controller, Type 304 stainless steel** | | **3302.200** | **3302.210** | **3303.200** | **3303.210** |
| **Part No. with comfort controller, Type 304 stainless steel** | | **–** | **–** | **3303.600** | **3303.610** |
| Voltage V, Hz | | 230, 50/60 | 115, 60 | 230, 50/60 | 115, 60 |
| Dimensions inches (mm) | H x B x T x T2 | 22 x 11 x 6 x 4 (550 x 280 x 140 x 98) | | 22 x 11 x 8 x 7 (550 x 280 x 200 x 164) | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 864 (253) | | 2400 (703) | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 1025/1093 (300/320) | 1025 (300) | 1708/2083 (500/610) | 1708 (500) |
| | $T_i$ 95 $T_a$ 122 | 512/581 (150/170) | 512 (150) | 957/1195 (280/350) | 957 (280) |
| Rated current maximum | | 1.6 A/1.7 A | 3.3 A | 2.6 A/2.6 A | 5.7 A |
| Starting current | | 3.0 A/3.4 A | 8.0 A | 5.1 A/6.4 A | 11.5 A |
| Pre-fuse T | | 10.0 A | 10.0 A | 10.0 A | 10.0 A |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 245 W/255 W | 290 W | 360 W/380 W | 470 W |
| | $T_i$ 95 $T_a$ 122 | 255 W/275 W | 340 W | 420 W/390 W | 500 W |
| Cooling coefficient j = $Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 1.2 | | 1.4 | |
| Refrigerant | | R134a, 3.5 oz (100 g) | | R134a, 6.0 oz (170 g) | |
| Maximum allowable operating pressure | | 263 psi (25 bar) | | 406 psi (28 bar) | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | | | |
| Environmental ratings | | UL Type 12 (IP 54) | | | |
| Duty cycle | | 100% | | | |
| Type of connection | | Plug-in terminal strip | | | |
| Weight lb (kg) | | 28.7 (13) | | 37.5 (17) | |
| Air displacement of fans | External circuit | 182 cfm (310 $m^3$/h) | | 203 cfm (345 $m^3$/h) | |
| | Internal circuit | 203 cfm (345 $m^3$/h) | | 182 cfm (310 $m^3$/h) | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | | |

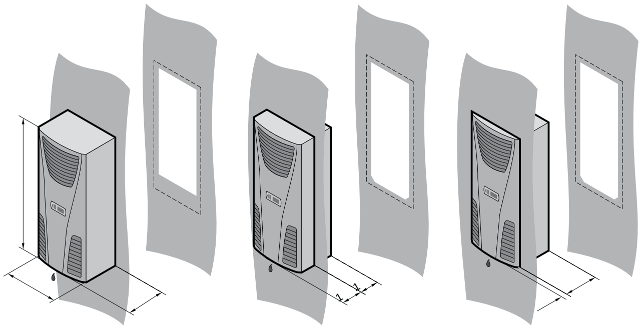
| **Accessories** | PU | | | Page |
|---|---|---|---|---|
| Filter mats | 3 | 3286.300 | | 328 |
| Metal filters | 1 | 3286.310 | | 327 |
| Door-operated switch | 1 | 4127.000 | | – |
| Master/slave cable for comfort controller | 1 | – | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | – | 3159.100 | 323 |
| Interface card for comfort controller | 1 | – | 3124.200 | 323 |
| Condensate hose | 1 | 3301.608 | 3301.610 | 324 |

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Wallmount

## Useful Cooling Capacity: 2663 BTU (780 W)



**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

With nano-coated condenser.

**Note:**
Air conditioners with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323.

**Property Rights:**
US design patent no. D 488,480
IR reg. design no. DM/061 967
with validity for FR, IT, ES
German registered designs
no. 402 02 324 and no. 402 02 325
Japanese registered design
no. 1 187 896
Indian registered design
no. 189 953

**For additional technical information, please visit www.rittal-corp.com**

| | | | | |
|---|---|---|---|---|
| **Part No. with basic controller, RAL 7035 (light gray)** | | **3361.100** | **3361.110** | **3361.140**[1] |
| **Part No. with comfort controller, RAL 7035 (light gray)** | | **3361.500** | **3361.510** | **3361.540**[1] |
| **Part No. with basic controller, Type 304 stainless steel** | | **3361.200** | **3361.210** | **3361.240**[1] |
| **Part No. with comfort controller, Type 304 stainless steel** | | **3361.600** | **3361.610** | **3361.640**[1] |
| Voltage V, Hz | | 230, 50/60[2] | 115, 60[2] | 400, 2~, 50/60[2] |
| Dimensions inches (mm) | H x W x D | 22 x 11 x 11 (550 x 280 x 280) | | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 2663 (780) | | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 2561/2664 (750/780) | 2561 (750) | 2561/2664 (750/780) |
| | $T_i$ 95 $T_a$ 122 | 1742/1844 (510/540) | 1742 (510) | 1742/1844 (510/540) |
| Rated current maximum | | 2.3 A/2.4 A | 5.3 A | 1.2 A/1.4 A |
| Starting current | | 5.6 A/5.6 A | 12.0 A | 3.1 A/3.3 A |
| Pre-fuse T | | 10 A | 10 A | 10 A |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 480 W/555 W | 570 W | 480 W/550 W |
| | $T_i$ 95 $T_a$ 122 | 530 W/640 W | 670 W | 530 W/640 W |
| Cooling coefficient j = $Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 1.5 | | |
| Refrigerant | | R134a, 9.9 oz (280 g) | | |
| Maximum allowable operating pressure | | 406 psi (28 bar) | | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | | |
| Environmental ratings | | UL Type 12 (IP 54) | | |
| Duty cycle | | 100% | | |
| Type of connection | | Plug-in terminal strip | | |
| Weight lb (kg) | | 48.5 (22) | | |
| Air displacement of fans (unimpeded air flow) | External circuit | 283 cfm (480 $m^3$/h) | | |
| | Internal circuit | 353 cfm (600 $m^3$/h) | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Filter mats | 3 | 3286.300 | 328 |
| Metal filters | 1 | 3286.310 | 327 |
| Door-operated switch | 1 | 4127.000 | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Condensate hose | 1 | 3301.608 | 324 |

[1] External transformer Ø 5 x 3" (126 x 65 mm) deep which must be mounted by the end customer.

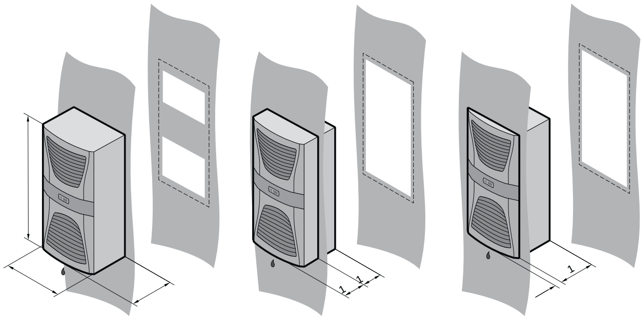
[2] $T_a$ maximum = 125° F (52° C)/60 Hz.

Special voltages available upon request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Wallmount

## Useful Cooling Capacity: 3916 - 5794 BTU (1147 - 1697 W)



**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Air conditioner with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

**Property Rights:**
German registered design
no. 402 02 325
IR reg. design no. DM/062 557
with validity for FR, IT, ES
Indian registered design
no. 190 269
Japanese registered design
no. 1 187 905

**For additional technical information, please visit www.rittal-corp.com**

| **Part No. with basic controller, RAL 7035 (light gray)** | | **3304.100** | **3304.110** | **3304.140** | **3305.100** | **3305.110** | **3305.140** |
|---|---|---|---|---|---|---|---|
| **Part No. with comfort controller, RAL 7035 (light gray)** | | **3304.500** | **3304.510** | **3304.540** | **3305.500** | **3305.510** | **3305.540** |
| **Part No. with basic controller, Type 304 stainless steel** | | **3304.200** | **3304.210** | **3304.240** | **3305.200** | **3305.210** | **3305.240** |
| **Part No. with comfort controller, Type 304 stainless steel** | | **3304.600** | **3304.610** | **3304.640** | **3305.600** | **3305.610** | **3305.640** |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 400, 50/460, 60, 3~ | 230, 50/60 | 115, 50/60 | 400, 50/460, 60, 3~ |
| Dimensions inches (mm) | H x W x D | 37 x 16 x 10 (950 x 400 x 260) | | | | | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 3916 (1147) | | | 5794 (1697) | | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 3415/3620 (1000/1060) | | | 5123/5157 (1500/1510) | | |
| | $T_i$ 95 $T_a$ 122 | 2698/2869 (790/840) | | | 4201/4269 (1230/1250) | | |
| Rated current maximum | | 4.8 A/4.4 A | 9.5 A/10.0 A | 2.5 A/2.6 A | 5.4 A/6.0 A | 11.0 A/12.5 A | 2.3 A/2.6 A |
| Starting current | | 12.0 A/14.0 A | 26.0 A/28.0 A | 11.5 A/12.7 A | 22.0 A/24.0 A | 42.0 A/46.0 A | 12.2 A/11.3 A |
| Pre-fuse T | | 10.0 A/10.0 A | 16.0 A/16.0 A | 10.0 A/10.0 A[1] | 16.0 A/16.0 A | 20.0 A/20.0 A | 10.0 A/10.0 A[1] |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 700 W/650 W | 725 W/680 W | 580 W/550 W | 850 W/1000 W | 880 W/1050 W | 800 W/980 W |
| | $T_i$ 95 $T_a$ 122 | 750 W/710 W | 780 W/750 W | 660 W/680 W | 1000 W/1160 W | 1040 W/1200 W | 960 W/1150 W |
| Cooling coefficient j = $Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 1.4 | | 1.7 | 1.8 | 1.7 | 1.9 |
| Refrigerant | | R134a, 11.4 oz (325g) | | R134a, 17.6 oz (500 g) | R134a, 21.2 oz (600 g) | | |
| Maximum allowable operating pressure | | 363 psi (25 bar) | | | | | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | | | | | |
| Environmental ratings | | UL Type 12 (IP 54) | | | | | |
| Duty cycle | | 100% | | | | | |
| Type of connection | | Plug-in terminal strip | | | | | |
| Weight lb (kg) | | 86.0 (39) | 97.0 (44) | 88.2 (40) | 90.3 (41) | 101.4 (46) | 92.6 (42) |
| Air displacement of fans | External circuit | 530 cfm (900 $m^3$/h) | | | | | |
| | Internal circuit | 353 cfm (600 $m^3$/h) | | | 471 cfm (600 $m^3$/h) | | |
| Temperature control | | Basic or comfort controller (factory setting +95° F [35° C]) | | | | | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Filter mats | 3 | 3286.400 | 328 |
| Metal filters | 1 | 3286.410 | 327 |
| Door-operated switch | 1 | 4127.000 | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Condensate hose | 1 | 3301.612 | 324 |

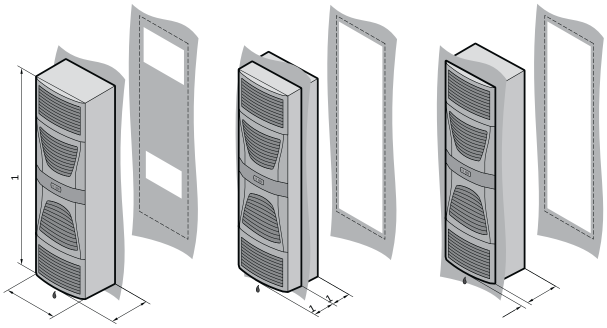
[1] Motor circuit-breaker.

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Wallmount

## Useful Cooling Capacity: 8706 - 10525 BTU (2550 - 3083 W)



**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template, eyebolt and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Air conditioners with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

**Additional Parts Needed:**
For installation in the door, the use of a door alignment roller (4538.000) is recommended.

**For additional technical information, please visit www.rittal-corp.com**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Part No. with basic controller, RAL 7035 (light gray)** | | **3328.100** | **3328.110** | **3328.140** | **3329.100** | **3329.110** | **3329.140** |
| **Part No. with comfort controller, RAL 7035 (light gray)** | | **3328.500** | **3328.510** | **3328.540** | **3329.500** | **3329.510** | **3329.540** |
| **Part No. with basic controller, Type 304 stainless steel** | | **3328.200** | **3328.210** | **3328.240** | **3329.200** | **3329.210** | **3329.240** |
| **Part No. with comfort controller, Type 304 stainless steel** | | **3328.600** | **3328.610** | **3328.640** | **3329.600** | **3329.610** | **3329.640** |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 400, 50/460, 60, 3~ | 230, 50/60 | 115, 50/60 | 400, 50/460, 60, 3~ |
| Dimensions inches (mm) | H x W x D | 62 x 16 x 11 (1580 x 400 x 295) | | | | | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 8706 (2550) | | | 10525 (3083) | | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 6830/8026 (2000/2350) | | | 8537/9392 (2500/2750) | | 8537/9392 (2500/2700) |
| | $T_i$ 95 $T_a$ 122 | 4952/6771 (1450/1690) | | | 5464/5977 (1600/1750) | | 6489/6660 (1900/1950) |
| Rated current maximum | | 7.5 A/9.1 A | 14.7 A/17.3 A | 2.8 A/3.3 A | 8.6 A/10.6 A | 17.0 A/22.0 A | 3.7 A/3.8 A |
| Starting current | | 22.0 A/26.0 A | 36.0 A/39.0 A | 6.8 A/7.8 A | 21.0 A/21.0 A | 44.0 A/42.0 A | 6.8 A/7.6 A |
| Pre-fuse T | | 16.0 A | 25.0 A | 10.0 A/10.0 A[1] | 16.0 A | 25.0 A | 10.0 A/10.0 A[1] |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 1025 W/ 1200 W | 1085 W/ 1250 W | 930 W/ 1150 W | 1320 W/ 1550 W | 1380 W/ 1600 W | 1300 W/ 1500 W |
| | $T_i$ 95 $T_a$ 122 | 1130 W/ 1220 W | 1170 W/ 1290 W | 1150 W/ 1400 W | 1500 W/ 1880 W | 1550 W/ 1940 W | 1550 W/ 1850 W |
| Cooling coefficient $j = Q_K/Pel$ | $T_i$ 95 $T_a$ 95 | 1.7 | | 2.3 | 1.9 | | 2.0 |
| Refrigerant | | R134a, 33.5 oz (950 g) | | | | | |
| Maximum allowable operating pressure | | 406 psi (28 bar) | | | | | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | | | | | |
| Environmental ratings | | UL Type 12 (IP 54) | | | | | |
| Duty cycle | | 100% | | | | | |
| Type of connection | | Plug-in terminal strip | | | | | |
| Weight lb (kg) | | 145.5 (66) | 160.9 (73) | 147.7 (67) | 152.1 (69) | 167.6 (76) | 154.3 (70) |
| Air displacement of fans | External circuit | 377 cfm (640 $m^3$/h) | | | 418 cfm (710 $m^3$/h) | | |
| | Internal circuit | 324 cfm (550 $m^3$/h) | | | 377 cfm (640 $m^3$/h) | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | | | | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Filter mats | 3 | 3286.400 | 328 |
| Metal filters | 1 | 3286.410 | 327 |
| Door-operated switch | 1 | 4127.000 | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Condensate hose | 1 | 3301.612 | 324 |

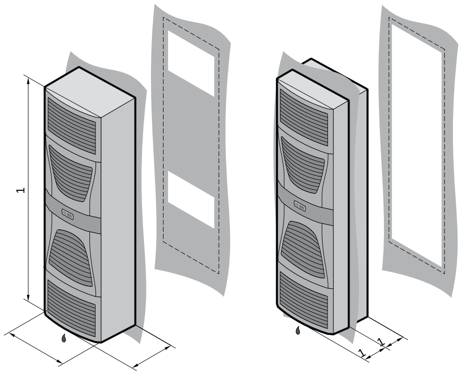
[1] Motor circuit-breaker.

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Wallmount

## Useful Cooling Capacity: 16841 BTU (4933 W)



**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template, eyebolt and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Air conditioners with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

**Additional Parts Needed:**
For installation in the door, the use of a door alignment roller (4538.000) is recommended.

**For additional technical information, please visit www.rittal-corp.com**

| | | |
|---|---|---|
| **Part No. with basic controller, RAL 7035 (light gray)** | | **3332.140** |
| **Part No. with comfort controller, RAL 7035 (light gray)** | | **3332.540** |
| **Part No. with basic controller, Type 304 stainless steel** | | **3332.240** |
| **Part No. with comfort controller, Type 304 stainless steel** | | **3332.640** |
| Voltage V, Hz | | 400, 50/460, 60, 3~ |
| Dimensions inches (mm) | H x W x D | 62 x 20 x 13 (1580 x 500 x 340) |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 16841 (4933) |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 13661/15027 (4000/4400) |
| | $T_i$ 95 $T_a$ 122 | 10485/12192 (3070/3570) |
| Rated current maximum | | 4.2 A/4.2 A |
| Starting current | | 9.2 A/11.0 A |
| Pre-fuse T | | Motor circuit breaker 10.0 A/10.0 A |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 1710 W/2110 W |
| | $T_i$ 95 $T_a$ 122 | 1980 W/2450 W |
| Cooling coefficient j = $Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 2.3 |
| Refrigerant | | R134a, 105.8 oz (3000 g) |
| Maximum allowable operating pressure | | 406 psi (28 bar) |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) |
| Environmental ratings | | UL Type 12 (IP 54) |
| Duty cycle | | 100% |
| Type of connection | | Plug-in terminal strip |
| Weight lb (kg) | | 200.6 (91) |
| Air displacement of fans | External circuit | 1177 cfm (2000 $m^3$/h) |
| | Internal circuit | 883 cfm (1500 $m^3$/h) |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) |

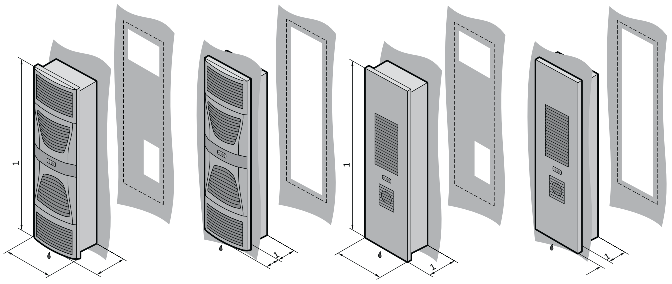
| **Accessories** | PU | | Page |
|---|---|---|---|
| Filter mats | 3 | 3286.400 | 328 |
| Metal filters | 1 | 3286.410 | 327 |
| Door-operated switch | 1 | 4127.000 | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Condensate hose | 1 | 3301.612 | 324 |

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air Conditioner - Wallmount

## Slimline, Useful Cooling Capacity: 5804 BTU (1700 W)



The super slimline design permits system adaptation for applications where high heat loads are accommodated in a confined space.

**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Air conditioner with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

**For additional technical information, please visit www.rittal-corp.com**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Part No. with basic controller, RAL 7035 (light gray)** | | **3366.100** | **3377.100** | **3366.110** | **3377.110** | **3366.140** | **3377.140** |
| **Part No. with comfort controller, RAL 7035 (light gray)** | | **3366.500** | **3377.500** | **3366.510** | **3377.510** | **3366.540** | **3377.540** |
| **Part No. with basic controller, Type 304 stainless steel** | | **3366.200** | **3377.200** | **3366.210** | **3377.210** | **3366.240** | **3377.240** |
| **Part No. with comfort controller, Type 304 stainless steel** | | **3366.600** | **3377.600** | **3366.610** | **3377.610** | **3366.640** | **3377.640** |
| Voltage V, Hz | | 230, 50/60 | | 115, 50/60 | | 400, 50/460, 60, 3~ | |
| Dimensions inches (mm) | H x W x D | 62 x 18 x 8 (1590 x 435 x 205) | 62 x 18 x 7 (1590 x 435 x 165) | 62 x 18 x 8 (1590 x 435 x 205) | 62 x 18 x 7 (1590 x 435 x 165) | 62 x 18 x 8 (1590 x 435 x 205) | 62 x 18 x 7 (1590 x 435 x 165) |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 5804 (1700) | | | | | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 3415/5123 (1500/1500) | | | | | |
| | $T_i$ 95 $T_a$ 122 | 3586/3757 (1050/1100) | | | | | |
| Rated current maximum | | 7.1 A/7.3 A | | 14.2 A/14.7 A | | 3.0 A/3.1 A | |
| Starting current | | 22.0 A/24.0 A | | 43.0 A/47.0 A | | 8.0 A/8.8 A | |
| Pre-fuse T | | 10.0 A | | 20.0 A | | 10.0 A | |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 1045 W/1175 W | | 1075 W/1200 W | | 1090 W/1240 W | |
| | $T_i$ 95 $T_a$ 122 | 1220 W/1335 W | | 1265 W/1250 W | | 1120 W/1290 W | |
| Cooling coefficient j = $Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 1.4 | | | | 1.3 | |
| Refrigerant | | R134a, 24.7 oz (700 g) | | | | | |
| Maximum allowable operating pressure | | 406 psi (28 bar) | | | | | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | | | | | |
| Environmental ratings | | UL Type 12 (IP 54) | | | | | |
| Duty cycle | | 100% | | | | | |
| Type of connection | | Plug-in terminal strip | | | | | |
| Weight lb (kg) | | 99.2 (45) | | 110.2 (50) | | 101.4 (46) | |
| Air displacement of fans (unimpeded air flow) | External circuit | 536 cfm (910 m$^3$/h) | | | | | |
| | Internal circuit | 506 cfm (860 m$^3$/h) | | | | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | | | | |

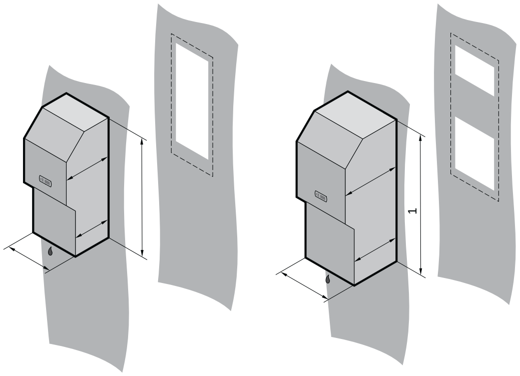
| **Accessories** | PU | | | | | | | Page |
|---|---|---|---|---|---|---|---|---|
| Filter mats | 3 | 3286.400 | 3253.010 | 3286.400 | 3253.010 | 3286.400 | 3253.010 | 328 |
| Metal filters | 1 | 3286.410 | 3253.220 | 3286.410 | 3253.220 | 3286.410 | 3253.220 | 327 |
| Trim frame for external mounting | 1 | 3377.000 | | | | | | 324 |
| Door-operated switch | 1 | 4127.000 | | | | | | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | | | | | | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | | | | | | 323 |
| Interface card for comfort controller | 1 | 3124.200 | | | | | | 323 |
| Condensate hose | 1 | 3301.612 | | | | | | 324 |

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# UL Type 4X Air Conditioner - Wallmount

## Useful Cooling Capacity: 2400 - 5794 BTU (703 - 1697 W)



**Material:**
Type 304 stainless steel

**Protection Ratings:**
UL and cUL recognized, CSA

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Air conditioner with comfort controller may be integrated into a monitoring system with an optional interface card 3124.20 (RS 232, RS 485, RS 422 and PLC interface). See page 323

Now made in the USA.

