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Contents - Disconnect Switches

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Safety Switches

Non-Fused Air Conditioning Disconnects

Selection						
		240V Non-Fused Disconnect cUL listed, Type 3R enclosure				
		Catalogue Number	Ampere Rating	Maximum Horsepower	Disconnect Type	Std. Pkg.
		WN2060	60	10	Non-Fused Pullout	6
						

Features

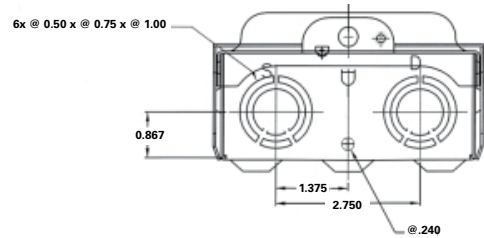
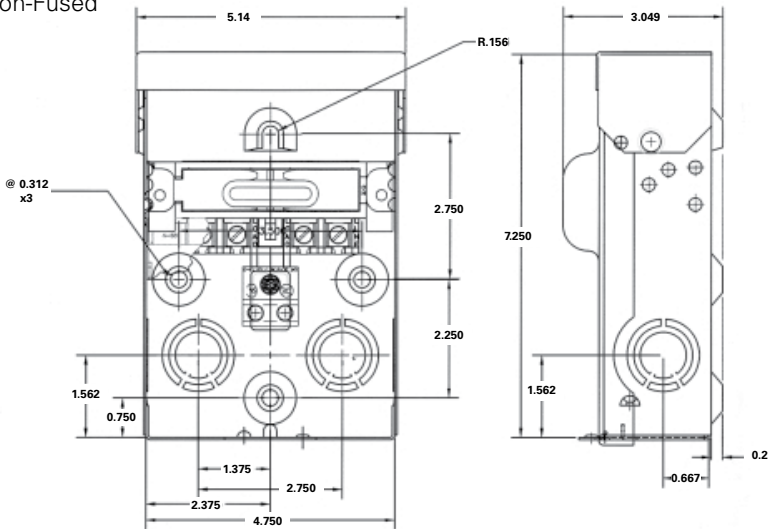
- Ample Wiring Space
- Rugged Design
- Numerous Knockouts
- Raised Mounting Embosses
- Copper Conductors
- Pullout Switch
- Removable Door

Benefits

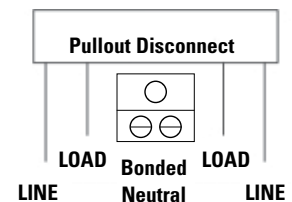
- The larger enclosure allows for ample wiring space.
- Manufactured with powder coated G90 galvanized steel for fade, scratch and corrosion resistance
- All (6) knockouts are easy to remove. The sidewall knockouts provide access from the sides of the device. Every knockout has 1/2", 3/4" and 1" provisions.
- (4) Raised mounting embosses keep the unit away from the wall, preventing dirt build-up. The upper mounting hole is shaped to be used as a hanger.
- Copper current carrying part allows for a cooler, longer lasting operation.
- The pullout switch design allows you to safely and easily de-energize the load terminals.
- The easily removable door makes it possible to wire the device with absolutely no interference.

Dimensions - Inches*

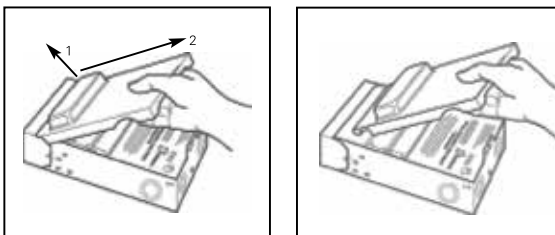
Non-Fused



Wiring Diagram



Removable Door





Wire Range Table				
Connector	Copper		Aluminum	
	Solid	Standard	Solid	Standard
Line	#14-8	#14-3	#12-8	#12-3
Load	#14-8	#14-3	#12-8	#12-3
Neutral	#12-8	#12-2	#12-8	#12-2
Equip Grnd.	#12-8	#12-2	#12-8	#12-2

* For inches/millimeters conversion, multiply inches by 25.4.

Safety Switches

Fused Air Conditioning Disconnects

Selection						
		240V Fused Disconnect cUL listed, Type 3R enclosure				
		Catalogue Number	Ampere Rating	Maximum Horsepower	Fuse Class	Std. Pkg.
		WF2030	30	3	H	6
		WF2060	60	10	H	6
						

Features

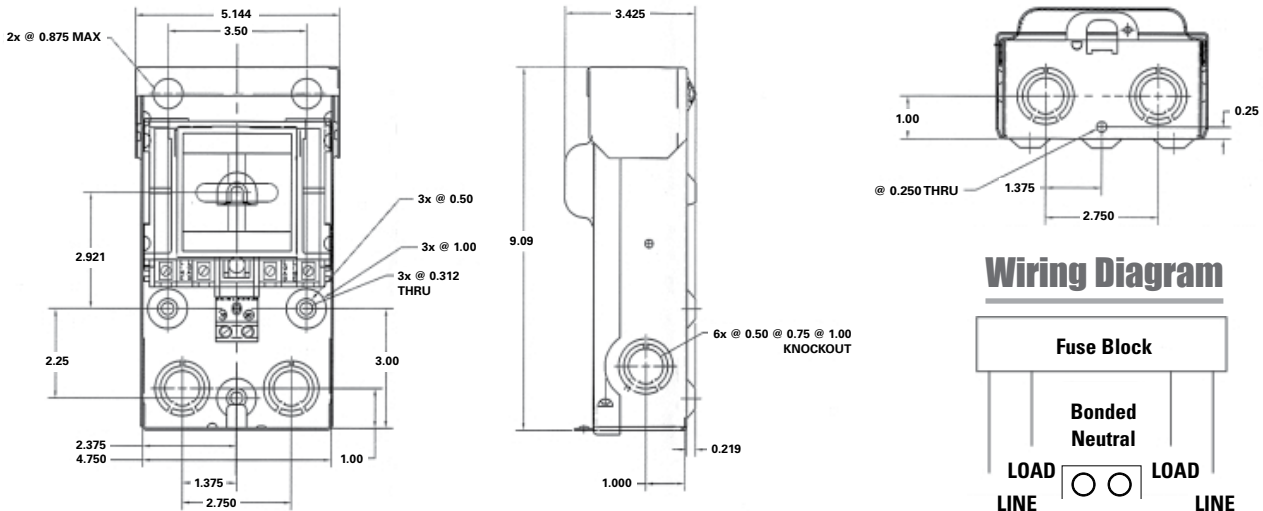
- Ample Wiring Space
- Rugged Design
- Numerous Knockouts
- Raised Mounting Embosses
- Copper Conductors
- Pullout Switch
- Removable Door