**For additional technical information, please visit www.rittal-corp.com**

| **Part No. with basic controller** | | **3303.104**[2] | **3303.114**[2] | **3304.104** | **3304.114** | **3304.144** | **3305.104** | **3305.114** | **3305.144** |
|---|---|---|---|---|---|---|---|---|---|
| **Part No. with comfort controller** | | **3303.504**[2] | **3303.514**[2] | **3304.504** | **3304.514** | **3304.544** | **3305.504** | **3305.514** | **3305.544** |
| Voltage V, Hz | | 230, 50/60 | 115, 60 | 230, 50/60 | 115, 60 | 400, 50/ 460, 60, 3~ | 230, 50/60 | 115, 60 | 400, 50/ 460, 60, 3~ |
| Dimensions inches (mm) | H x W x D | 24 x 11 x 12 (620 x 285 x 298) | | 40 x 16 x 14 (1020 x 405 x 358) | | | | | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 2400 (703) | | 3916 (1147) | | | 5794 (1697) | | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 1708/2083 (500/610) | | 3415/3620 (1000/1060) | | | 5123/5157 (1500/1510) | | |
| | $T_i$ 95 $T_a$ 122 | 956/1195 (280/350) | | 2698/2869 (790/840) | | | 4201/4269 (1230/1250) | | |
| Rated current maximum | | 2.6/2.6 A | 5.7 A | 5.4/5.0 A | 10.6/11.1 A | 2.8/2.9 A | 6.0/6.5 A | 12.1/13.6 A | 2.6/2.9 A |
| Starting current | | 5.1/6.4 A | 11.5 A | 12.0/14.0 A | 26.0/28.0 A | 11.5/12.7 A | 22.0/24.0 A | 42.0/46.0 A | 12.2/11.3 A |
| Pre-fuse T | | 10.0 A | 10.0 A | 10.0 A | 16.0 A | 10.0 A[1] | 16.0 A | 20.0 A | 10.0 A[1] |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 360/380 W | 470 W | 700/650 W | 725/680 W | 580/550 W | 850/1000 W | 880/1050 W | 800/980 W |
| | $T_i$ 95 $T_a$ 122 | 420/390 W | 500 W | 750/710 W | 780/750 W | 660/680 W | 1000/1160 W | 1040/1200 W | 960/1150 W |
| Cooling coefficient j = $Q_K$/Pel | $T_i$ 95 $T_a$ 95 | 1.4 | | | | 1.7 | 1.8 | 1.7 | 1.9 |
| Refrigerant | | R134a, 6.0 oz (170 g) | | R134a, 17.6 oz (500 g) | | | R134a, 21.1 oz (600 g) | | |
| Maximum allowable operating pressure | | 406 psi (28 bar) | | 363 psi (25 bar) | | | | | |
| Temperature and setting range | | 68 to 131° F (+20 to +55° C) | | | | | | | |
| Environmental ratings | | UL Type 4X (IP 66) | | | | | | | |
| Duty cycle | | 100% | | | | | | | |
| Type of connection | | Plug-in terminal strip | | | | | | | |
| Weight lb (kg) | | 55.1 (25) | | 108.2 (49) | 119.0 (54) | 110.2 (50) | 112.4 (51) | 123.5 (56) | 114.6 (52) |
| Material | | Type 304 stainless steel | | | | | | | |
| Air displacement of fans | External circuit | 203 cfm (345 m$^3$/h) | | 530 cfm (900 m$^3$/h) | | | 530 cfm (900 m$^3$/h) | | |
| | Internal circuit | 182 cfm (310 m$^3$/h) | | 353 cfm (600 m$^3$/h) | | | 471 cfm (800 m$^3$/h) | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | | | | | | |

| **Accessories** | PU | | | | Page |
|---|---|---|---|---|---|
| Door-operated switch | 1 | 4127.000 | | | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | – | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | | | 323 |
| Interface card for comfort controller | 1 | 3124.200 | | | 323 |
| Condensate hose | 1 | 3301.610 | 3301.612 | | 324 |

[1] Motor circuit breaker.

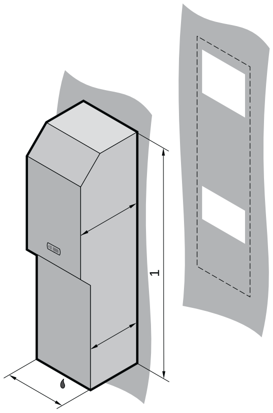
[2] Internal condensate evaporator not included.

Special voltages and technical modifications available by request.

Inch and pound measurements are rounded to the nearest whole number.

# UL Type 4X Air Conditioner - Wallmount

## Useful Cooling Capacity: 8706 - 10525 BTU (2550 - 3083 W)



**Material:**
Type 304 stainless steel

**Protection Ratings:**
UL and cUL recognized

UL file: SA8250

**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

With nano-coated condenser and integrated condensate evaporator.

**Note:**
Air conditioner with comfort controller may be integrated into a monitoring system with an optional interface card 3124.200 (RS 232, RS 485, RS 422 and PLC interface). See page 323

Now made in the USA.

**For additional technical information, please visit www.rittal-corp.com**

| **Part No. with basic controller** | | **3328.104** | **3328.114** | **3328.144** | **3329.104** | **3329.114** | **3329.144** |
|---|---|---|---|---|---|---|---|
| **Part No. with comfort controller** | | **3328.504** | **3328.514** | **3328.544** | **3329.504** | **3329.514** | **3329.544** |
| Rated operating voltage V, Hz | | 230, 50/60 | 115, 50/60 | 400, 50/460, 60, 3~ | 230, 50/60 | 115, 50/60 | 400, 50/460, 60, 3~ |
| Dimensions inches (mm) | H x W x D | 65 x 16 x 15 (1650 x 405 x 388) | | | | | |
| Useful cooling capacity $Q_K$ BTU (W) | $T_i$ 131 $T_a$ 131 | 8706 (2550) | | | 10525 (3083) | | |
| Useful cooling capacity $Q_K$ to DIN 3168 BTU (W) | $T_i$ 95 $T_a$ 95 | 6860/8025 (2000/2350) | | | 8538/9392 (2500/2750) | | |
| | $T_i$ 95 $T_a$ 122 | 4952/5772 (1450/1690) | | | 5464/5977 (1600/1750) | | |
| Rated current max. | | 7.5 A/9.1 A | 14.7 A/17.3 A | 2.8 A/3.3 A | 8.6 A/10.6 A | 17.0 A/22.0 A | 3.7 A/3.8 A |
| Start-up current | | 22.0 A/26.0 A | 36.0 A/39.0 A | 6.8 A/7.8 A | 21.0 A/21.0 A | 44.0 A/42.0 A | 6.8 A/7.6 A |
| Pre-fuse T | | 16.0 A | 25.0 A | 10.0A/10.0 A[1] | 16.0 A | 25.0 A | 10.0 A/10.0 A[1] |
| Power consumption Pel to DIN 3168 | $T_i$ 95 $T_a$ 95 | 1025/1200 W | 1085/1250 W | 1050/1275 W | 1450/1675 W | 1500/1725 W | 1425/1625 W |
| | $T_i$ 95 $T_a$ 122 | 1250/1350 W | 1300/1410 W | 1275/1525 W | 1625/2000 W | 1675/2065 W | 1675/1975 W |
| Cooling coefficient $j = Q_K/Pel$ | $T_i$ 95 $T_a$ 95 | 1.7 | | 2.3 | 1.9 | | 2.0 |
| Refrigerant | | R134a, 31.7 oz (900 g) | | | | | |
| Maximum allowable operating pressure | | 406 psi (28 bar) | | | | | |
| Temperature and setting range | | 68 to 122° F (+20 to +55° C) | | | | | |
| Protection rating | | UL Type 4X (IP 66) | | | | | |
| Duty cycle | | 100% | | | | | |
| Type of connection | | Plug-in terminal strip | | | | | |
| Weight lb (kg) | | 176.4 (80) | 191.8 (87) | 176.4 (80) | 183.0 (83) | 198.4 (90) | 183.0 (83) |
| Material | | Type 304 stainless steel | | | | | |
| Air displacement of fans | External circuit | 377 cfm (640 m$^3$/h) | | | 418 cfm (710 m$^3$/h) | | |
| | Internal circuit | 324 cfm (550 m$^3$/h) | | | 377 cfm (640 m$^3$/h) | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | | | | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Door-operated switch | 1 | 4127.000 | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| RiDiag II including cables for comfort controller | 1 | 3159.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Condensate hose | 1 | 3301.612 | 324 |

[1] Motor circuit breaker.
Special voltages available on request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Thermoelectric Cooler

## Small, Lightweight, Efficient

The powerful thermoelectric cooling unit in a lightweight design. The energy efficient climate-control solution for command panels and small enclosures – **an energy savings of more than 60%** compared to conventional industry systems.

## Mounting

**Internal mounting**
When installed in the enclosure, the unit only protrudes by a few inches, and therefore does not interrupt either the aesthetic appearance or freedom of movement on support arm systems.

**External mounting**
Its low weight also allows it to be externally mounted on simple aluminium rear panels or blanking panels.

**Support arm systems**
Thanks to its low-vibration operation and minimal weight, the thermoelectric cooler from Rittal is the ideal partner on support arm systems.

## Modular

**Scalable output**
The modular designs allows simple scaling of the cooling output depending on your requirements, both horizontally . . .

. . . and vertically.

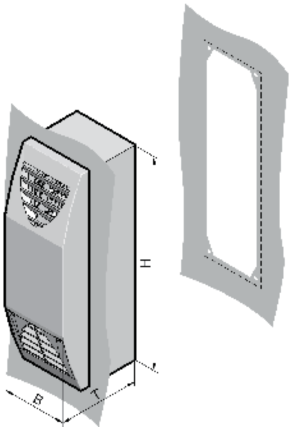
**Controller**
Energy-efficient control with pulse width modulation and innovative soft start function ensures a constant enclosure temperature and a long service life of the Peltier elements.

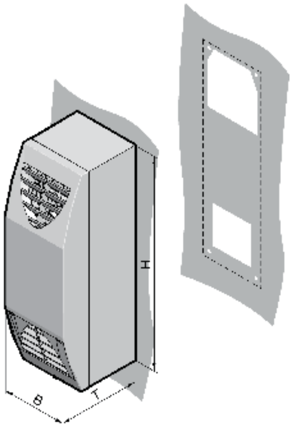
## Benefits

- Cooling output 341 BTU, thanks to state-of-the-art Peltier technology.
- Low-maintenance thanks to an efficient design.
- High operating ratio (Coefficiency of Performance >1) thanks to optimum interplay between all components.
- Maximum possible protection for your electronics, floating change-over fault signal contact in case of over temperature.
- USB interface for unit programming.
- Minimal build volume and minimal weight compared with other industry systems.
- Large voltage range from 100 – 240 V AC and 24 V DC.
- RJ 45 interface for linking to the Rittal CMC-TC monitoring system.

# Thermoelectric Cooler

## Useful Cooling Capacity: 341 BTU (100 W)





**Application:**
- Ideal for cooling small enclosures and operator interface panels
- Especially suitable for use on support arm systems as well
- Optimum space utilization
- Targeted cooling of hot spots

**Configuration:**
Thermoelectric cooling unit, wired ready for connection, with multilingual documentation and mounting accessories.

| **Part No.** | | **3201.200** | **3201.300** |
|---|---|---|---|
| Dimensions inches (mm) | H x B x T | 16 x 5 x 6 (400 x 125 x 155) | |
| Rated operating voltage V/Hz | | 100 – 230 V AC / 50/60 Hz | 24 V DC |
| Coefficiency of Performance/COP | $T_i$ 95 $T_a$ 95 | 1.0 | 1.2 |
| Useful cooling output $Q_K$ to DIN 3168 | $T_i$ 95 $T_a$ 95 | 341 BTU (100 W) | 341 BTU (100 W) |
| Starting current | | 120 V: 9.2 A<br>230 V: 4.7 A | 40 A |
| Max. running current | | 120 V: 1.2 A<br>230 V: 0.6 A | 5.2 A |
| Power pack integrated | | ■ | – |
| Color of cover/unit | | RAL 7024/Anodized aluminium | |
| Protection rating | | NEMA 12/IP 54 | |
| Weight lb (kg) | | 7.7 (3.5) | 6.6 (3.0) |
| Temperature range | | +32 to +131° F (0 to +55° C) | +32 to +131° F (0 to +55° C) |
| Air throughput, unimpeded air flow | | 29 cfm (50 m$^3$/h) | |
| Type of connection | | Plug-in spring connection terminal | |
| Pre-fuse t | | 2 A | 10 A |

| **Accessories** | PU | | | Page |
|---|---|---|---|---|
| Power pack 150 watts for 35 mm top-hat rail | 1 | – | 3201.030 | – |
| Filter mat | 1 | 3201.050 | | – |
| Door-operated switch | 1 | 4127.010 | | 241 |
| Digital temperature indicator | 1 | 3114.200 | | 321 |

We reserve the right to make technical modifications. Special voltages available by request.

Inch and pound measurements are rounded to the nearest whole number.

# Low Noise Vortex Cooler

## Useful Cooling Capacity: 400 - 5000 BTU (117 - 1465 W)

Vortex Coolers use compressed air to create a cool stream of air which is distributed inside an enclosure using a flexible hose ducting kit. This low noise version is housed in a UL94 V-O plastic cover with sound deadening insulation for quieter operation.

These coolers are especially effective in small enclosures where air conditioners will not fit, when an existing source of compressed air exists, when heat loads are low to moderate, or when a NEMA 4/4X cooling solution is required. Vortex Coolers are also effective in applications where EMI/ RFI must be minimized.

Rittal can provide sizing assistance and, through Rittal's modification service center, mounting cut-outs for these coolers.

**Advantages**
- Easy quick top or side mounting
- No wiring
- No maintenance required
- Very quiet, 62 dB(A) operation
- Slight pressurization of enclosure
- Integrated mechanical thermostat
- Maintains 80-95° F temperature
- Operates in environments up to 175° F

**Material:**
Stainless steel or aluminum

**Color:**
Satin finish

**Protection Ratings:**
UL type 12, 4/4X
UL listed

UL file #191061

**Configuration:**
Includes low noise Vortex Cooler, ducting kit and mechanical thermostat. No electrical wiring required.

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | **9963.957** | **9963.959** | **9963.961** | **9963.963** |
|---|---|---|---|---|
| UL Type Rating | 12 | 12 | 12 | 12 |
| Cooling Capacity (BTU)[1] | 900 | 1500 | 2500 | 5000 |
| Noise level at dBa at 100 psi | 62 | 62 | 62 | 62 |
| Air consumption SCFM | 15 | 25 | 35 | 70 |
| Pressure psi | 100 | 100 | 100 | 100 |
| Port size NPT inches | 0.375 | 0.375 | 0.375 | 0.375 |

| **Part No.** | **9963.958** | **9963.960** | **9963.962** | **9963.964** |
|---|---|---|---|---|
| UL Type Rating | 4/4X | 4/4X | 4/4X | 4/4X |
| Cooling Capacity (BTU)[1] | 900 | 1500 | 2500 | 5000 |
| Noise level at dBa at 100 psi | 62 | 66 | 62 | 62 |
| Air consumption SCFM | 15 | 25 | 35 | 70 |
| Pressure range psi | 100 | 100 | 100 | 100 |
| Port size NPT inches | 0.375 | 0.375 | 0.375 | 0.375 |

[1] Cooling capacity at 100 $p_{sig}$, 70° F inlet air, 90° F thermostat setting, -40° F pressure dew point.

Inch and pound measurements are rounded to the nearest whole number.

# Vortex Cooler

## Useful Cooling Capacity: 400 - 5000 BTU (117 - 1465 W)

Vortex Coolers use compressed air to create a cool stream of air which is distributed inside an enclosure using a flexible hose ducting kit.

These coolers are especially effective in small enclosures where air conditioners will not fit, when an existing source of compressed air exists, when heat loads are low to moderate, or when a NEMA 4/4X cooling solution is required. Vortex Coolers are also effective in applications where EMI/ RFI must be minimized.

Rittal can provide sizing assistance and, through Rittal's modification service center, mounting cut-outs for these coolers.

**Advantages**
Small physical size
No EMI/RFI created
Creates cooled air without refrigerants (CFCs/HFCs)
Exceptionally reliable, no moving parts to break
Low maintenance
Maintain UL Type 12, 4 and 4X ratings

**Material:**
Stainless steel or aluminum

**Color:**
Satin finish

**Protection Ratings:**
CE, UL

UL listed

UL file: 191061

**Configuration:**
Includes Vortex Cooler, thermostat, solenoid, filter, and ducting kit (230 V solenoid available for 230 V operation)

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | **9963.944** | **9963.945** | **9963.946** | **9963.947** | **9963.948[3]** |
|---|---|---|---|---|---|
| UL Type Rating | 12 | 12 | 12 | 12 | 12 |
| Voltage[1] | 115/50/60 | 115/50/60 | 115/50/60 | 115/50/60 | 115/50/60 |
| Cooling Capacity (BTU)[2] | 400 | 900 | 1500 | 2500 | 5000 |
| Noise level at dBa at 100 psi | 69 | 80 | 83 | 90 | 90 |
| Air consumption SCFM | 8 | 15 | 25 | 35 | 70 |
| Pressure range psi | 70 – 150 | 70 – 150 | 70 – 150 | 70 – 150 | 70 – 150 |
| Port size NPT inches | 0.125 | 0.25 | 0.25 | 0.25 | 0.25 |

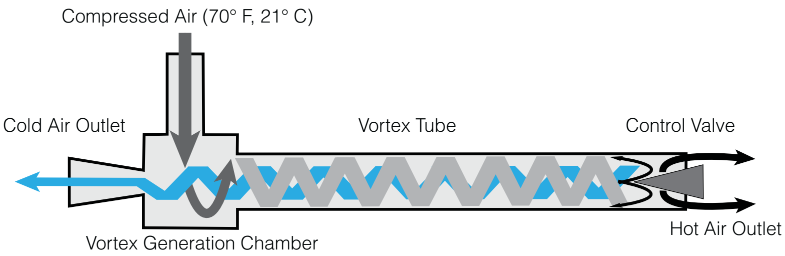
| **Part No.** | **9963.949** | **9963.950** | **9963.953** | **9963.954[3]** |
|---|---|---|---|---|
| UL Type Rating | 4 | 4 | 4 | 4 |
| Voltage[1] | 115/50/60 | 115/50/60 | 115/50/60 | 115/50/60 |
| Cooling Capacity (BTU)[2] | 900 | 1700 | 2500 | 5000 |
| Noise level at dBa at 100 psi | 83 | 86 | 90 | 90 |
| Air consumption SCFM | 15 | 25 | 35 | 70 |
| Pressure range psi | 70 – 150 | 70 – 150 | 70 – 150 | 70 – 150 |
| Port size NPT inches | 0.125 | 0.25 | 0.25 | 0.25 |

| **Part No.** | **9963.951** | **9963.955** | **9963.956** | **9963.952[3]** |
|---|---|---|---|---|
| UL Type Rating | 4X | 4X | 4X | 4X |
| Voltage[1] | 115/50/60 | 115/50/60 | 115/50/60 | 115/50/60 |
| Cooling Capacity (BTU)[2] | 900 | 1700 | 2500 | 5000 |
| Noise level at dBa at 100 psi | 83 | 86 | 90 | 90 |
| Air consumption SCFM | 15 | 25 | 35 | 70 |
| Pressure range psi | 70 – 150 | 70 – 150 | 70 – 150 | 70 – 150 |
| Port size NPT inches | 0.125 | 0.25 | 0.25 | 0.25 |

[1] 230 V available by substituting 230 V solenoid – see Accessories, 24 V DC and 480 V AC available by special order.
[2] Cooling capacity at 100 psig, 70° F inlet air, 90° F thermostat setting, -40° F pressure dew point.
[3] Ships with two 2500 BTU vortex tubes.

Inch and pound measurements are rounded to the nearest whole number.

| **Accessories** | Port size NPT inches | PU | |
|---|---|---|---|
| 5 micron filter for up to 1700 BTU capacity | 0.375 | 1 | **9963.936** |
| 5 micron filter for up to 2500 BTU capacity | 0.375 | 1 | **9963.937** |
| 5 micron filter for up to 5000 BTU capacity | 0.75 | 1 | **9963.938** |
| Oil filter for up to 1700 BTU capacity | 0.375 | 1 | **9963.939** |
| Oil filter for up to 5000 BTU capacity | 0.375 | 1 | **9963.940** |
| UL Type 12 230V solenoid for up to 1700 BTU capacity | 0.25 | 1 | **9961.458** |
| UL Type 4/4X 230V solenoid for up to 1700 BTU capacity | 0.25 | 1 | **9961.459** |
| UL Type 4/4X 230V solenoid for up to 2500 BTU capacity | 0.375 | 1 | **9963.943** |



### The Rittal Vortex Cooler - how it works

A Vortex Cooler uses the principle of vortex cooling which occurs when air rotates around an axis. The vortex tube creates a "mini tornado" from compressed air, which is separated into hot and cold airstreams. This compressed air enters into the tube and passes through the generation chamber to start the airflow rotating. As the air spins down the tube towards the control valve a small portion of the compressed air passes out as hot exhaust. The remaining air is forced back through the tube at a slower air speed. This cooled return air exits through the cold air exhaust port and into the enclosure.

The Rittal Vortex Cooler has no moving parts and are commonly used for spot cooling when a compressed air source is readily available.

## Features of Air/Air Heat Exchangers

Rittal's air/air heat exchangers are perfect for environments where the ambient air temperature is at or below the desired interior temperature of the enclosure. Two separate air circuits prevent the ingress of dust and pollutants into the enclosure.

### Platform concept/installation

**Identical installation cut-outs** for various cooling capacities.

**Easily retrofitted** Due to the low weight, simple assembly cut-outs and problem free attachment of the heat exchangers, a cabinet or enclosure is easily retrofitted.

### Servicing/security

**Simple maintenance** The heat exchanger module removes easily for cleaning. The cleverly designed structure enables fast, economical maintenance.

Heat Exchangers

Climate Control

## Benefits:

- Specific thermal output from 17.5 to 90 W/C
- External and internal circuit may be controlled separately
- Mounting cut-outs and enclosure dimensions identical to TopTherm wallmount air conditioners
- Most models suitable for external and internal mounting
- Top design identical to TopTherm wallmount air conditioners

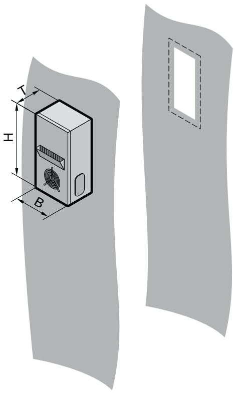
## Important:

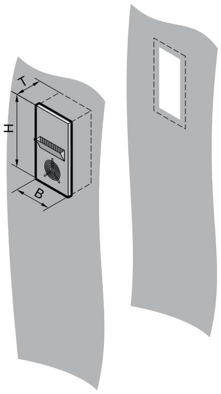
- The temperature difference between the room temperature and enclosure internal temperature will have a decisive effect on the heat loss that may be dissipated.

**For calculations and to download Therm software, refer to our website: www.rittal-corp.com**

# Air/Air Heat Exchanger - Wallmount

## Specific Thermal Output: 12 – 62 W/C





**Configuration:**
Fully wired unit ready for connection.

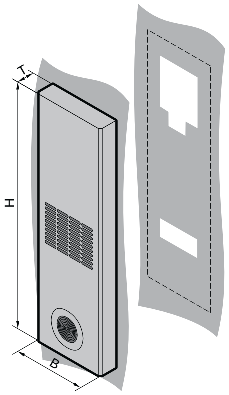
**Protection Rating:**
UL and cUL recognized, CE

UL file: E117603

**For additional technical information, please visit www.rittal-corp.com**

**3125.800**
Compact wall-mount air/air heat exchanger. Ideal for small enclosures and command panels. Suitable for external and internal mounting.

**3129.800**
Super-slimline air/air heat exchangers. Ideal for external/ internal door mounting.



| **Part No.** | | **3125.800** | **3129.800**[1] |
|---|---|---|---|
| Voltage V, Hz | | 230, 50/60 | |
| Dimensions inches (mm) | H x B x T | 16 x 8 x 6 (400 x 200 x 146) | 54 x 16 x 4 (1360 x 400 x 110) |
| Specific thermal output | | 12 W/C | 62 W/C |
| Fans | | 2 per heat exchanger | |
| Maximum rated current per fan (230 V) | | 0.11 A/0.13 A | 0.45 A/0.55 A |
| Power per fan (230 V) | | 25 W/30 W | 100 W/130 W |
| Air displacement of fans | External circuit<br>Internal circuit | 156/185 cfm<br>(265/315 m³/h) | 506/530 cfm<br>(860/900 m³/h) |
| Temperature range | | 23 to 131° F (–5 to +55° C) | |
| Type of connection | | connection cable | |
| Weight lb (kg) | | 18 (8) | 66 (30) |
| Color | | RAL 7035 (light gray) | |
| Environmental ratings | Internal circuit | UL Type 12 (IP 54) | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Thermostat | 1 | 3110.000 | 322 |
| Temperature indicator | 1 | 3114.200 | 321 |
| Speed control | 1 | 3120.200 | 322 |

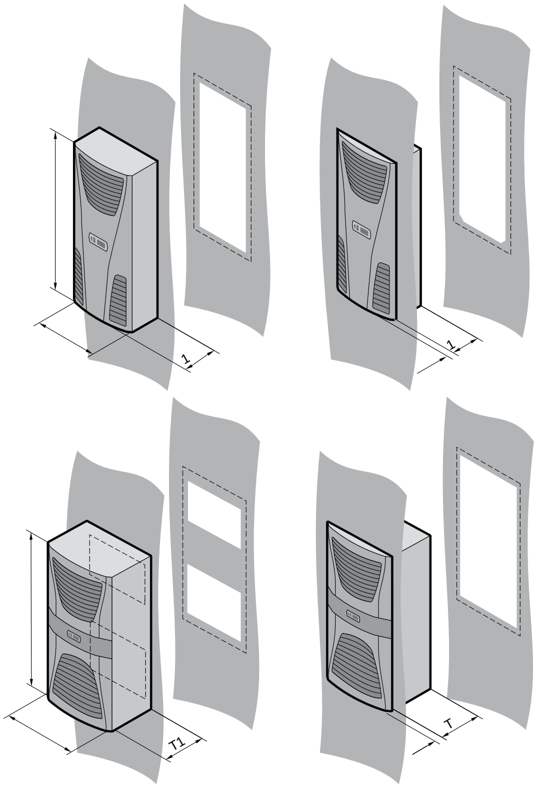
[1] UL Pending

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air/Air Heat Exchanger - Wallmount

## Specific Thermal Output: 17.5 – 60 W/C



**Protection Ratings:**
UL and cUL recognized, CE

UL file: E117603A

**For additional technical information, please visit www.rittal-corp.com**

**Property Rights:**
German registered designs
no. 402 02 324 and
no. 402 02 325
IR reg. design no. DM/061 967
and no. DM/062 557
Chinese registered design
no. ZL 0330 8461.1
Indian registered design
no. 190 269 and no. 189 953
Japanese registered design
no. 1 187 905 and no. 1 187 896
US design patent no. US D 488,480S

| **Part No.** | | **3126.100** | **3126.115** | **3127.100** | **3127.115** | **3128.100** | **3128.115** | **3129.100** | **3129.115** |
|---|---|---|---|---|---|---|---|---|---|
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 |
| Dimensions inches (mm) | H x B x T1 x T2 | 22 x 11 x 6<br>(550 x 280 x 150) | | 37 x 16 x 8 x 6<br>(950 x 400 x 205 x 155) | | 37 x 16 x 9 x 7<br>(950 x 400 x 225 x 175) | | | |
| Specific thermal output | | 17.5 W/C | | 30 W/C | | 45 W/C | | 60 W/C | |
| Fans | | 2 per heat exchanger | | | | | | | |
| Maximum rated current per fan (230 V) | | 0.11 A/0.13 A | | 0.28 A/0.34 A | | 0.3 A/0.4 A | | 0.38 A/0.4 A | |
| Power per fan (230 V) | | 23 W/27 W | | 60 W/75 W | | 70 W/90 W | | 85 W/90 W | |
| Air displacement of fans | External circuit<br>Internal circuit | 156/185 cfm<br>(265/315 m³/h) | | 283/309 cfm<br>(480/525 m³/h) | | 353/368 cfm<br>(600/625 m³/h) | | 506/530 cfm<br>(860/900 m³/h) | |
| Temperature range | | 23 to 131° F (–5 to +55° C) | | | | | | | |
| Type of connection | | Plug-in terminal strip | | | | | | | |
| Weight lb (kg) | | 22 (10) | | 40 (18) | | 42 (19) | | 46 (21) | |
| Color | | RAL 7035 (light gray) | | | | | | | |
| Environmental ratings | Internal circuit | UL Type 12 (IP 54) | | | | | | | |

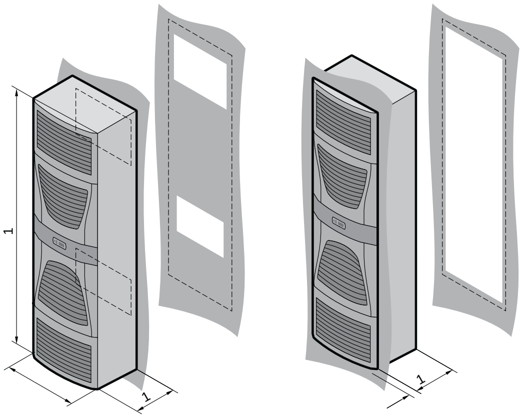
| **Accessories** | PU | | | | | | | | | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| Filter mats | 3 | 3286.300 | | 3286.400 | | | | | | 328 |
| Metal filters | 1 | 3286.310 | | 3286.410 | | | | | | 327 |
| Thermostat | 1 | 3110.000 | | | | | | | | 322 |
| Temperature indicator | 1 | 3114.200 | | | | | | | | 321 |
| Speed control | 1 | 3120.200 | | | | | | | | 322 |

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air/Air Heat Exchanger - Wallmount

## Specific Thermal Output: 90 W/C



**Protection Ratings:**
UL and cUL recognized, CE

UL file: E117603A

**Configuration:**
Fully wired unit ready for connection.

- With comfort controller and digital temperature indicator
- Floating fault signal contact in case of overtemperature
- Separately controllable air circuits

**Property Rights:**
German registered designs
no. 402 02 324 and no. 402 02 325
IR reg. design no. DM/061 967
and no. DM/062 557
Brazilian registered design
no. DI 6203240-2
Chinese registered design
no. ZL 0330 4386.8
Indian registered designs
nos. 190 270, 189 954,
189 955, 189 958
Japanese registered design
no. 1 187 906 and no. 1 187 897
US design patent
no. US D 492,319S and
US D 492,320S

**For additional technical information, please visit www.rittal-corp.com**

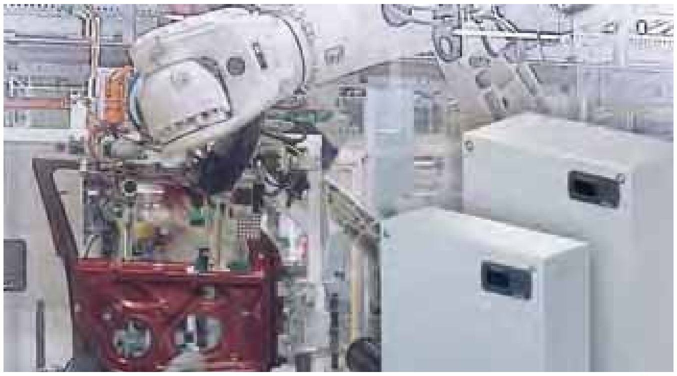
| **Part No.** | | **3130.100** | **3130.115** |
|---|---|---|---|
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 |
| Dimensions inches (mm) | H x W x D | 62 x 16 x 9 (1580 x 400 x 215) | |
| Specific thermal output | | 90 W/C | |
| Fans | | 2 per heat exchanger | |
| Maximum rated current per fan (230 V) | | 0.67 A/0.88 A | |
| Power per fan (230 V) | | 150 W/200 W | |
| Air displacement of fans | External circuit | 500/556 cfm (850/945 m$^3$/h) | |
| | Internal circuit | 500/556 cfm (850/945 m$^3$/h) | |
| Temperature range | | 23 to 131° F (–5 to +55° C) | |
| Type of connection | | Plug-in terminal strip | |
| Weight lb (kg) | | 75 (34) | |
| Color | | RAL 7035 (light gray) | |
| Environmental ratings | Internal circuit | UL Type 12 (IP 54) | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Filter mats | 3 | 3286.400 | 328 |
| Metal filters | 1 | 3286.410 | 327 |
| Thermostat | 1 | 3110.000 | 322 |
| Temperature indicator | 1 | 3114.200 | 321 |
| Speed control | 1 | 3120.200 | 322 |

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

## Features of Air/Water Heat Exchangers



### Suitable for use in extreme conditions

The air of the enclosure interior may also be cooled to below the level of the external temperature by using **air/water heat exchangers** with a central chiller system. Dust is unable to penetrate the enclosure. The waste heat from the enclosure does not raise the temperature of the ambient air, provided the cold water supply system is spatially separated.

### Versions

**Roofmount**

Especially for bayed enclosures, where wallmount devices would obstruct the door.

**Wallmount**

For mounting on the wall or any sufficiently large vertical surface.

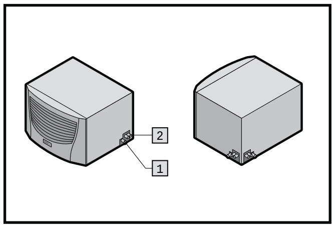
### Controller

**Basic Controller:**

- Visualization of the operating status by a LED display
- Switching hysteresis: 5 C
- Floating fault signal contact in case of over temperature
- Setpoint adjustable from the outside by a potentiometer (setting range 68 – 131° F [20 – 55° C])

**Comfort Controller:**

- Switching hysteresis: 2 – 10 C, preset to 5 C
- System alarm, individually configurable for 2 floating fault signal contacts
- Visualization of the current enclosure internal temperature and all system messages on the display
- Storage of all system states in the log file
- Optional extension card for integration into monitoring systems such as CMC



**Flexible water logistics and condensate management**

Any condensate is discharged by one of the two tube connectors (½") and a discharge hose, which should be laid with a gradient to ensure that there are no kinks.
In order to avoid increased condensation, the cooling water temperature should be adapted to match the required cooling capacity.

**1** Condensate discharge (flexible)

**2** Cooling water connection (flexible)

### Benefits:

- Useful cooling capacity from 1025 to 17076 BTU (300 to 5000 W)
- Suitable for use even in extreme conditions and ambient temperatures up to 158° F (+70° C)
- Also available with all water-carrying parts made from Type 316 stainless steel

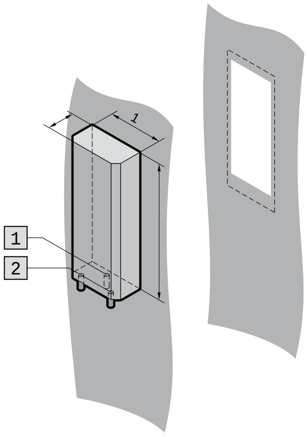
### Important:

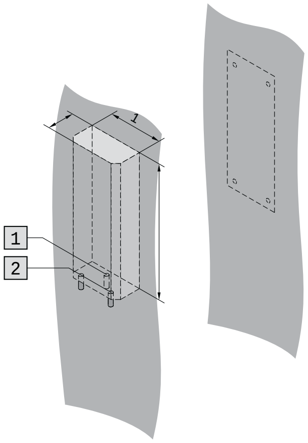
- Air/water heat exchangers should always be used in conjunction with chiller systems or a cooling water circuit

**For calculations and to download Therm software, refer to our website: www.rittal-corp.com**

# Air/Water Heat Exchanger - Wallmount

## Useful Cooling Capacity: 1025 BTU (300 W)





Especially for selective cooling of hot spots in small enclosures.

**Configuration:**
Fully wired ready for connection, including drilling template and assembly parts.

- **1** Condensate discharge
- **2** Cooling water connection (quick-release fastener)

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | | **3212.230** | **3212.115**[1] | **3212.024**[1] |
|---|---|---|---|---|
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 24 V DC |
| Dimensions inches (mm) | H x W x D | 12 x 6 x 3 (300 x 150 x 85) | | |
| Useful cooling capacity BTU (W) | $T_i$ 95 $T_w$ 50, 52.8 gal/h (200 l/h) | 1025 (300) | | |
| Rated current maximum | | 0.11 A/0.13 A | 0.23 A/0.24 A | 1.20 A |
| Pre-fuse T | | 4.0 A | | |
| Cooling medium | | Water (refer to specifications and assembly instructions at www.rittal-corp.com) | | |
| Water inlet temperature | | > 34 to 86° F (+1 to +30° C) | | |
| Permissible operating pressure p. max. | | 15 to 145 psi (1 to 10 bar) | | |
| Temperature range | | 34 to 158° F (+1 to +70° C) | | |
| Environmental ratings | | UL Type 12 (IP 55)[2] | | |
| Duty cycle | | 100% | | |
| Type of connection | | Connection clamp | | |
| Weight lb (kg) | | 6.6 (3) | | |
| Color | | RAL 7035 (light gray) | | |
| Air displacement of fans (unimpeded air flow) | | 165 cfm (280 m³/h) | | 147 cfm (250 m³/h) |

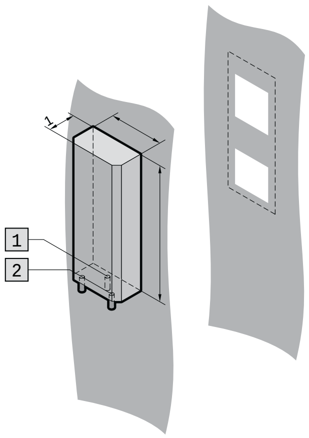
| **Accessories** | PU | | Page |
|---|---|---|---|
| Temperature indicator | 1 | 3114.200 | 321 |
| Door-operated switch | 1 | 4127.000, see www.rittal-corp.com | – |
| Condensate hose | 1 | 3301.612 | 324 |
| Flow regulator valve | 1 | see www.rittal-corp.com | – |

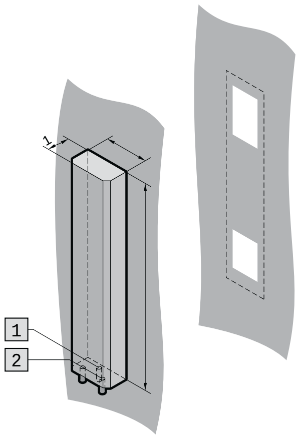
[1] Delivery times available upon request and UL pending.
[2] IP 65 available by request.
Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air/Water Heat Exchanger - Wallmount

## Useful Cooling Capacity: 2049 - 4440 BTU (600 - 1300 W)





**Protection Ratings:**
UL and cUL recognized, CE

UL file: E117603

**Configuration:**
Fully wired ready for connection with terminal strip, including drilling template, gasket and assembly parts.

**Additional Parts Needed:**
Cooling water system such as Rittal chiller systems, see page 309

**1** Condensate discharge ½"

**2** Cooling water connection ½"

**For additional technical information, please visit www.rittal-corp.com**

| Part No. | | 3214.100 | 3214.115[1] | 3215.100 | 3215.115[1] |
|---|---|---|---|---|---|
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 230, 50/60 | 115, 50/60 |
| Dimensions inches (mm) | H x W x D | 20 x 8 x 4 (500 x 200 x 100) | | 37 x 8 x 4 (950 x 200 x 100) | |
| Useful cooling capacity BTU (W) | $T_i$ 95 $T_w$ 50, 52.8 gal/h (200 l/h) | 2049 (600) | | 4269 (1250) | |
| | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 2220 (650) | | 4440 (1300) | |
| Rated current maximum | | 0.17 A/0.18 A | 0.34 A/0.36 A | 0.38 A/0.4 A | 0.76 A/0.8 A |
| Pre-fuse T | | 2.0 A | | 4.0 A | |
| Cooling medium | | Water (refer to specifications and assembly instructions at www.rittal-corp.com) | | | |
| Water inlet temperature | | > 34 to 86° F (+1 to +30° C) | | | |
| Permissible operating pressure $p_{max}$ | | 14.5 to 145 psi (1 to 10 bar) | | | |
| Temperature range | | 34 to 158° F (+1 to +70° C) | | | |
| Environmental ratings | | UL Type 12 (IP 55)[2] | | | |
| Duty cycle | | 100% | | | |
| Type of connection | | Terminal strip | | | |
| Weight lb (kg) | | 15.4 (7) | | 20.9 (9.5) | |
| Color | | RAL 7035 (light gray) | | | |
| Air displacement of fans | | 71 cfm (120 m³/h) | | 118 cfm (200 m³/h) | |
| Temperature control | | Thermostat-controlled magnetic valve | | | |
| Temperature monitoring | | Internal thermostat, with change-over contact, switching load 16 A, setting range 68 to 140° F (+20 to +60° C) (factory setting 95° F [+35° C]) | | | |

| Accessories | PU | | Page |
|---|---|---|---|
| Temperature indicator | 1 | 3114.200 | 321 |
| Door-operated switch | 1 | 4127.000, see www.rittal-corp.com | – |
| Condensate hose | 1 | 3301.612 | 324 |
| Flow regulator valve | 1 | see www.rittal-corp.com | – |

[1] UL pending.

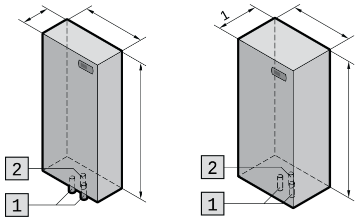
[2] IP 65 available by request.

Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air/Water Heat Exchanger - Wallmount

## Useful Cooling Capacity: 1280 - 3412 BTU (375 - 1000 W)



**Protection Ratings:**
UL and cUL recognized, CE

UL file: E117603

Upon request: UL Type 3R available

UL Type 3R file: SA33163

**Configuration:**
Fully wired ready for connection with terminal strip, including drilling template, gasket and assembly parts.

**Additional Parts Needed:**
Cooling water system such as Rittal chiller systems, see page 309

1 Condensate discharge ½"

2 Cooling water connection ½"

**For additional technical information, please visit www.rittal-corp.com**

| Water-carrying parts | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Part No. basic controller** | CuAL | **3363.100** | **3363.110[1]** | **3363.140[1]** | **3364.100** | **3364.110[1]** | **3364.140[1]** |
| **Part No. comfort controller** | | **3363.500** | **3363.510[1]** | **3363.540[1]** | **3364.500** | **3364.510[1] [2]** | **3364.540[1]** |
| Useful cooling output BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 1706 (500) | | | 3412 (1000) | | |
| **Part No. basic controller** | Type 316 stainless steel | **3363.104** | **3363.114** | **3363.144** | **3364.104[1]** | **3364.114** | **3364.144** |
| **Part No. comfort controller** | | **3363.504** | **3363.514** | **3363.544** | **3364.504[1]** | **3364.514** | **3364.544** |
| Useful cooling output BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 1280 (375) | | | 2559 (750) | | |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 |
| Dimensions inches (mm) | H x W x D | 22 x 11 x 4 (550 x 280 x 92) | | | 22 x 11 x 6 (550 x 280 x 142) | | |
| Rated current maximum | | 0.17A/ 0.18A | 0.35A/ 0.40A | 0.1A/0.12A | 0.2A/0.19A | 0.4A/0.38A | 0.12A/0.11A |
| Pre-fuse T | | 4.0 A | | 4.0 A[2] | 4.0 A | | 4.0 A[2] |
| Cooling medium | | Water (refer to specifications and assembly instructions at www.rittal-corp.com) | | | | | |
| Water inlet temperature | | 34 to 86° F (+1 to +30° C) | | | | | |
| Permissible operating pressure p. max. | | 14.5 to 145 psi (1 to 10 bar) | | | | | |
| Temperature range | | 34 to 158° F (+1 to +70° C) | | | | | |
| Environmental ratings | | UL Type 12 (IP 55)[3] | | | | | |
| Duty cycle | | 100% | | | | | |
| Type of connection | | Plug-in terminal strip | | | | | |
| Weight lb (kg) | | 26 (12) | | | 33 (15) | | |
| Color | | RAL 7035 (light gray) | | | | | |
| Air displacement of fans | | 159/188 cfm (270/320 $m^3$/h) | | | | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | | | | |

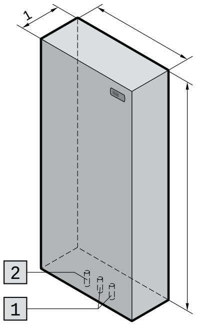
| **Accessories** | PU | | Page |
|---|---|---|---|
| Door-operated switch | 1 | 4127.000, see www.rittal-corp.com | – |
| Master/slave | 1 | 3124.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Condensate hose | 1 | 3301.612 | 324 |
| Flow regulator valve | 1 | see www.rittal-corp.com | – |

[1] Units include an additional external transformer which must be mounted by the end customer.
[2] 2-pole miniature circuit breaker.
[3] IP 65 available by request.
Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air/Water Heat Exchanger - Wallmount

## Useful Cooling Capacity: 5118 - 10236 BTU (1500 - 3000 W)



**Protection Ratings:**
UL and cUL recognized, CE

UL file: E117603

Upon request: UL Type 3R available

UL Type 3R file: SA33163

**Configuration:**
Fully wired ready for connection with terminal strip, including drilling template, gasket and assembly parts.

**Additional Parts Needed:**
Cooling water system such as Rittal chiller systems, see page 309

**1** Condensate discharge ½"

**2** Cooling water connection ½"

**For additional technical information, please visit www.rittal-corp.com**

| | Water-carrying parts | | | | | | |
|---|---|---|---|---|---|---|---|
| **Part No. basic controller** | CuAL | **3373.100** | **3373.110** | **3373.140** | **3374.100** | **3374.110** | **3374.140** |
| **Part No. comfort controller** | | **3373.500** | **3373.510** | **3373.540** | **3374.500** | **3374.510** | **3374.540** |
| Useful cooling output BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 6824 (2000) | | | 10236 (3000) | | |
| **Part No. basic controller** | Type 316 stainless steel | **3373.104** | **3373.114** | **3373.144** | **3374.104** | **3374.114** | **3374.144** |
| **Part No. comfort controller** | | **3373.504** | **3373.514** | **3373.544** | **3374.504** | **3374.514** | **3374.544** |
| Useful cooling output BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 5118 (1500) | | | 7677 (2250) | | |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 |
| Dimensions inches (mm) | H x W x D | 37 x 16 x 6 (950 x 400 x 142) | | | | | |
| Rated current maximum | | 0.38A/ 0.43A | 0.75A/ 0.85A | 0.22A/0.25A | 0.57A/0.78A | 1.15A/1.55A | 0.35A/0.45A |
| Pre-fuse T | | 4.0 A | | 4.0 A[2] | 4.0 A | | 4.0 A[2] |
| Cooling medium | | Water (refer to specifications and assembly instructions at www.rittal-corp.com) | | | | | |
| Water inlet temperature | | 34 to 86° F (+1 to +30° C) | | | | | |
| Permissible operating pressure p. max. | | 14.5 to 145 psi (1 to 10 bar) | | | | | |
| Temperature range | | 34 to 158° F (+1 to +70° C) | | | | | |
| Environmental ratings | | UL Type 12 (IP 55)[1] | | | | | |
| Duty cycle | | 100% | | | | | |
| Type of connection | | Plug-in terminal strip | | | | | |
| Weight lb (kg) | | 44 (20) | | | | | |
| Color | | RAL 7035 (light gray) | | | | | |
| Air displacement of fans | | 353/368 cfm (600/625 m³/h) | | | 412/430 cfm (700/730 m³/h) | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | | | | |

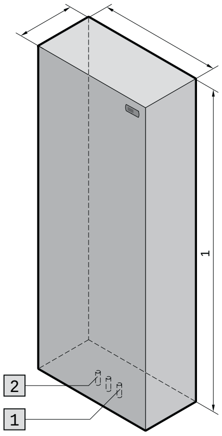
| **Accessories** | PU | | Page |
|---|---|---|---|
| Door-operated switch | 1 | 4127.000, see www.rittal-corp.com | – |
| Master/slave | 1 | 3124.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Condensate hose | 1 | 3301.612 | 324 |
| Flow regulator valve | 1 | see www.rittal-corp.com | – |

[1] IP 65 available by request.
[2] 2-pole miniature circuit breaker.
Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air/Water Heat Exchanger - Wallmount

## Useful Cooling Capacity: 12795 - 17060 BTU (3750 - 5000 W)



**Protection Ratings:**
UL and cUL recognized, CE

UL file: E117603

Upon request: UL Type 3R available

UL Type 3R file: SA33163

**Configuration:**
Fully wired ready for connection with terminal strip, including drilling template, gasket and assembly parts.

**Additional Parts Needed:**
Cooling water system such as Rittal chiller systems, see page 309

1 Condensate discharge ½"

2 Cooling water connection ½"

**For additional technical information, please visit www.rittal-corp.com**

| | Water-carrying parts | | | |
|---|---|---|---|---|
| **Part No. basic controller** | CuAL | **3375.100** | **3375.110** | **3375.140** |
| **Part No. comfort controller** | | **3375.500** | **3375.510** | **3375.540** |
| Useful cooling output BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 17060 (5000) | | |
| **Part No. basic controller** | Type 316 stainless steel | **3375.104** | **3375.114** | **3375.144** |
| **Part No. comfort controller** | | **3375.504** | **3375.514** | **3375.544** |
| Useful cooling output BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 12796 (3750) | | |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 |
| Dimensions inches (mm) | H x W x D | 55 x 18 x 10 (1400 x 450 x 250) | | |
| Rated current maximum | | 0.57A/0.78A | 1.15A/1.55A | 0.35A/0.45A |
| Pre-fuse T | | 4.0 A | | 4.0 A[1] |
| Cooling medium | | Water (refer to specifications and assembly instructions at www.rittal-corp.com) | | |
| Water inlet temperature | | 34 to 86° F (+1 to +30° C) | | |
| Permissible operating pressure $P_{max.}$ | | 14.5 to 145 psi (1 to 10 bar) | | |
| Temperature range | | 34 to 158° F (+1 to +70° C) | | |
| Environmental ratings | | UL Type 12 (IP 55)[1] | | |
| Duty cycle | | 100% | | |
| Type of connection | | Plug-in terminal strip | | |
| Weight lb (kg) | | 123 (56) | | 130 (59) |
| Color | | RAL 7035 (light gray) | | |
| Air displacement of fans | | 1391/1618 cfm (2365/2750 m³/h) | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | |

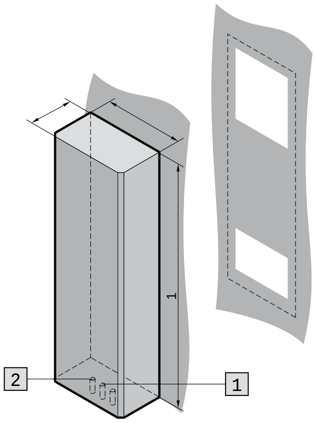
| **Accessories** | PU | | Page |
|---|---|---|---|
| Door-operated switch | 1 | 4127.000, see www.rittal-corp.com | – |
| Master/slave | 1 | 3124.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Condensate hose | 1 | 3301.612 | 324 |
| Flow regulator valve | 1 | see www.rittal-corp.com | – |

[1] IP 65 available by request.
[2] 2-pole miniature circuit breaker.
Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air/Water Heat Exchanger - Wallmount

## Useful Cooling Capacity: 17060 - 23885 BTU (5000 - 7000 W)



**Protection Ratings:**
CSA

**Configuration:**
Fully wired ready for connection with terminal strip, including drilling template, gasket and assembly parts.

**Additional Parts Needed:**
Cooling water system such as Rittal chiller systems, see page 309

1 Condensate discharge ½"

2 Cooling water connection ½"

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | | **3216.480** | |
|---|---|---|---|
| Voltage V, Hz | | 400, 3~, 50/60 | 480, 3~, 60 |
| Dimensions inches (mm) | H x W x D | 71 x 18 x 12 (1800 x 450 x 300) | |
| Useful cooling capacity BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 17060 BTU (5000 W) | |
| | $T_i$ 95 $T_w$ 50, 132 gal/h (500 l/h) | 23885 BTU (7000 W) | |
| Rated current maximum | | 1.4 A/1.6 A | 1.2 A |
| Pre-fuse T | | 4.0 A, 3-pole | |
| Cooling medium | | Water (refer to specifications and assembly instructions at www.rittal-corp.com) | |
| Water inlet temperature | | 34 to 86° F (+1 to +30° C) | |
| Permissible operating pressure $P_{max.}$ | | 14.5 to 145 psi (1 to 10 bar) | |
| Temperature range | | 34 to 158° F (+1 to +70° C) | |
| Environmental ratings | | UL Type 12 (IP 55)1) | |
| Duty cycle | | 100% | |
| Type of connection | | Terminal strip | |
| Weight lb (kg) | | 174.2 (79) | |
| Color | | RAL 7035 (light gray) | |
| Air displacement of fans | | 4078 cfm (2400 $m^3$/h) | |
| Temperature control | | Thermostat-controlled magnetic valve | |

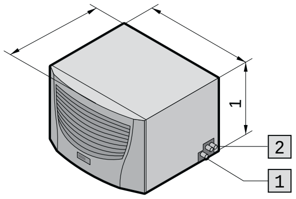
| **Accessories** | PU | | Page |
|---|---|---|---|
| Temperature indicator | 1 | 3114.200 | 321 |
| Door-operated switch | 1 | 4127.000, see www.rittal-corp.com | – |
| Condensate hose | 1 | 3301.612 | 324 |
| Flow regulator valve | 1 | see www.rittal-corp.com | – |

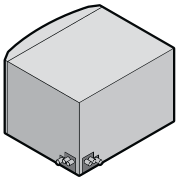
1) IP 65 available by request.
UL pending, all water-carrying parts Type 316 stainless steel.
Special voltages available by request. We reserve the right to make technical modifications.

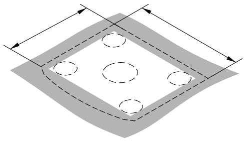
Inch and pound measurements are rounded to the nearest whole number.

# Air/Water Heat Exchanger - Roofmount

## Useful Cooling Capacity: 6403 - 8538 BTU (1875 - 2500 W)







**Protection Ratings:**
cUL recognized, CE

UL file: E117603A

**For additional technical information, please visit www.rittal-corp.com**

**Configuration:**
Fully wired ready for connection with connector, including drilling template, gasket and assembly parts.

**Additional Parts Needed:**
Cooling water system such as Rittal chiller systems, see page 309

**1** Condensate discharge (flexible)

**2** Cooling water connection (flexible)

**Property Rights:**
German registered designs no. 402 02 324 and no. 402 02 325
US design patent no. US D 492,319S
Indian registered design no. 189 956
Chinese registered design no. ZL 0330 6415.6

| Water-carrying parts | | | | |
|---|---|---|---|---|
| **Part No. basic controller** | CuAL | **3209.100** | **3209.110** | **3209.140** |
| **Part No. comfort controller** | | **3209.500** | **3209.510** | **3209.540** |
| Useful cooling capacity BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 8538 (2500) | | |
| **Part No. basic controller** | Type 316 stainless steel | **3209.104**[1] | **3209.114**[1] | **3209.144** |
| **Part No. comfort controller** | | **3209.504**[1] | **3209.514**[1] | **3209.544** |
| Useful cooling capacity BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 6403 (1875) | | |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 |
| Dimensions inches (mm) | H x W x D | 16 x 24 x 19 (415 x 597 x 475) | | |
| Rated current maximum | | 0.40 A | 0.85 A | 0.25 A |
| Pre-fuse T | | 4.0 A | | |
| Cooling medium | | Water (refer to specifications and assembly instructions at www.rittal-corp.com) | | |
| Water inlet temperature | | > 34 to 86° F (+1 to +30° C) | | |
| Permissible operating pressure $P_{max.}$ | | 14.5 to 145 psi (1 to 10 bar) | | |
| Temperature range | | 34 to 158° F (+1 to +70° C) | | |
| Environmental ratings | | UL Type 12 (IP 55)[1] | | |
| Duty cycle | | 100% | | |
| Type of connection | | Plug-in terminal strip | | |
| Weight lb (kg) | | 51.8 (23.5) | 60.6 (27.5) | |
| Color | | RAL 7035 (light gray) | | |
| Air displacement of fans (unimpeded air flow) | | 606 cfm (1030 m$^3$/h) | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Door-operated switch | 1 | 4127.000, see www.rittal-corp.com | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Air ducting system | 1 | 3286.870 | 319 |
| Cover stoppers for interior air outlet | 1 | 3286.880 | 320 |
| Condensate hose | 1 | 3301.612 | 324 |
| Shallow duct systems | 1 | 3286.850 | 319 |
| Flow regulator valve | 1 | see www.rittal-corp.com | – |

[2] IP 65 available by request.
Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Air/Water Heat Exchanger - Roofmount

## Useful Cooling Capacity: 10246 - 13661 BTU (3000 - 4000 W)

**Protection Ratings:**
cUL recognized, CE

UL file: E117603A

**For additional technical information, please visit www.rittal-corp.com**

**Configuration:**
Fully wired ready for connection with connector, including drilling template, gasket and assembly parts.

**Additional Parts Needed:**
Cooling water system such as Rittal chiller systems, see page 309

1 Condensate discharge (flexible)

2 Cooling water connection (flexible)

US design patent no. US D 492,319S
Indian registered design no. 189 956
Chinese registered design no. ZL 0330 6415.6

**Property Rights:**
German registered designs
no. 402 02 324 and
no. 402 02 325

| | Water-carrying parts | | | |
|---|---|---|---|---|
| **Part No. basic controller** | CuAL | **3210.100** | **3210.110** | **3210.140** |
| **Part No. comfort controller** | | **3210.500** | **3210.510** | **3210.540** |
| Useful cooling capacity BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 13661 (4000) | | |
| **Part No. basic controller** | Type 316 stainless steel | **3210.104** | **3210.114** | **3210.144** |
| **Part No. comfort controller** | | **3210.504** | **3210.514** | **3210.544** |
| Useful cooling capacity BTU (W) | $T_i$ 95 $T_w$ 50, 105 gal/h (400 l/h) | 10246 (3000) | | |
| Voltage V, Hz | | 230, 50/60 | 115, 50/60 | 400, 2~, 50/60 |
| Dimensions inches (mm) | H x W x D | 16 x 24 x 19 (415 x 597 x 475) | | |
| Rated current maximum | | 0.44 A | 0.9 A | 0.25 A |
| Pre-fuse T | | 4.0 A | | |
| Cooling medium | | Water (refer to specifications and assembly instructions at www.rittal-corp.com) | | |
| Water inlet temperature | | > 34 to 86° F (+1 to +30° C) | | |
| Permissible operating pressure $P_{max.}$ | | 14.5 to 145 psi (1 to 10 bar) | | |
| Temperature range | | 34 to 158° F (+1 to +70° C) | | |
| Environmental ratings | | UL Type 12 (IP 55)[1] | | |
| Duty cycle | | 100% | | |
| Type of connection | | Plug-in terminal strip | | |
| Weight lb (kg) | | 56.2 (25.5) | 65 (29.5) | |
| Color | | RAL 7035 (light gray) | | |
| Air displacement of fans (unimpeded air flow) | | 544 cfm (925 m³/h) | | |
| Temperature control | | Basic or comfort controller (factory setting 95° F [+35° C]) | | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Door-operated switch | 1 | 4127.000, see www.rittal-corp.com | – |
| Master/slave cable for comfort controller | 1 | 3124.100 | 323 |
| Interface card for comfort controller | 1 | 3124.200 | 323 |
| Air ducting system | 1 | 3286.870 | 319 |
| Cover stoppers for interior air outlet | 1 | 3286.880 | 320 |
| Condensate hose | 1 | 3301.612 | 324 |
| Shallow duct systems | 1 | 3286.850 | 319 |
| Flow regulator valve | 1 | see www.rittal-corp.com | – |

[1] IP 65 available by request.
Special voltages available by request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

## Features

Chiller systems ensure centralized, efficient cooling and provision of the cooling medium (generally water). For example, all cooling tasks on a system or machine can be solved by a single pipeline system. Spatial separation between cooling production and process cooling can be achieved with chiller systems.

## Application diversity of centralized cooling technology

**Enclosure cooling**

In conjunction with air/water heat exchangers, optimum dissipation of high heat loads is guaranteed, even under extreme ambient temperatures and air pollution.

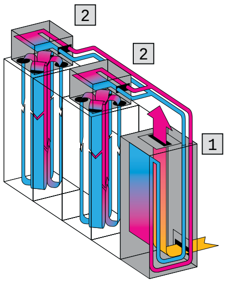
**Cooling of liquid media**

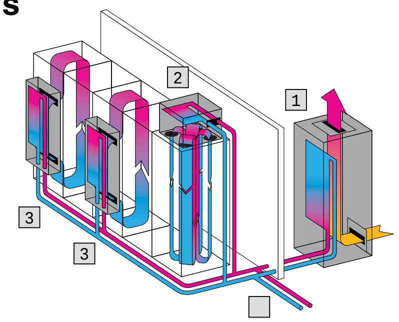
Direct and indirect cooling of liquids are the prerequisite for ensuring essential machine precision and speed.

**Process cooling**

High-quality material processing, such as laser cutting, requires high levels of temperature precision with simultaneous cooling of the peripheral technology.

## Installation conditions





**Unity with enclosures**

For example, chiller systems may be attached directly to a bayed enclosure suite to provide effective, centralized cooling of all cases and enclosures on a machine or plant floor.

**Spatially separated**

High heat loads can even be dissipated in confined and awkward spaces, due to the spatial separation of the chiller system from the enclosure and machine. In all cases, as well as enclosure cooling, cooling water may also be produced for process and machine cooling or for cooling liquid media.

1 Chiller system
2 Air/water heat exchanger, roofmount
3 Air/water heat exchanger, wallmount
4 Further cooling options, machine cooling

## Benefits:

- A single system for enclosure cooling, process and machine cooling, and the cooling of liquid media.
- Integration into bayed enclosure suites
- Individual project planning
- Commissioning and servicing

## Important:

- Cooling capacity calculated at an ambient temperature of 90° F (32° C) and an inlet temperature of 50° F (10° C) and 64° F (18° C) (water) or 68° F (20° C) (oil)

## Features

## Project planning examples

**Example 1**

### Production line

High-quality material processing requires a high degree of temperature precision with simultaneous cooling of the peripheral technology. The cost-effective cooling of various equipment in the production line is performed centrally by the chiller system in an industrial enclosure. It supplies the machine, process cooling and control enclosure with the required cooling water by an air/water heat exchanger.

**Example 2**

### Test laboratory

Every single product is subjected to in-depth functional and quality testing at the in-house test laboratory. To ensure that the test process runs smoothly, the control enclosures are cooled by an air/water heat exchanger, and the three test benches are supplied with the required cooling water per the test requirements. These diverse cooling tasks are performed by a chiller system integrated into the TS8 modular enclosure system. Visually, they form a single unit with the TS8 control enclosure.

**Example 3**

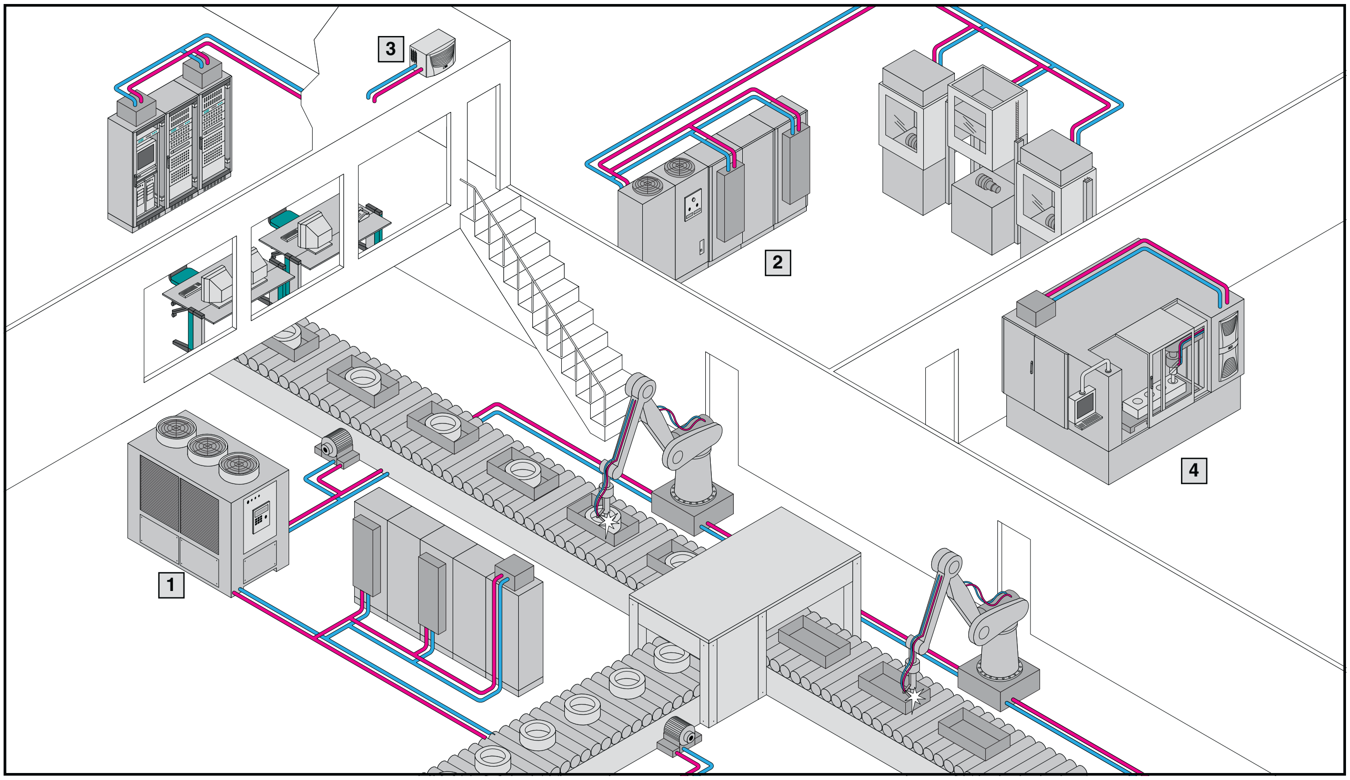
### Control room

In conjunction with air/water heat exchangers, the server and network enclosures installed in the production control room are cooled by a mini chiller system. The mini chiller system is installed outside of the production control room to avoid contaminating the room air, and to facilitate optimum dissipation of the heat loss generated by the chiller system.

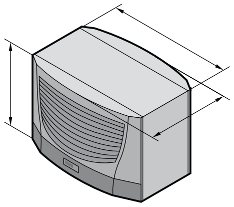
**Example 4**

### Tool production

The heat loss generated during tool machining, (for example by water-cooled motor spindles with high-frequency drives), must be dissipated efficiently. In this case, the task is performed by a wallmount mini chiller system which at the same time ensures cooling of the control unit, also integrated into the machine.



## Cooling Capacity: 2664 - 5669 BTU (780 - 1660 W)



**Technical Design:**

- Compact and modular layout of the cooling components on a base plate which functions as a collecting tray
- Medium-conveying pumps
- Precise temperature control, based on microprocessor technology
- Collective fault signal with floating contact
- Application-specific equipment available on request
- Pressure-sealed system (XXXX.600) or open system with tank (XXXX.610)

**Configuration:**
Chiller system wired and plumbed ready for connection, with multilingual documentation including functional diagram and wiring plans.

**Note:**
The illustration shows units with customer-specific options.

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | | **3318.600** | **3318.610** | **3319.600** | **3319.610** |
|---|---|---|---|---|---|
| Voltage V, Hz | | 230, 50/60 | | | |
| Dimensions inches (mm) | H x W x D | 16 x 24 x 17 (400 x 600 x 430) | | | |
| Cooling capacity at | | | | | |
| $T_w$ = 50° F (10° C)/$T_a$ = 90° F (32° C) BTU (W) | | 2664/2971 (780/870) | | 4098/4542 (1200/1330) | |
| $T_w$ = 64° F (18° C)/$T_a$ = 90° F (32° C) BTU (W) | | 3279/3654 (960/1070) | | 5089/5669 (1490/1660) | |
| Power consumption | | 630/780 W | | 845/1050 W | |
| Rated current maximum | | 4.2 A | | 5.4 A | |
| Refrigerant | | R134a | | | |
| $P_{max.}$ cooling circuit | | 363 psi (25 bar) | | | |
| Temperature range | Environment | 59 to 109° F (+15 to +43° C) | | | |
| | Liquid media | 59 to 77° F (+15 to +25° C) | | | |
| Pump capacity | | See characteristic curve | | | |
| Tank | | Pressure-sealed | PP plastic | Pressure-sealed | PP plastic |
| Tank capacity gal (l) | | – | 0.7 (2.5) | – | 0.7 (2.5) |
| Water connections | | 2 x ½" BSPP Internal Thread | | | |
| Weight lb (kg) | | 105.8 (48) | | 112.4 (51) | |
| Color | | RAL 7035 (light gray) | | | |
| Ratings (electric) | | IP 44 | | | |
| Air displacement of fans | | 530 cfm (900 $m^3$/h) | | | |
| Temperature control | | Microcontroller control, setting range 50 to 77° F (+10 to +25° C) (factory setting 64° F [+18° C]) | | | |

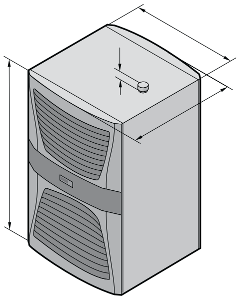
| **Accessories** | PU | | Page |
|---|---|---|---|
| Metal filter mat | 1 | 3286.510 | 327 |

Customized solutions and technical modifications available upon request.

Inch and pound measurements are rounded to the nearest whole number.

# Chiller System

## Mini, Cooling Capacity: 9050 - 18442 BTU (2650 - 5400 W)



**Technical Design:**
- Compact, modular configuration of the cooling components with integrated water tank. Operator display may be optionally mounted on the front or rear
- Integrated tank level display
- Medium-conveying pumps
- Precise temperature control, based on microprocessor technology
- Collective fault signal with floating contact
- Application-specific equipment available on request

**Configuration:**
Chiller system wired and plumbed ready for connection, with multilingual documentation including functional diagram and wiring plans.

**Note:**
The illustration shows units with customer-specific options.

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | | **3320.600** | **3334.600** |
|---|---|---|---|
| Voltage V, Hz | | 400, 3~, 50/60/460, 3~, 60[1] | |
| Dimensions inches (mm) | H x W x D | 27 x 24 x 25 (676 x 602 x 645) | |
| Cooling capacity at | | | |
| $T_w$ = 50° F (10° C)/$T_a$ = 90° F (32° C) BTU (W) | | 9050/10246 (2650/3000) | 13319/16051 (3900/4700) |
| $T_w$ = 64° F (18° C)/$T_a$ = 90° F (32° C) BTU (W) | | 10246/11612 (3000/3400) | 15368/18442 (4500/5400) |
| Power consumption | | 1716/1953 W | 2001/2505 W |
| Rated current maximum | | 3.8 A/3.9 A | 4.9 A/5.0 A |
| Refrigerant | | R134a | |
| $P_{max.}$ cooling circuit | | 363 psi (25 bar) | |
| Temperature range | Environment | 59 to 109° F (+15 to +43° C) | |
| | Liquid media | 59 to 77° F (+15 to +25° C) | |
| Pump capacity | | See characteristic curve | |
| Tank | | Type 304 stainless steel | |
| Tank capacity gal (l) | | 7.9 (30) | |
| Water connections | | 2 x ½" BSPP Internal Thread | |
| Weight lb (kg) | | 194.0 (88) | 207.2 (94) |
| Color | | RAL 7035 (light gray) | |
| Ratings (electric) | | IP 44 | |
| Air displacement of fans | | 1051 cfm (1785 m$^3$/h) | |
| Temperature control | | Microcontroller control, setting range 50 to 77° F (+10 to +25° C) (factory setting 64° F [+18° C]) | |

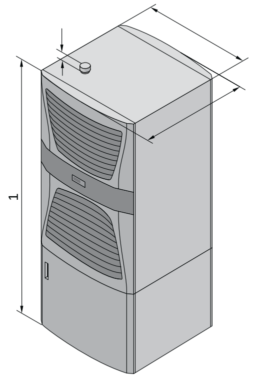
| **Accessories** | PU | | Page |
|---|---|---|---|
| Metal filter mat | 1 | 3286.520 | 327 |

[1] Supports multiple voltages without rewiring.
Special voltages and technical modifications available upon request.

Inch and pound measurements are rounded to the nearest whole number.

# Chiller System

## Cooling Capacity: 16368 - 22506 BTU (4800 - 6600 W)



**Technical Design:**
- Compact, modular configuration of the cooling components with integrated water tank. Operator display may be optionally mounted on the front or rear
- Integrated tank level display
- Medium-conveying pumps
- Precise temperature control, based on microprocessor technology
- Collective fault signal with floating contact
- Application-specific equipment available on request

**Configuration:**
Chiller system wired and plumbed ready for connection, with multilingual documentation including functional diagram and wiring plans.

**Note:**
The illustration shows units with customer-specific options.

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | | **3334.660** |
|---|---|---|
| Voltage V, Hz | | 400, 3~, 50/60/460, 3~, 60[1] |
| Dimensions inches (mm) | H x W x D | 41 x 24 x 25 (1050 x 602 x 645) |
| Cooling capacity at | | |
| $T_w$ = 50° F (10° C)/$T_a$ = 90° F (32° C) BTU (W) | | 16368/17562/17562 (4800/5150/5150) |
| $T_w$ = 64° F (18° C)/$T_a$ = 90° F (32° C) BTU (W) | | 20460/22506/22506 (6000/6600/6600) |
| Power consumption | | 4280/5140/5080 W |
| Rated current maximum | | 8.09 A/9.7 A/8.04 A |
| Refrigerant | | R134a |
| $P_{max.}$ cooling circuit | | 363 psi (25 bar) |
| Temperature range | Environment | 59 to 109° F (+15 to +43° C) |
| | Liquid media | 59 to 77° F (+15 to +25° C) |
| Pump capacity | | See characteristic curve |
| Tank | | Type 304 stainless steel |
| Tank capacity gal (l) | | 7.9 (30) |
| Water connections | | 2 x ½" BSPP Internal Thread |
| Weight lb (kg) | | 264 (120) |
| Color | | RAL 7035 (light gray) |
| Ratings (electric) | | IP 44 |
| Air displacement of fans | | 1295/1471 cfm (2200/2500 $m^3$/h) |
| Temperature control | | Microcontroller control, setting range 50 to 77° F (+10 to +25° C) (factory setting 64° F [+18° C]) |

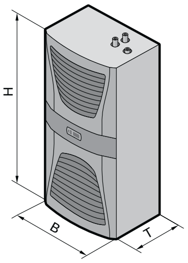
| **Accessories** | PU | | Page |
|---|---|---|---|
| Metal filter mat | 1 | 3286.520 | 327 |

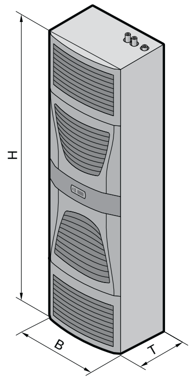
[1] Supports multiple voltages without rewiring.
Special voltages and technical modifications available upon request.

Inch and pound measurements are rounded to the nearest whole number.

# Chiller System - Wallmount

## Cooling Capacity: 2835 - 9563 BTU (830 - 2800 W)





**Technical Design:**

- Compact, modular configuration of the cooling components with integrated water tank
- Application-specific equipment available on request
- Open system with tank

**Configuration:**

Chiller system fully wired and plumbed ready for connection, with multilingual documentation including functional diagram and wiring plans.

**Note:**

The illustration shows units with customer-specific options

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | | **3360.100** | **3360.250** |
|---|---|---|---|
| Voltage V, Hz | | 400, 3~, 50/60/460, 3~, 60[1] | |
| Dimensions inches (mm) | H x B x T | 37 x 16 x 12 (950 x 400 x 310) | 62 x 16 x 11 (1580 x 400 x 290) |
| Cooling capacity at | | | |
| $T_w$ = 50° F (10° C)/$T_a$ = 90° F (32° C) BTU (W) | | 2835/3176 (830/930) | 7172/8026 (2100/2350) |
| $T_w$ = 64° F (18° C)/$T_a$ = 90° F (32° C) BTU (W) | | 3415/3825 (1000/1120) | 8538/9563 (2500/2800) |
| Power consumption | | 700/760 W | 1550/2000 W |
| Rated current maximum | | 2.7 A/3.0 A | 3.7 A/3.8 A |
| Refrigerant | | R134a | |
| $P_{max.}$ cooling circuit | | 334 psi (23 bar) | |
| Temperature range | Environment | 59 to 109° F (+15 to +43° C) | |
| | Liquid media | 59 to 77° F (+15 to +25° C) | |
| Pump capacity | | See characteristic curve | |
| Tank | | PP plastic | |
| Tank capacity gal (l) | | 1.3 (5) | 2.6 (10) |
| Water connections | | Quick-release coupling (counterpart included in accessory bag) | |
| Weight lb (kg) | | 103.6 (47) | 172.0 (78) |
| Color | | RAL 7035 (light gray) | |
| Ratings (electric) | | IP 44 | |
| Air displacement of fans | | 294 cfm (500 m³/h) | 418 cfm (710 m³/h) |
| Temperature control | | Microcontroller control, setting range 50 to 77° F (+10 to +25° C) (factory setting 64° F [+18° C]) | |
| **Accessories** | PU | | |
| Filter mat | 1 | 3286.400 | |
| Metal filter mat | 1 | 3286.410 | |

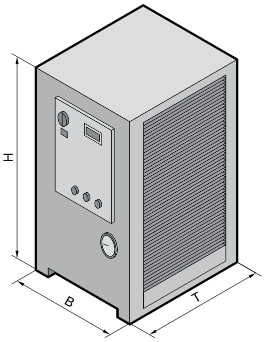
[1] Supports multiple voltages without rewiring.

Special voltages and technical modifications available upon request.

Inch and pound measurements are rounded to the nearest whole number.

# Chiller System - Floorstanding

## Cooling Capacity: 5800 - 26274 BTU (1700 - 7700 W)



**Technical Design:**
- Robust industrial standard in 3 enclosure sizes
- Identical basic enclosure for oil and water chiller systems
- Variable air routing is possible via the l/h or r/h side panel
- Floating contact for collective fault signal
- Anti-frost sensor
- Multi-coil vaporizer in the tank

**Configuration:**
Chiller system wired ready for connection, with multilingual documentation including functional diagram and wiring plans.

**For additional technical information, please visit www.rittal-corp.com**

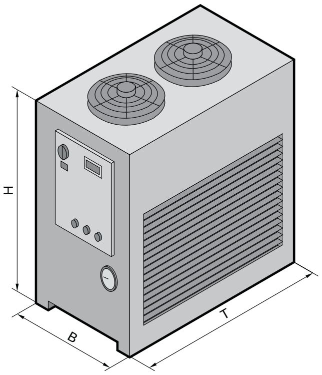
| **Part No.** | | **3336.100** | **3336.200** | **3336.300** | **3336.500** | **3336.600** | **3336.650** |
|---|---|---|---|---|---|---|---|
| Voltage V, Hz | | 400, 3~, 50 | | | | | |
| Dimensions inches (mm) | H x B x T | 29 x 18 x 21 (725 x 470 x 540) | 38 x 19 x 26 (965 x 485 x 650) | | 46 x 24 x 32 (1180 x 595 x 800) | | |
| Cooling capacity at | | | | | | | |
| $T_w$ = 50° F (10° C)/$T_U$ = 90° F (32° C) BTU (W) | | 5800 (1700) | 7166 (2100) | 7848 (2300) | 12113 (3550) | 16378 (4800) | 17743 (5200) |
| $T_w$ = 64° F (18° C)/$T_U$ = 90° F (32° C) BTU (W) | | 7166 (2100) | 8803 (2580) | 1165 (3360) | 17197 (5040) | 21019 (6160) | 26274 (7700) |
| Power consumption | | 1.5 kW | 1.7 kW | 2.3 kW | 2.9 kW | 3.7 kW | 3.9 kW |
| Rated current maximum | | 3.4 A | 3.0 A | 4.2 A | 5.5 A | 6.2 A | 7.3 A |
| Refrigerant | | R134a | | | | | |
| $P_{max.}$ cooling circuit | | 348 psi (24 bar) | | | | | |
| Temperature range | Environment | 59 to 109° F (+15 to +43° C) | | | | | |
| | Liquid media | 59 to 77° F (+15 to +25° C) | | | | | |
| Pump capacity | | See characteristic curve | | | | | |
| Tank | | Type 304 stainless steel | | | | | |
| Tank capacity gal (l) | | 4.5 (17) | 8.7 (33) | | 15.1 (57) | | |
| Water connections | | 3/4" BSPP Internal Thread | | | 1" BSPP Internal Thread | | |
| Weight lb (kg) | | 165 (75) | 213 (97) | 218 (99) | 310 (141) | 314 (143) | 323 (147) |
| Color | | RAL 7035 (light gray) | | | | | |
| Ratings (electric) | | IP 54 | | | | | |
| Air displacement of fans | | 412 cfm (700 $m^3$/h) | 736 cfm (1250 $m^3$/h) | 1050 cfm (1785 $m^3$/h) | 1848 cfm (3140 $m^3$/h) | | |
| Temperature control | | Microcontroller control, setting range 50 to 77° F (+10 to +25° C) (factory setting 64° F [+18° C]) | | | | | |

Special voltages available upon request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

# Immersible Chiller System - Floorstanding

## Cooling Capacity 28150 - 86986 BTU (8250 - 25200 W)



**Technical Design:**
Robust industrial standard in 2 enclosure sizes

- Identical basic enclosure for oil and water chiller systems
- Variable air routing is possible via the l/h or r/h side panel
- Floating contact for collective fault signal
- Anti-frost sensor
- Multi-coil vaporizer in the tank

**Configuration:**
Chiller system wired ready for connection, with multilingual documentation including functional diagram and wiring plans.

**For additional technical information, please visit www.rittal-corp.com**

| **Part No.** | **3336.700** | **3336.710** | **3336.720** | **3336.730** | **3336.740** | **3336.750** |
|---|---|---|---|---|---|---|
| Voltage V, Hz | 400, 3~, 50 | | | | | |
| Dimensions inches (mm) H x B x T | 46 x 24 x 46 (1178 x 615 x 1160) | | | 46 x 28 x 54 (1178 x 715 x 1360) | | |
| Cooling capacity at | | | | | | |
| $T_w$ = 50° F (10° C)/$T_u$ = 90° F (32° C) BTU (W) | 28150 (8250) | 40605 (11900) | 45893 (13450) | 51182 (15000) | 58006 (17000) | 70290 (20600) |
| $T_w$ = 64° F (18° C)/$T_u$ = 90° F (32° C) BTU (W) | 34121 (10000) | 48964 (14350) | 55618 (16300) | 63124 (18500) | 71313 (20900) | 86986 (25200) |
| Power consumption | 3800 W | 4800 W | 5300 W | 6400 W | 7100 W | 13120 W |
| Rated current maximum | 10.6 A | 13.1 A | 14.1 A | 16.2 A | 18.2 A | 23.7 A |
| Refrigerant | R407C | | | | | |
| $P_{max.}$ cooling circuit | 392 psi (27 bar) | | | | | |
| Temperature range Environment | 59 to 109° F (+15 to +43° C) | | | | | |
| Temperature range Liquid media | 59 to 77° F (+15 to +25° C) | | | | | |
| Pump capacity | See characteristic curve | | | | | |
| Tank | Type 304 stainless steel | | | | | |
| Tank capacity gal (l) | 15.9 (60) | | | 26.4 (100) | | |
| Water connections | 1" BSPP Internal Thread | | | | | |
| Weight lb (kg) | 473 (215) | 495 (225) | 517 (235) | 528 (240) | 550 (250) | 572 (260) |
| Color | RAL 7035 (light gray) | | | | | |
| Ratings (electric) | IP 54 | | | | | |
| Air displacement of fans | 3696 cfm (6280 m³/h) | | | 6404 cfm (10880 m³/h) | | |
| Temperature control | Microcontroller control, setting range 50 to 77° F (+10 to +25° C) (factory setting 64° F [+18° C]) | | | | | |

Special voltages available upon request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

## Features

Condensation poses a high risk for control electronics in outdoor and indoor locations. Various output ratings ensure that the correct thermal output is always available. Therefore, the total required thermal output can be distributed with complete accuracy inside an enclosure.

### Simple assembly and perfect control

**Fast assembly**

This is achieved with a snap fastening on the mounting panel or 1" (35 mm) EN 50 022 support rails or screw-fastening directly onto a mounting panel.

**No condensation and always the right temperature**

The heater is controlled as required by a hygrostat or enclosure internal thermostat.

**Fully wired unit ready for connection**

Clamp-type terminal connection for simple, effective wiring.

**Energy-optimised design**

- Output without fan
10, 20, 30, 50, 130, 200 watts
- Output with fan
250, 400, 800 watts

## Benefits:

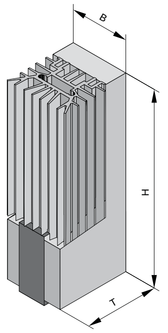
- Continuous thermal output of 10 to 800 W (34 to 2730 BTU)
- Energy efficienct due to self-regulating PTC technology.
- Quick-assembly system

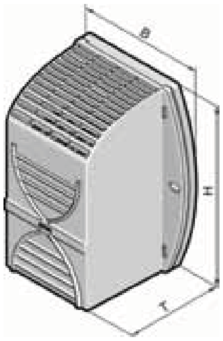
## Important:

- For the correct temperature and to avoid condensation, use a thermostat or hygrostat, see page 322
- The thermal output is increased with fans
- Heaters should always be installed in an upright position. Leave a distance of 2" (50 mm) at the top and bottom to allow circulation
- Heat is distributed evenly in large enclosures by using several low-output heaters

**General information, Therm software and calculation formulas can be found on our website: www.rittal-corp.com**

## Continuous Thermal Output 34 - 2730 BTU (10 - 800 W)





**Configuration:**
PTC heater with quick-fit terminal and assembly parts.

**Protection Ratings:**

UL recognized, CE

UL file: E76083

**Note:**

- Thermostat 3110.000 (see page 322) is recommended for precise temperature control in the enclosure.
- In order to prevent condensation on assemblies, hygrostat 3118.000 (see page 322) is recommended to regulate heating.
- In larger enclosures, even heat distribution is best achieved by installing several low-output heaters.
- Installation in the enclosure is generally advisable, even when using heat exchangers and air conditioners, in order to prevent condensation.

**For additional technical information, please visit www.rittal-corp.com**

### Without fan, continuous thermal output 34 – 512 BTU (10 – 150 W)

| **Part No.** | **3105.310** | **3105.320** | **3105.330** | **3105.340** | **3105.350** | **3105.360** | **3105.370** |
|---|---|---|---|---|---|---|---|
| Dimensions inches (mm) H x B x T | 5 x 2 x 2<br>(120 x 45 x 46) | 5 x 2 x 2<br>(120 x 45 x 46) | 6 x 3 x 2<br>(155 x 64 x 56) | 6 x 3 x 2<br>(155 x 64 x 56) | 9 x 3 x 2<br>(230 x 64 x 56) | 6 x 4 x 3<br>(165 x 90 x 75) | 7 x 4 x 3<br>(180 x 90 x 75) |
| Voltage V, Hz | 110 – 240 V, 50/60 Hz | | | | | | |
| Continuous thermal output at $T_a$ = 50° F (10° C) BTU (W) | 27 – 34<br>(8 – 10) | 61 – 68<br>(18 – 20) | 78 – 102<br>(23 – 30) | 167 – 170<br>(49 – 50) | 215 – 256<br>(63 – 75) | 293 – 341<br>(86 – 100) | 444 – 512<br>(130 – 150) |
| Pre-fuse T | 2 A | | 4 A | | | | |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Thermostat | 1 | 3110.000 | 322 |
| Hygrostat | 1 | 3118.000 | 322 |
| Temperature indicator | 1 | 3114.200 | 321 |

Special voltages available on request. We reserve the right to make technical modifications.

### With fan, continuous thermal output 853 – 2730 BTU (250 – 800 W)

| **Part No. 110 V with fan** | **3105.210** | **3105.220** | **3105.230** |
|---|---|---|---|
| **Part No. 230 V with fan** | **3105.180** | **3105.190** | **3105.200** |
| Dimensions inches (mm) H x B x T | 7 x 6 x 4<br>(170 x 142 x 101) | | |
| Voltage V, Hz | 110 – 240 V, 50/60 Hz | | |
| Continuous thermal output at $T_a$ = 50° F (10° C) BTU (W) | 853 (250)[1] | 1365 (400)[1] | 2730 (800)[1] |
| Pre-fuse gG for 110 V | 4 A | 6 A | 10 A |
| Pre-fuse gG for 230 V | 4 A | 6 A | 6 A |

| **Accessories** | PU | | Page |
|---|---|---|---|
| Thermostat | 1 | 3110.000 | 322 |
| Hygrostat | 1 | 3118.000 | 322 |
| Temperature indicator | 1 | 3114.200 | 321 |

[1] Output with fan.

Special voltages available upon request. We reserve the right to make technical modifications.

Inch and pound measurements are rounded to the nearest whole number.

## Air duct system

**For TopTherm roofmount air conditioners**

The air duct system for Rittal TopTherm roofmount air conditioners makes it possible to route the cold air directly to specific areas of the enclosure. The risk of short cycles in the air circulation due to self-ventilated installed devices is eliminated.

The length of the flat duct is 59" (1500 mm), and it may be cut to the desired length.

**Material:**
Flame-resistant plastic to DIN 4102/B1

**Configuration:**
Flat duct, compensating hose

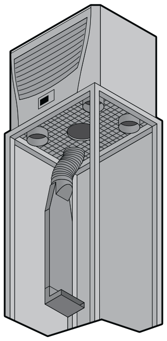
**Accessories:**
90° deflector, see page 320.

Plugs, see page 320.

| For air conditioner | PU | Part No. |
|---|---|---|
| 3382. . . ./3383. . . ./3384. . . ./3385. . . ./3273. . . . /3359. . . . | 1 | **3286.870** |
| 3386. . . ./3387. . . . | 1 | **3286.970** |

**Note:**

Do not direct cold air straight at active components. When using the duct system, the performance of the air conditioner may be reduced, depending on the application in question.



## Shallow air duct system

**for TopTherm roofmount cooling units and air/water heat exchangers, to fit TS8 enclosures from a width of 31" (800 mm)**

It is possible to route the cold air directly to specific areas of the enclosure using the air duct system. The risk of "short circuits" in the air circulation due to self-ventilated installed devices is therefore eliminated. The length of the shallow duct is 59" (1500 mm), and it may be cut to any required length.

**Material:**
Flame-resistant plastic to DIN 4102/B1

**Configuration:**
Shallow duct, adaptor, compensating piece, deflector 90°

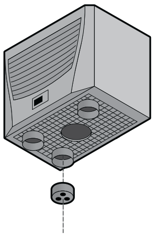
**Accessories:**
90° Deflector, see page 320.
Plugs, see page 320.

**Also required:**
Shallow duct extension 3286.860 to compensate for the enclosure width and height. TS support strips for securing the shallow duct in a vertical direction, see page 320.

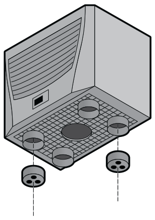
**Note:**
Do not direct cold air straight at active components. When using the ducting system, the performance of the cooling unit may be reduced, depending on the application in question.

| For air conditioner | PU | Part No. |
|---|---|---|
| 3209. . . ./3210. . . ./3273. . . ./3359. . . ./3382. . . ./<br>3383. . . ./3384. . . ./3385. . . . | 1 | **3286.850** |

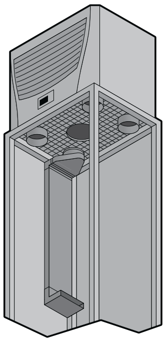
**Note:**
Max. number of plugs per unit varies by part number



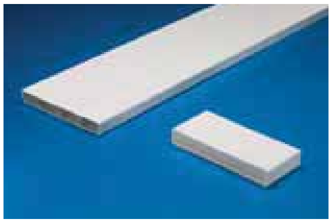
Max. 1 x:
3359. . . .
3382. . . .
3386. . . .
3387. . . .



Max. 2 x:
3383. . . .
3384. . . .
3385. . . .



## Air Routing



### Shallow duct extension

Extension kit for shallow air duct system 3286.850 for width, depth or height length extensions in TS8 enclosures.

**Material:**
Flame-resistant plastic to DIN 4102/B1

**Configuration:**
59" (1500 mm) shallow duct, connection piece

| PU | Part No. |
|---|---|
| 1 | **3286.860** |

### 90° deflector

**For air duct system**

For targeted air deflection at the end of the flat channel.

**Material:**

Flame-resistant plastic to DIN 4102/B1

| PU | Part No. |
|---|---|
| 1 | **3286.990** |

### Plugs

**For TopTherm roofmount air conditioners**

To cover unneeded cold air outlets in TopTherm roofmount air conditioners.

**Material:**

Polyurethane foam

| For air conditioner | PU | Part No. |
|---|---|---|
| 3382. . . ./3359. . . . | 2 | **3286.780** |
| 3383. . . ./3384. . . ./3385. . . ./3273. . . . | 2 | **3286.880** |
| 3386. . . ./3387. . . . | 2 | **3286.980** |

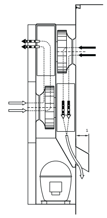
### Air diverter

For use in climate controlled enclosures, climate control doors, climate control sidewalls and TopTherm wallmount air conditioners.
For targeted routing of the cold air in a downward direction.

Particularly well-suited for densely-packed electrical components in the lower section of the enclosure.

**Material:**
Carbon steel, painted RAL 7032 (pebble gray)

| For devices | Part No. |
|---|---|
| 8607. . . ./8687. . . ./3306. . . ./3331. . . . | **3213.300** |
| 3304. . . ./3305. . . . | **3213.310** |
| 3328. . . ./3329. . . . | **3213.320** |
| 3332. . . . | **3213.330**[1] |



[1] 5" (115 mm) for 3213.330

## Digital enclosure internal temperature display and thermostat

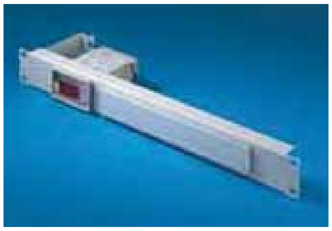
For installing on the enclosure door or wall and in an air conditioner, heat exchanger or thermoelectric cooler.

**Technical Specifications:**

- Small dimensions
- Depth: 4" (100 mm)
- The 3-digit 7-segment display is ½" (13 mm) high and clearly legible
- Can be switched from °F/°C
- The display can be used in a temperature range from 41 to 158° F (+5 to +70° C)
- With 59" (1500 mm) long NTC sensor
- Two relay outputs as change-over contact and normally open contact (maximum contact load 230 V, 6 A)
- Freely selectable switching difference
- The freely adjustable setpoint values can be adjusted by the membrane keyboard at the front.
- Setting range: 41 to 131° F (+5 to +55° C)
- Display and switching accuracy ± 2 K
- Mounting cut-out 3 x 1" (68 x 33 mm)
- Storage of the minimum and maximum recorded temperature until the system is reset

| Voltage | **Part No.** |
|---|---|
| 100 - 230 V AC 50/60 Hz<br>24-60 V DC | **3114.200** |

Special requirements available on request.



## Digital enclosure internal temperature display and thermostat

**Integrated into a patch panel 1 U**

Including cable attachment for connection cable and label holder.

Voltage: 230 V AC
Special voltages available on request.

**Technical Specifications:**

- Small dimensions
- Depth: 4" (100 mm)
- The 3-digit 7-segment display is 0.5" (13 mm) high and clearly legible
- Can be switched from °F/°C
- The display can be used in a temperature range from 41 to 158° F (+5 to +70° C)
- With 59" (1500 mm) long NTC sensor
- Two relay outputs as change-over contact and normally open contact (maximum contact load 230 V, 6 A)
- Freely selectable switching difference
- The freely adjustable setpoint values can be adjusted by the membrane keyboard at the front
- Setting range: 41 to 131° F (+5 to +55° C)
- Display and switching accuracy ± 2 K
- Mounting cut-out 3 x 1" (68 x 33 mm)
- Storage of the minimum and maximum recorded temperature until the system is reset

**Configuration:**

Panel, temperature indicator and thermostat, identification strip.

| Color | **Part No.** |
|---|---|
| RAL 7035 (light gray) | **7109.035** |

## Regulation/Control

### Enclosure internal thermostat

Ideal for controlling filter fan units, heaters and heat exchangers, this thermostat can also be used as a signal generator for monitoring the enclosure internal temperature.

| Voltage | Part No. |
|---|---|
| 230/115/60/48/24 V AC<br>60/48/24 V DC | **3110.000** |

**Technical Specifications:**

- Bi-metal sensor as a temperature-sensitive element with thermal feedback
- Contact population: Single-pole change-over contact as a quick-break contact
- Permissible contact load:
  Category 5 – 3 (heating)
  AC 10 (4)[1] A,
  DC = 30 W
  Category 5 – 4 (cooling)
  AC 5 (4)[1] A,
  DC = 30 W
  [1] = Inductive load at cos $\varphi$ = 0.6
- Setting range 41 to 140° F (+5 to +60° C)
- Weight approximately 4 oz (105 grams)
- Dimensions 3 x 3 x 1" (71 x 71 x 33 mm)
- Switching difference approximately 1 K ± 0.8 K
- A broad voltage spectrum, just one model covers 24 to 230 V.
- Time-saving connection technique using a terminal strip with a screw connection from the outside.
- Flexible mounting on a vertical or horizontal 1" (35 mm) support rail to EN 50 022, and snap fastening in the TS/ES enclosure section using the supplied adaptor.

**Protection Ratings:**

UL, cUL recognized,CE,VDE

UL file: E174004

### Hygrostat

The hygrostat switches on the heater and/or fan when a preset relative humidity level in the enclosure is exceeded. The relative humidity is raised above the dew point, and condensation on assemblies or electronic components is avoided.

| Voltage | Part No. |
|---|---|
| 24 - 230 V (AC/DC) | **3118.000** |

**Technical Specifications:**

- Contact population: Single-pole change-over contact as a quick-break contact
- Permissible contact load:
  AC ~ 5 (0.2)[1] A
  DC = maximum 20 W
  [1] = Inductive load at cos $\varphi$ = 0.6
- Setting range 50 – 100% relative humidity
- Weight approximately 4 oz (100 g)
- Dimensions 3 x 3 x 1" (71 x 71 x 33.5 mm)
- Switching difference approximately 4%
- A broad voltage spectrum, just one model covers 24 to 230 V.
- Time-saving connection technique using a terminal strip with a screw connection from the outside.
- Flexible mounting on a vertical or horizontal 1" (35 mm) support rail to EN 50 022, and snap fastening in the TS/ES enclosure section using the supplied adaptor.

### Bottom mount adaptor

**For enclosure internal thermostat 3110.000 and hygrostat 3118.000**

Bottom mount adaptor with mounting option for screwed cable glands, for targeted cable infeed from appropriate equipment such as filter fan units and enclosure heaters. In conjunction with screwed cable glands, it is also suitable for use as strain relief.

| PU | Part No. |
|---|---|
| 1 | **3110.200** |

### Speed control

Temperature-dependent speed control for Rittal fan and filter units and air/air heat exchangers. Dual rated 115/230 V, 50/60 Hz AC for noise reduction and to save energy in part-load operation.

| PU | Part No. |
|---|---|
| 1 | **3120.200** |

**Technical Specifications:**

- For mounting on 35 mm support rail DIN EN 50 022
- Rated operating voltage: 230 V (AC)/115 V (AC)
- Setting range: +68 to +131° F (+20 to +55° C)
- Phase cross-over controller
- Maximum fan output: 300 W
- Dimensions inches (mm): 4.1 x 3.5 x 2.4 (105 x 91 x 60)

**Protection Rating:**

- UL file: E203342

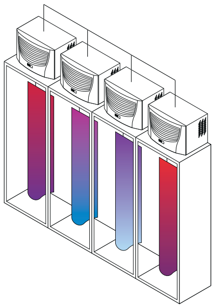
## Interface card

**For TopTherm air conditioners with comfort controller**

The interface card is an extension for TopTherm air conditioners with comfort controller. In this way it is possible, to monitor a master/slave combination of up to 10 air conditioners. Control is achieved by standardized interfaces: RS232 (DB9) or RS 485, one PLC interface (DB9).
RS 422 (RJ 45 jack) is the connection to the Rittal CMC-TC. Remote monitoring by TCP-IP, graphical interfaces for operation, evaluation and control, documentation. Connection to additional sensors for access control, monitoring is therefore possible. The extension card is built into a 1 U plastic housing. A voltage supply of 24 V DC is needed. This may be supplied from the CMC-TC by a wide-range power pack 7320.425 (100 to 240 V AC, 50/60 Hz) or externally by a Kycon connector.

**Configuration:**
Interface card integrated into a plastic box
H x W x D inches (mm):
2 or 1 U x 5 x 5 (44 or 1 U x 136 x 129).
Serial SUB-D cable, 59" (1.5 mm).

| PU | **Part No.** |
|---|---|
| 1 | **3124.200** |



## SK master/slave cable

The SK master/slave cable facilitates communications between several enclosure air conditioners, TopTherm .500/.510/.540, production date 05/02 or later, by a master/slave construction such as that required in complex bayed enclosure systems for optimum operating results.

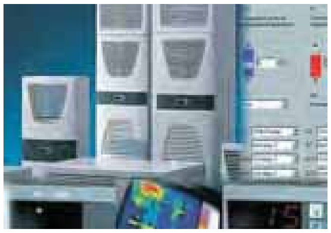
**Technical Specifications:**
The master/slave construction facilitates common activation and deactivation by door limit switches, parallel activation and deactivation by a temperature set point, and common collective fault signals and temperature logging, thereby eliminating the need for intricate wiring.

**Configuration:**
118" (3 m) shielded interface cable, including operating manual on programming the air conditioners.

| For | **Part No.** |
|---|---|
| TopTherm | **3124.100** |
| Climate controlled enclosures | **3124.000** |

**Note:**
$n_B = nK - 1$
$n_B$: Number of order units (SK bus system)
$n_k$: Number of air conditioners to be linked

**Property Rights:**
German patent no. 196 15 469



## RiDiag II

RiDiag II is a tool for diagnosing the operating behaviour of Comfort controller-regulated cooling units. By connecting a PC, it is possible to retrieve error messages, temperatures and capacity utilization levels of the cooling units which are stored in the Comfort controller.

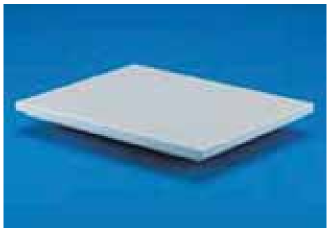
The system includes integrated temperature measurement from four sensors in the cooling unit, and also features graphical representation of the temperature development over time.

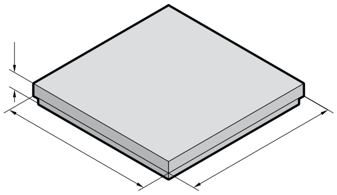
**Supply includes:**
CD-ROM (languages: German/English/Italian/French), connection cable

| PU | **Part No.** |
|---|---|
| 1 | **3159.100** |

# Accessories

## General





### Vent attachment TS

For passive ventilation with labyrinthine air flow routing, to match the roofs for TopTherm roofmount air conditioners.

**Color:**
RAL 7035 (light gray)

**Protection Ratings:**
IP 43

**Configuration:**
Assembly parts

| For roof plates with cut-out inches (mm) | Part No. |
|---|---|
| 19 x 15 (490 x 390) | **8801.380** |

### Trim frame

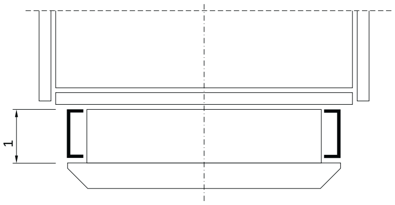
**For slimline air conditioners**

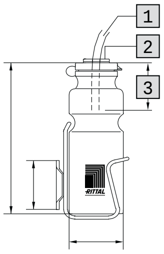
Slimline air conditioners can be internally or externally mounted on an enclosure door or wall. The trim frame presents a closed front for the air conditioner.

**Material:**
Sheet steel

**Color:**
RAL 7035 (light gray)

| For air conditioner | Part No. |
|---|---|
| 3366. . . . /3377. . . . | **3377.000** |





### Condensate collecting bottle

For mounting on the enclosure. For use with all enclosure air conditioners and air/water heat exchangers.

Safety overflow at the side.

Capacity approximately 0.2 gal (0.75 l).

1 Condensate discharge tube
2 Membrane grommet
3 Maximum 3" (70 mm)

| PU | Part No. |
|---|---|
| 1 | **3301.600** |

**Configuration:**
Condensate collecting bottle, bottle holder including assembly parts.

### Condensate hose

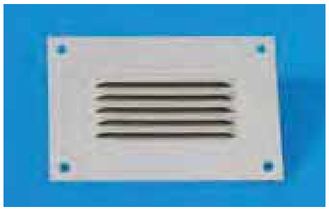
For removing and forwarding condensate. For connecting to enclosure air conditioners.

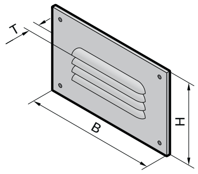
**Material:**
PVC, transparent

**Configuration:**
394" (10 m) hose

| **For devices** | Material thickness Ø | **Part No.** |
|---|---|---|
| 3302 . . . | 8 x 1" (1.5 mm) | **3301.608** |
| 3303. . . ./3361. . . . | 10 x 1" (1.5 mm) | **3301.610** |
| 3273. . . ./3304. . . ./<br>3305. . . ./3328. . . ./<br>3329. . . ./3332. . . ./<br>3366. . . ./3359. . . ./<br>3382. . . ./3383. . . ./<br>3384. . . ./3385. . . ./<br>3386. . . ./3387. . . ./<br>3377. . . | 12 x 1" (2 mm) | **3301.612** |

Inch and pound measurements are rounded to the nearest whole number.





B = Width
T = Depth

## Integrated louvers

For ventilation by convection; easily retrofitted using 4 screws.

**Material:**
Sheet steel

**Color:**
RAL 7035 (light gray)

**For additional technical information, please visit www.rittal-corp.com**

| H inches (mm) | W inches (mm) | D inches (mm) | PU | Part No. |
|---|---|---|---|---|
| 4 (110) | 6 (160) | 0.3 (8) | 4 | **2541.235** |
| 4 (100) | 8 (210) | 0.3 (8) | 4 | **2542.235** |
| 4 (110) | 13 (330) | 0.3 (8) | 4 | **2543.235** |

For RAL 7032 (pebble gray), use Part No XXXX.200;
For primed version, use Part No. XXXX.300.

## Outlet filter

For ventilation by convection, an outlet filter can be installed in the upper and lower sections of the modular enclosure.

**Material:**
ABS, material resistance to UL 94-V0

**Color:**
RAL 7035 (light gray)

**Note:**
EMC version, please visit wwww.rittal-corp.com

**Accessories:**
Spare filter mats, see page 326
Fine filter mats, see page 326

| Dimensions inches (mm) | Part No. RAL 7035 | Part No. RAL 9005 |
|---|---|---|
| 5 x 1 (116 x 22) | **3321.207** | **9963.661** |
| 6 x 1 (148 x 24.5) | **3322.207** | **9963.662** |
| 8 x 1 (204 x 30) | **3323.207** | **9963.663** |
| 10 x 1 (255 x 30) | **3325.207** | **9963.664** |
| 13 x 1 (323 x 30) | **3326.207** | **9963.583** |

For RAL 7032 (pebble gray), use Part No. XXXX.200.

**Protection Ratings:**
UL, cUL recognized

UL file: E76084

**Configuration:**
Outlet filter including filter mat.

## Front outlet grill 2U

**For centrifugal fans**

This front outlet grill is required if a 19" (482.6 mm) cross-flow blower (3144.000/3145.000) is used in the lower section of the electronic enclosure and the hot air is to be expelled to the outside from the upper section of the enclosure. The design of the grill matches that of the intake grill in the cross-flow blower. These grills can also be used as simple inflow and outflow grills with natural convection.

| PU | Part No. |
|---|---|
| 1 | **3176.000** |

**Accessories:**
Filter mat, see page 326

## Filter holder

**For roof ventilation**

The use of a filter mat is required in order to increase the ratings of the roof vent (3148.000).

Ratings IP 43 to EN 60 529/10.91 is achieved.

**Material:**
Sheet steel

| H x W x D inches (mm) | Part No. |
|---|---|
| 10 x 13 x 0.6 (244 x 340 x 15) | **3175.000** |

**Configuration:**
Filter holder including filter mat

**Accessories:**
Spare filter mat, see page 326

Inch and pound measurements are rounded to the nearest whole number.

## Filter Mats

### Spare filter mats

Made of chopped-fiber mat with a progressive structure.

Temperature resistant to 212° F (100° C), self-extinguishing category F1 to DIN 53 438.

Dust-laden air side: Open structure.

Clean air end: Closed structure.

Reliable filtering of virtually all types of dust from a particle size of 10 µm and larger.

**Material:**
Chemical fiber

| For filter fan units | H x W x D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 3321. . . . | 4 x 4 x 0.4 (89 x 89 x 10) | 5 | **3321.700** |
| 3322. . . . | 5 x 5 x 0.5 (120 x 120 x 12) | 5 | **3322.700** |
| 3323. . . . | 7 x 7 x 0.7 (173 x 173 x 17) | 5 | **3171.100** |
| 3324. . . ./3325. . . . | 9 x 9 x 0.7 (221 x 221 x 17) | 5 | **3172.100** |
| 3326. . . . | 11 x 11 x 0.7 (289 x 289 x 17) | 5 | **3173.100** |
| 3327. . . . | 11 x 11 x 0.4 (289 x 289 x 10) | 5 | **3327.700** |

| For filter holders | H x W x D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 3175.000 | 10 x 13 x 0.8 (242 x 338 x 20) | 3 | **3174.000** |

### Fine filter mats

Made of chopped-fiber mat with a progressive structure.

Temperature-resistant to 212° F (100° C), self-extinguishing category F1 to DIN 53 438.

Dust-laden air side: Open structure.

Clean air end: Closed structure.

Reliable filtering of virtually all types of dust from a particle size of 10 µm and smaller.

**Material:**
Chemical fiber

| For filter fan units/outlet filters | H x W x D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 3323 . . . . | 7 x 7 x 0.5 (173 x 173 x 12) | 5 | **3181.100** |
| 3324 . . . ./3325 . . . . | 9 x 9 x 0.5 (221 x 221 x 12) | 5 | **3182.100** |
| 3326. . . ./3327. . . . | 11 x 11 x 0.5 (289 x 289 x 12) | 5 | **3183.100** |

Inch and pound measurements are rounded to the nearest whole number.

## Metal filter

When air conditioners are used in dusty and damp environments, it is advisable to use washable metal filters. If air or steam condenses on the metal surfaces, any particles that may be present will adhere to the metal and are easily washed out with water or grease-dissolving detergents.

**Material:**
Aluminum
Thickness: 0.4" (10 mm)

| For TopTherm air conditioners | H x W x D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 3302.300/3302.310 | 4 x 8 x 0.4 (95 x 190 x 10) | 1 | **3286.120** |
| 3302.100/3302.110/3303. . . ./3361. . . . | 8 x 10 x 0.4 (200 x 265 x 10) | 1 | **3286.310** |
| 3304. . . ./3305. . . ./3328. . . ./3329. . . ./3332. . . ./3366. . . . | 11 x 14 x 0.4 (268 x 344 x 10) | 1 | **3286.410** |
| 3273. . . ./3382. . . ./3383. . . ./3384. . . ./3385. . . ./3359. . . . | 10 x 21 x 0.4 (255 x 530 x 10) | 1 | **3286.510** |
| 3386. . . ./3387. . . . | 12 x 28 x 0.4 (300 x 720 x 10) | 1 | **3286.610** |
| 3377. . . . | 8 x 8 x 0.4 (210 x 205 x 10) | 1 | **3253.220** |

| For discontinued air conditioners | H x W x D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 3296. . . ./3272.100/3290. . . ./3280.100 | 11 x 21 x 0.4 (290 x 520 x 10) | 1 | **3286.210** |
| 3299. . . ./3261. . . . | 12 x 21 x 0.4 (315 x 520 x 10) | 1 | **3286.200** |
| 3265.100/3266.100 | 13 x 10 x 0.4 (320 x 265 x 10) | 1 | **3267.200** |
| 3256. . . . | 14 x 12 x 0.4 (365 x 315 x 10) | 1 | **3254.200** |
| 3293. . . ./3281.100/3298. . . ./3279.100/3260. . . ./3269. . . ./3262.100/3393. . ./3381.100/3391. . . . | 12 x 13 x 0.4 (300 x 328 x 10) | 1 | **3294.200** |
| 3255. . . ./3395. . . . | 9 x 14 x 0.4 (210 x 348 x 10) | 1 | **3253.200** |
| 3394. . . . | 16 x 15 x 0.4 (415 x 375 x 10) | 1 | **3285.200** |

| For UL Type 4X stainless steel air conditioners | H x W x D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 3303. . . . | 9 x 11 x 0.4 (231 x 275 x 10) | 2 | **9961.868** |
| | 3 x 11 x 0.4 (81.5 x 280 x 10) | | |
| 3304. . . ./3305. . . . | 12 x 16 x 0.4 (291 x 395 x 10) | 2 | **9961.869** |
| | 3 x 16 x 0.4 (82 x 401 x 10) | | |
| 3328. . . ./3329. . . . | 13 X 16 X 0.4 (321 X 395 x 10 | 2 | **9961.870** |
| | 3 x 16 x 0.4 (82 x 401 x 10) | | |

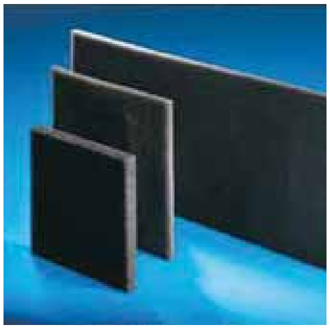
| For climate control doors | H x W x D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 3306. . . ./3307. . . ./3309. . . ./3310. . . . | 4 x 17 x 0.4 (100 x 424 x 10) | 1 | **3284.200** |
| 3308. . . . | 4 x 25 x 0.4 (100 x 624 x 10) | 1 | **3288.200** |
| 3331. . . . | 6 x 15 x 0.4 (150 x 380 x 10) | 1 | **3289.200** |

| For mini chiller systems | H x W x D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 3318.600/3318.610/3319.600/3319.610 | 10 x 21 x 0.4 (255 x 530 x 10) | 1 | **3286.510** |
| 3320.600/3334.600 | 22 x 20 x 0.3 (558 x 500 x 8) | 1 | **3286.520** |
| 3360. . . . | 11 x 14 x 0.4 (268 x 344 x 10) | 1 | **3286.410** |

Note: Each UL Type 4X air conditioner require 2 filters a top and bottom. Each part number is a complete set.

Inch and pound measurements are rounded to the nearest whole number.

## Filter Mats



### Filter mats for cooling units

Rittal cooling units are low-maintenance and are supplied without filter mats. Filter mats may be used for extreme conditions.

**Material:**
Open-celled polyurethane foamed plastic with excellent physical and mechanical properties. Temperature-resistant from -40 to 176° F (-40 to +80° C).Thickness: 0.4" (10 mm)

| For TopTherm air conditioners | H x W x D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 3302.300/3302.310 | 4 x 8 x 0.4 (95 x 190 x 10) | 3 | **3286.110** |
| 3302. . . ./3303. . . ./3361. . . . | 8 x 10 x 0.4 (200 x 265 x 10) | 3 | **3286.300** |
| 3304. . . ./3305. . . ./3328. . . ./3329. . . ./3332. . . ./ 3366. . . . | 11 x 14 x 0.4 (268 x 344 x 10) | 3 | **3286.400** |
| 3273. . . ./3382. . . ./3383. . . ./3384. . . ./3385. . . ./ 3359. . . . | 10 x 21 x 0.4 (255 x 530 x 10) | 3 | **3286.500** |
| 3386. . . ./3387. . . . | 12 x 28 x 0.4 (300 x 720 x 10) | 3 | **3286.600** |
| 3377. . . . | 8 x 8 x 0.4 (210 x 205 x 10) | 3 | **3253.010** |

| For discontinued air conditioners | H x W x D inches (mm) | PU | **Part No.** |
|---|---|---|---|
| 3296. . . ./3272.100/3290. . . ./3280.100/3299. . . ./ 3261. . . . | 13 x 21 x 0.4 (332 x 539 x 10) | 3 | **3286.100** |
| 3265.100/3266.100 | 13 x 11 x 0.4 (332 x 270 x 10) | 3 | **3267.100** |
| 3256. . . . | 12 x 16 x 0.4 (300 x 395 x 10) | 3 | **3254.000** |
| 3293. . . ./3281.100/3298. . . ./3279.100/3260. . . ./ 3269. . . ./3262.100/3393. . . ./3381.100/3391. . . . | 12 x 13 x 0.4 (313 x 334 x 10) | 3 | **3294.100** |
| 3255. . . ./3395. . . . | 10 x 14 x 0.4 (245 x 350 x 10) | 3 | **3253.000** |
| 3394. . . . | 8 x 12 x 0.4 (200 x 315 x 10) | 3 | **3285.000** |
| 3292.134/3278.134 | 10 x 13 x 0.4 (250 x 325 x 10) | 3 | **3286.000** |

### Hose-proof hoods

**For filter fan units/outlet filters**

When the hose-proof hood is mounted above the filter fan unit and outlet filter a rating of IP 56 (UL 3R) to EN 60 529/10.91 is achieved. Particularly suitable for use in the food industry.

**Material:**
Stainless steel
Painted steel RAL 7035 (light gray)

**Protection Ratings:**
In conjunction with the filter fan units/outlet filters, UL 3R + 12 is met.
UL and cUL recognized

UL file: E76083

| For | Dimensions inches (mm) | **Part No. Stainless** | **Part No. RAL 7035** |
|---|---|---|---|
| 3321. . . | 10 x 6 x 2<br>(260 x 150 x 40) | **3321.800** | **3321.835** |
| 3322. . . | 11 x 7 x 2<br>(270 x 176 x 55) | **3322.800** | **3322.835** |
| 3323. . . | 16 x 9 x 2<br>(410 x 233 x 55) | **3323.800** | **3323.835** |
| 3324. . .<br>3325. . . | 20 x 11 x 3<br>(500 x 282 x 85) | **3324.800** | **3324.835** |
| 3326. . .<br>3327. . . | 22 x 14 x 4<br>(560 x 350 x 110) | **3326.800** | **3326.835** |

Inch and pound measurements are rounded to the nearest whole number.

# Technical Appendix

## Protection Ratings/Grounding/ RAL Colors/Universal Cut-Outs

### Protection Ratings and approvals

Product Protection Ratings and approvals are key requirements for the global acceptance of industrial products.

Rittal products meet the highest internationally recognized quality standards. All components are subjected to the most stringent testing in accordance with international standards and regulations.

The consistently high product quality is ensured by a comprehensive quality management system. Regular production inspections by external test institutes also guarantee compliance with global standards.

A precise allocation of products to marks of conformity can be found on our product and service pages on the Internet: **www.rittal-corp.com**

### Enclosure designs guaranteeing hygiene and effective cleaning

Special applications require special solutions – in terms of materials, design and security.

This is also true for applications in the food and hygiene sector and in sensitive fields such as medical technology and pharmaceuticals.

Consequently, Rittal has reviewed the quality standards in those branches and has subjected its products to stringent testing.

### Grounding

The grounding must be designed by the manufacturer of switchgear in accordance with the relevant VDE provisions or local regulations.

The enclosure packs generally contain grounding materials (screws, nuts, washers). The assembly instructions contain recommendations on installing a protective ground.

The pre-assembled ground straps available in various cross sections and lengths, are intended to make assembly of a ground conductor easier.

Further information can be found in our technical documentation "PE ground conductor connection, current carrying capacity".

### RAL Colors

| Color RAL | Designation | Color Sample |
|---|---|---|
| 3001 | signal red | 🟥 |
| 5002 | ultramarine | 🟦 |
| 5005 | signal blue | 🟦 |
| 5018 | turquoise blue | 🟦 |
| 7015 | slate gray | ⬛ |
| 7022 | umbra gray | ⬛ |
| 7024 | graphite gray | ⬛ |
| 7030 | stone gray | ▨ |
| 7032 | pebble gray | 🟫 |

| Color RAL | Designation | Color Sample |
|---|---|---|
| 7033 | cement gray | 🟩 |
| 7035 | light gray | ⬜ |
| 7044 | silky gray | ⬜ |
| 8019 | gray brown | ⬛ |
| 9005 | jet black | ⬛ |
| 9006 | white aluminum | ▨ |
| 9011 | graphite black | ⬛ |
| 9017 | traffic black | ⬛ |

Color samples shown are for reference only and may be different from the finished product

### Universal Cut-Outs

For safety locking of enclosures and bayed suites in conjunction with up to 200A disconnect switches and up to 400A circuit breaker operating mechanisms.[1)]

- ABB DSFHN, K5FCH, OHF1C, K3FHD, K6FHD
- Allen Bradley 1494V, 1494C, 1494RC, 140U
- Cutler Hammer C361, C371, Flex Shaft
- General Electric STDA, SCH SpectraFlex
- Siemens VBF, VBNF, FHO, Max-Flex
- Square D 9422

[1)] May work with some circuit braker operating mechanisms greater than 400A.

## Surface protection

The triple treatment of outer surfaces – Nano coating, electrophoretic dipcoat-priming and textured powder-coating – provides optimum corrosion protection for enclosures such as TS, AE and KL. To ensure optimum corrosion protection in extreme climates, aluminium or zinc-plated metal with subsequent zinc phosphating and powder-coating are used for outdoor enclosures.

The standard coating is resistant to:

- Mineral oils
- Lubricants
- Machining emulsions
- Solvent (briefly as for cleaning)
- Weak acids and alkalines

This has been tested and confirmed by various independent test institutes.

Quality is ensured by continuous process monitoring.

## Priming or powder coating suitable for over-painting

After careful cleaning of the surface, the standard coating may be over-painted with:

- DD gloss paints
- Single and dual-component gloss paints
- Car repair paints
- Powder paints
- Water-based paints

If in doubt, perform a compatibility test. Always follow the paint manufacturer's instructions.

When over-painting, take care not to exceed 356° F (180° C) and a baking time of 15 minutes.

Prior to painting, the surface needs to be prepared by physical scuffing or the use of a chemical etching agent.

Physical scuffing would be like a 300 grit 3M pad; chemical etching agents would be Xylene or Toulene.

## Special coatings

**Tropical coating:**

For high corrosion resistance in warm, damp climates, also suitable for outdoor and long-term use.

**Chemical paint:**

For the best possible resistance to organic and inorganic substances that can be achieved with paint.

## Outdoor use of enclosures

In order to guarantee satisfactory long-term function of enclosures in outdoor environments, relevant environmental factors need to be taken into account.

These include:

- UV radiation, the corrosive action of air pollution, rain, ice, snow, wind and other factors in special climate conditions.

**Influence of weather conditions on the outer coating**

It is necessary to ensure the UV and corrosion resistance of components exposed to the weather. A special 3-phase paint finish is suitable for outdoor installations. For outdoor installation of an enclosure, a rain canopy should be provided to protect the seal against permanent humidity and exposure to prolonged UV radiation.

**Condensation inside the enclosure**

Condensation needs to be prevented with special measures, for example by venting or heating the enclosure.

**Protection ratings**

The enclosure is exposed to extreme weather conditions during outdoor use.

Long periods of rain, snow, ice, high winds and temperature fluctuations place high demands on the enclosure's sealing gaskets. Often, the protection ratings for outdoor weather exposure described in DIN VDE 0100, part 737, point 5.2, IP X3 is insufficient to provide permanent protection for electrical installations.

Standard IEC 60 529 offers the option of labeling with the supplementary letter "W". Enclosures labeled this way are suitable for use in weather conditions agreed between the manufacturer and the user, and are equipped with additional protective features or techniques (rain canopy, special paints, special color shades).

## The three-phase coating process for enclosures

| Coating procedures | Technical properties | Technical specifications | |
|---|---|---|---|
| ▼ | | | |
| Degreasing, Nano coating, rinsing | Neutralizes electric resistance, provides temporary corrosion protection and better adhesion of paint. | | |
| ▼ | | | |
| Anodic dipcoat priming | Uniform coating on all surfaces, edges and recesses provides superior corrosion protection. | Coat thickness | Approximately 20 µm |
| | | Erichsen cupping DIN EN ISO 20 482 | ≥ 0.2" (4 mm) |
| | | Bucholz hardness DIN EN ISO 2815 | ≥ 80 |
| | | Cross cutting DIN EN ISO 2409 | Gt 0 |
| | The primer is readily over-painted and free from heavy metals, chromate and silicone. | | |
| ▼ | | | |
| Oven Heating | | | |
| ▼ | | | |
| Textured powder coating | The special merits of powder-coating are high durability, good corrosion protection, good resistance to chemicals, temperature, and outdoor environment, and can be easily cleaned. | Outer coating thickness | 60 µm . . . 110 µm |
| | | Erichsen cupping DIN EN ISO 20 482 | ≥ 0.2" (4 mm) |
| | | Bucholz hardness DIN EN ISO 2815 | ≥ 80 |
| | | Cross cutting DIN EN ISO 2409 | Gt 0 |
| | The powder coating is readily over-painted and is free from heavy metals, chromate and silicone. | | |
| ▼ | | | |
| Oven Heating | | Overall outer coating thickness | Ø 80 µm . . . 135 µm |

## Protection categories to IEC 60 529

**The IP protection ratings is characterized by 2 numbers.**

| **Example of protection ratings: IP 43:** | |
|---|---|
| Code Letters IP | |
| First characteristic numeral<br>4 | Second characteristic numeral<br>3 |

| **Degrees of protection for protection against contact and foreign bodies: First characteristic numeral** | | | **Degrees of protection for protection against water: Second characteristic numeral** | | |
|---|---|---|---|---|---|
| First characteristic numeral | Degree of protection | | Second characteristic numeral | Degree of protection | |
| | Description | Definition | | Description | Definition |
| 1 | Protected against solid foreign objects with a diameter of 2.0" (50 mm) and greater | The object probe, a sphere 2.0" (50 mm) in diameter, must not penetrate fully[1]. | 1 | Protected against vertically falling water drops | Vertically falling drops shall have no harmful effects. |
| 2 | Protected against solid foreign objects with a diameter of 0.5" (12.5 mm) and greater | The object probe, a sphere 0.5" (12.5 mm) in diameter, must not penetrate fully[1]. The articulated test finger may penetrate up to its length of 3" (80 mm), but adequate distance must be adhered to. | 2 | Protected against vertically falling water drops when the enclosure is tilted up to 15° | Vertically falling drops must not have any harmful effects when the enclosure is tilted up to 15° in both directions from the vertical. |
| 3 | Protected against solid foreign objects with a diameter of 0.1" (2.5 mm) and greater | The object probe, a sphere 0.1" (2.5 mm) in diameter, must not penetrate at all[1]. | 3 | Protected against spraying water | Water sprayed at an angle of up to 60° on either side of the vertical must have no harmful effects. |
| 4 | Protected against solid foreign objects with a diameter of 0.04" (1.0 mm) and greater | The object probe, a sphere 0.04" (1.0 mm) in diameter, must no penetrate at all[1]. | 4 | Protected against splashing water | Water splashed on the enclosure from every direction must not have any adverse effects. |
| 5 | Dust-protected | The ingress of dust is not fully prevented, but dust may not enter to such an extent as to impair satisfactory operation of the device or safety. | 5 | Protected against water jets | Water splashed on the enclosure from every direction must not have any adverse effects. |
| 6 | Dust-tight | No ingress of dust at a partial vacuum of 20 mbar inside the enclosure. | 6 | Protected against powerful water jets | Water splashed on the enclosure from every direction in a powerful jet must not have any adverse effects. |
| | | | 7 | Protected against the effects of temporary immersion in water | Water must not ingress to such an extent as to cause harmful effects when the enclosure is temporarily immersed in water under standardized pressure and time conditions. |
| | | | 9K | Water with high-pressure/ stream-jet cleaning[2] | Water directed at the enclosure from every direction under greatly increased pressure must not have any adverse effects. |

[1] The full diameter of the object probe must not pass through an opening of the enclosure.

[2] This test is not regulated by EN 60 529, but by DIN EN 40 050, part 9.

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## The CE symbol

All Rittal products subject to an EU Directive which envisages labeling are labeled CE.

Up-to-date manufacturer declarations for the respective products are available on the Internet at: www.rittal-corp.com

**Note:**

The CE symbol is not a quality symbol. Conformity is certified by the manufacturer on an independent basis. This distinguishes CE labeling from approvals, which are issued by independent bodies.

## NEMA

The **N**ational **E**lectrical **M**anufacturers **A**ssociation (NEMA) is a standards organization in Washington, D.C., USA, which publishes a number of technical standards but does not test or certify products itself.

The following NEMA classification outlines the protection of individuals from unintentional contact with equipment and the protection of an enclosure from external factors.

Further information on protection categories may be found on the Internet at: **www.rittal-corp.com**

## UL

UL is a source for product compliance based in Northbrook, IL, U.S.A. UL has developed more than 800 safety standards, for which it does product testing, and serves customers in more than 35 countries around the world, from manufacturers and retailers to consumers and regulating bodies.

## CSA

The **C**anadian **S**tandards **A**ssociation is a not-for-profit membership-based association serving business, industry, government and consumers in Canada and the global marketplace. CSA develops standards for public health and safety and offers training materials, workshops, and seminars for education in those standards.

# NEMA, UL, and CSA Standards

| Enclosure rating | NEMA | UL | CSA |
|---|---|---|---|
| | National Electrical Manufacturers Association (NEMA 250) | Underwriters Laboratories, Inc. (UL 50 and 508)* | Canadian Standards Association (C22.2 No. 94-M91) |
| Type 1 | Enclosures are intended for indoor use primarily to provide a degree of protection against the contact with the enclosed equipment. | Indoor use primarily to provide protection against contact with the enclosed equipment and against a limited amount of falling dirt. | General purpose enclosure. Protects against accidental contact with live parts. |
| Type 2 | Enclosures are intended for indoor use primarily to provide a degree of protection against the contact with the enclosed equipment. | Indoor use to provide a degree of protection against contact with the enclosed equipment and against a limited amount of falling dirt. | Indoor use to provide a degree of protection against dripping and light splashing of noncorrosive liquids, and falling dirt. |
| Type 3 | Enclosures are intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust, and damage from external ice formation. | Outdoor use to provide a degree of protection against windblown rain; undamaged by the formation of ice on the enclosure. | Indoor or outdoor use to provide a degree of protection against rain, snow, and windblown dust; undamaged by the external formation of ice on the enclosure. |
| Type 3R | Enclosures are intended for outdoor use primarily to provide a degree of protection against rain, sleet, and damage from external ice formation. | Outdoor use to provide a degree of protection against windblown dust and windblown rain; undamaged by the formation of ice on the enclosure. | Indoor or outdoor use to provide a degree of protection against rain, snow; undamaged by the external formation of ice on the enclosure. |
| Type 4 | Enclosures are intended for indoor and outdoor use primarily to provide a degree of protection against rain, sleet, and damage from external ice formation. | Indoor or outdoor use to provide a degree of protection against falling rain, splashing water, and hose-directed water; undamaged by the formation of ice on the enclosure. | Indoor or outdoor use to provide a degree of protection against rain, snow, and windblown dust, splashing and hose-directed water; undamaged by the external formation of ice on the enclosure. |
| Type 4X | Enclosures are intended for indoor and outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose-directed water, and damage from external ice formation. | Indoor or outdoor use to provide a degree of protection against falling rain, splashing water, and hose-directed water; undamaged by the formation of ice on the enclosure; resists corrosion. | Indoor or outdoor use to provide a degree of protection against rain, snow, and windblown dust, splashing and hose-directed water; undamaged by the external formation of ice on the enclosure; resists corrosion. |
| Type 6 | Enclosures are intended for indoor and outdoor use primarily to provide a degree of protection against hose-directed water, the entry of water during occasional temporary submersion at a limited depth, and damage from external ice formation. | Indoor or outdoor use to provide a degree of protection against entry of water during temporary submersion at a limited depth; undamaged by the formation of ice on the enclosure. | Indoor or outdoor use to provide a degree of protection against entry of water during temporary submersion at a limited depth; undamaged by the formation of ice on the enclosure. |
| Type 12 | Enclosures are intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt and non-corrosive liquids. | Indoor use to provide a degree of protection against dust, dirt, fiber flyings, dripping water, and external condensation of non-corrosive liquids. | Indoor use primarily to provide a degree of protection against circulating dust, lint, fibers, and flyings; dripping and light splashing of non-corrosive liquids; not provided with knockouts. |
| Type 13 | Enclosures are intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt and non-corrosive liquids. | Indoor use to provide a degree of protection against lint, dust, seepage, external condensation and spraying of water, oil, non-corrosive liquids. | Indoor use primarily to provide a degree of protection against circulating dust, lint, fibers, and flyings; seepage and spraying of non-corrosive liquids including oils and coolants. |

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# Conversion of NEMA Enclosure Type Ratings

## (NEMA 250-2003)

## To IEC 60529 Enclosure Classification Designations (IP)

(Cannot be Used to Convert IEC Classification Designations to NEMA Type Ratings)

| IP First Character | NEMA Enclosure Type | | | | | | | | | | | | | | | | | | IP Second Character |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3, 3X, 3S, 3SX | | 3R, 3RX | | 4, 4X | | 5 | | 6 | | 6P | | 12, 12K, 13 | | |
| IP0_ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | IP_0 |
| IP1_ | ▨ | | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | IP_1 |
| IP2_ | ▨ | | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | IP_2 |
| IP3_ | | | | | ▨ | ▨ | | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | IP_3 |
| IP4_ | | | | | ▨ | ▨ | | ▨ | ▨ | ▨ | ▨ | | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | IP_4 |
| IP5_ | | | | | ▨ | ▨ | | | ▨ | ▨ | ▨ | | ▨ | ▨ | ▨ | ▨ | ▨ | | IP_5 |
| IP6_ | | | | | | | | | ▨ | ▨ | | | ▨ | ▨ | ▨ | ▨ | | | IP_6 |
| | | | | | | | | | | | | | | ▨ | | ▨ | | | IP_7 |
| | | | | | | | | | | | | | | | | ▨ | | | IP_8 |
| | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | |

A = A shaded block in the "A" column indicates that the NEMA Enclosure Type exceeds the requirements for the respective IEC 60529 IP First Character Designation. The IP First Character Designation is the protection against access to hazardous parts and solid foreign objects.

B = A shaded block in the "B" column indicates that the NEMA Enclosure Type exceeds the requirements for the respective IEC 60529 IP Second Character Designation. The IP Second Character Designation is the protection against the ingress of water.

### Example Of Table Use

An IEC IP 45 Enclosure Rating is specified. What NEMA Type Enclosures meet and exceed the IP 45 rating?

Referencing the first character, 4, in the IP rating and the row designated "IP4_" in the left most column in the table; the blocks in Column "A" for NEMA Types 3, 3X, 3S, 3SX, 4, 4X, 5, 6, 6P, 12, 12K, and 13 are shaded. These NEMA ratings meet and exceed the IEC protection requirements against access to hazardous parts and solid foreign objects.

Referencing the second character, 5, in the IP rating and the row designated "IP_5" in the right most column in the table; the blocks in Column "B" for NEMA Types 3, 3X, 3S, 3SX, 4, 4X, 6 and 6P are shaded. These NEMA ratings meet and exceed the IEC requirements for protection against the ingress of water. The absence of shading in Column "B" beneath the "NEMA Enclosure Type 5" indicates that Type 5 does not meet the IP 45 protection requirements against the ingress of water. Likewise the absence of shading in Column "B" for NEMA Type 12, 12K and 13 enclosures indicates that these enclosures do not meet the IP 45 requirements for protection against the ingress of water. Only Types 3, 3X, 3S, 3SX, 4, 4X, 6, and 6P have both Column "A" in the "IP4_" row and Column "B" in the "IP_5" row shaded and could be used in an IP45 application.

The NEMA Enclosure Type 3 not only meets the IP 45 Enclosure Rating, but also exceeds the IEC requirements because the NEMA Type requires an outdoor corrosion test; a gasket aging test; a dust test; an external icing test; and no water penetration in the rain test. Slight differences exist between the IEC and NEMA test methods, but the IEC rating permits the penetration of water if "it does not deposit on insulation parts, or reach live parts." The IEC rating does not require a corrosion test; gasket aging test; dust test or external icing test. Because the NEMA ratings include additional test requirements, this table cannot be used to select IP Designations for NEMA rated enclosure specifications.

IEC 60529 specifies that an enclosure shall not only be designated with a stated degree of protection indicated by the first characteristic numeral if it also complies with all lower degrees of protection. Furthermore IEC 60529 states that an enclosure shall only be designated with a degree of protection indicated by the second characteristic numeral if it also complies with all lower degrees of protection up to and including the second characteristic numeral 6. An enclosure designated with a second characteristic numeral 7 or 8 only is considered unsuitable for exposure to water jets (designated by second characteristic numeral 5 or 6) and need not comply with requirements for numeral 5 or 6 unless it is dual coded. Since the IEC protection requirements become more stringent with increasing IP character value up through 6, once a NEMA Type rating meets the requirements for an IP designation up through 6, it will also meet the requirements for all lower IP designations. This is apparent from the shaded areas shown in the table.

### Note

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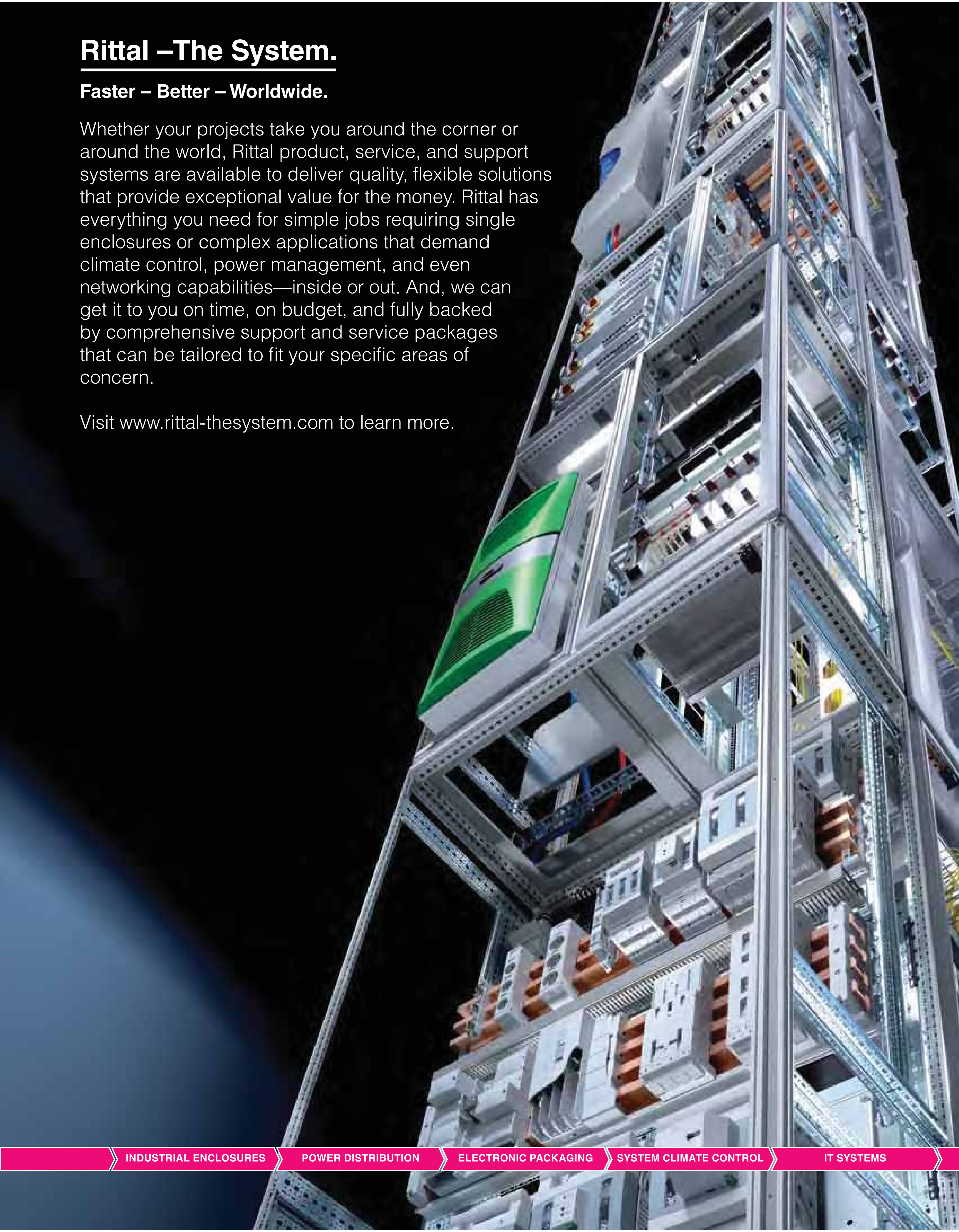
# Rittal –The System.

## Faster – Better – Worldwide.

Whether your projects take you around the corner or around the world, Rittal product, service, and support systems are available to deliver quality, flexible solutions that provide exceptional value for the money. Rittal has everything you need for simple jobs requiring single enclosures or complex applications that demand climate control, power management, and even networking capabilities—inside or out. And, we can get it to you on time, on budget, and fully backed by comprehensive support and service packages that can be tailored to fit your specific areas of concern.

Visit www.rittal-thesystem.com to learn more.



INDUSTRIAL ENCLOSURES · POWER DISTRIBUTION · ELECTRONIC PACKAGING · SYSTEM CLIMATE CONTROL · IT SYSTEMS

# EPLAN Software & Services

EPLAN Software & Services, a fast growing subsidiary of Rittal, provides fully integrated CAE software products for the efficient design and documentation of electrical, fluid power, instrumentation and process control, and 2D/3D enclosure systems. EPLAN's customer-centric services range from technical support and training to integration with third-party enterprise systems and overall engineering process consulting. This ensures successful software implementation and continued optimization of engineering processes as proven by over 18,000 customers with more than 60,000 installations.

EPLAN engineering center
EPLAN electric P8
EPLAN fluid
EPLAN ppe
EPLAN cabinet
M-CAD Data Management
EPLAN Platform

**The EPLAN Platform**

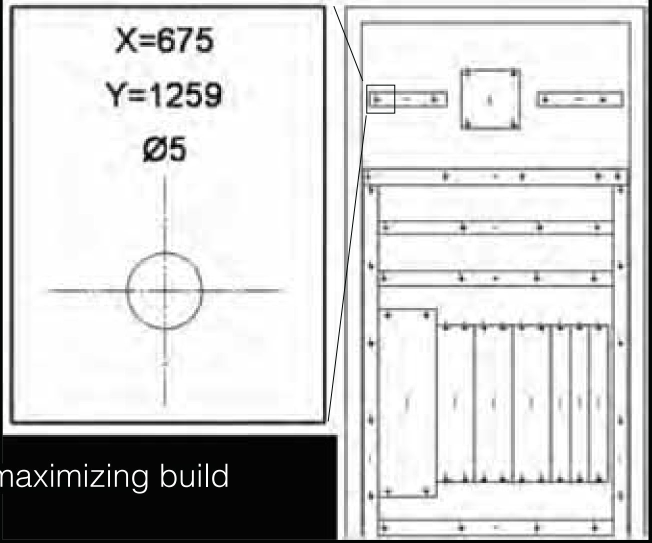
EPLAN products are based on a unique data management technology enabling them to directly and seamlessly share design data and core functionalities across the EPLAN Platform. This effectively allows the electrical, fluid power, instrumentation and process control, and enclosure designers to have one universal tool to achieve maximum efficiency and accuracy levels—both individually and collaboratively.

Concept

EPLAN Platform

Schematics, Layouts, Wiring Diagrams

efficient engineering.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EPLAN

# Electronic Packaging

Need an electronic packaging solution for your application? Stick with Rittal.

Rittal offers far more than just enclosures. Choose from a variety of subracks, chassis and piece parts that comply with industry standard platforms including CPCI, VME and uTCA.

From basic builds to complex EMC shielding requirements, panel-mounted components, custom or mobile applications—Rittal has everything you need.

All of our components (including power supplies, fan units and panels) are factory tested for reliability and performance to ensure your project's success.

# Plant Floor Networking

Ongoing technological advances in manufacturing operations and other modern industrial applications are increasingly integrating IT-dependent processes, making the use of IT equipment outside of the data center more and more prevalent. This requires enclosure solutions that can meet the demands of both IT performance and industrial-grade protection.  Even though IT equipment is placed at greater risk out on the plant floor, uptime is still a primary concern and a non-negotiable requirement.

Rittal offers UL Type 12 and NEMA 12 rated TS8 enclosures that incorporate the best of both worlds—the protection of our industrial enclosures and the flexibility and performance of our IT enclosures. Rittal's plant floor networking enclosures are compatible with a wide range of both industrial and IT accessories including Rittal industrial cooling products such as filter fans and air conditioners that can remove the heat necessary to keep installed IT equipment up and running while maintaining critical protection ratings.

# Outdoor Enclosure Solutions

Rittal offers a wide variety of enclosure systems and climate control components engineered specifically for outdoor and commercial applications that can be ordered off-the-shelf or custom-configured to provide superior protection in challenging environments.

Installed equipment is kept safe from day-to-day temperature fluctuations, humidity and sunlight as well as severe weather conditions, exposure to seawater and even earthquakes by industry-leading, modular freestanding and wall-mounted enclosures constructed of either rugged carbon or stainless steel. In addition, integral physical security and design features protect against unauthorized access and vandalism so you can rest assured that you're installation is protected from the worst that both "Mother" or human nature have to offer.

# Power Distribution

Rittal understands how important reliable, safe power distribution is to our customers, which is why our modular busbar systems are engineered to keep your applications running and your personnel out of harm's way.

Flexible, touch-safe designs allow users to customize their solution to meet their precise specifications while a modular architecture provides the freedom to easily reconfigure the system to change along with their needs. Supported by Rittal's knowledgeable applications experts, Rittal industrial power distribution systems deliver industry-leading technology to the controls and switchgear equipment that drive today's business.

# Rittal –The System.

**Faster – better – worldwide.**

- Enclosures
- Power Distribution
- Climate Control
- IT Infrastructure
- Software & Services

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