Benefits

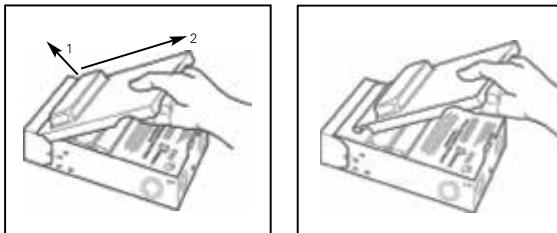
- The larger enclosure allows for ample wiring space.
- Manufactured with powder coated G90 galvanized steel for fade, scratch and corrosion resistance
- All (6) knockouts are easy to remove. The sidewall knockouts provide access from the sides of the device. Every knockout has 1/2", 3/4" and 1" provisions.
- (4) Raised mounting embosses keep the unit away from the wall, preventing dirt build-up. The upper mounting hole is shaped to be used as a hanger.
- Copper current carrying part allows for a cooler, longer lasting operation.
- The pullout switch design allows you to safely and easily de-energize the load terminals.
- The easily removable door makes it possible to wire the device with absolutely no interference.

Dimensions - Inches*

Fused



Removable Door



Wire Range Table				
Connector	Copper		Aluminum	
	Solid	Standard	Solid	Standard
Line	#14-8	#14-3	#12-8	#12-3
Load	#14-8	#14-3	#12-8	#12-3
Neutral	#12-8	#12-2	#12-8	#12-2
Equip Grnd.	#12-8	#12-2	#12-8	#12-2

* For inches/millimeters conversion, multiply inches by 25.4.

Type VBI Safety Switches

Guide Form Specifications

Product Overview

	General Duty	Heavy Duty	Double Throw																																	
Application	General Duty Switches are intended for applications where reliable performance and continuity of service are needed, but where duty requirements are not severe and usual service conditions prevail. (These switches are intended for use primarily with supply circuits rated 240V AC or less where the available fault current is less than 100,000A when used with Class R or T fuses or 10,000A max. when used with Class H fuses.)	Heavy Duty Switches are intended for use in applications where: <ol style="list-style-type: none"> 1. Rugged construction, reliable performance, continuity of service and ease of maintenance are emphasized, or 2. Available fault currents higher than 10,000A are likely to be encountered, such as in manufacturing plants, mass production industries, and commercial, institutional and other large buildings served by network systems or transformers of higher capacities. 3. System voltage is 600V AC or DC Max. 4. A Type 12 or 4/4X enclosure is required. 	Double throw switches are intended to transfer loads from one power source to another. All double throw switches are CSA certified. Switches are rated for use on systems with an available fault current of up to 10,000 AIC when protected with Class H fuses or 200,000 AIC when protected with Class R, J or Class T fuses. They can also be used to connect a single source of power to either of two loads. In this application it is necessary to field modify fusible switches so that the fuses are on the load side of the switching mechanism.																																	
Short Circuit Withstand Ratings	Suitable for use on systems capable of delivering not more than 100,000 RMS symmetrical amperes of fault current as follows: <table border="1"> <thead> <tr> <th>Sw. Rating</th> <th>AIC Rating</th> <th>Protective Device[Ⓞ]</th> </tr> </thead> <tbody> <tr> <td>30-200A</td> <td>10,000</td> <td>Circuit Breaker</td> </tr> <tr> <td>30-200A</td> <td>10,000</td> <td>Class H Fuse</td> </tr> <tr> <td>30-200A</td> <td>100,000</td> <td>Class R Fuse</td> </tr> <tr> <td>100-200A</td> <td>100,000</td> <td>Class J or T Fuse</td> </tr> </tbody> </table>	Sw. Rating	AIC Rating	Protective Device [Ⓞ]	30-200A	10,000	Circuit Breaker	30-200A	10,000	Class H Fuse	30-200A	100,000	Class R Fuse	100-200A	100,000	Class J or T Fuse	Suitable for use on systems capable of delivering not more than 200,000 RMS symmetrical amperes of fault current as follows: <table border="1"> <thead> <tr> <th>Sw. Rating & Type</th> <th>AIC Rating</th> <th>Protective Device[Ⓞ]</th> </tr> </thead> <tbody> <tr> <td>All Heavy Duty & DT</td> <td>10,000</td> <td>Circuit Breaker</td> </tr> <tr> <td>30-600A HD & DT</td> <td>10,000</td> <td>Class H Fuse</td> </tr> <tr> <td>30-600A HD</td> <td>200,000</td> <td>Class R, J or T Fuse</td> </tr> <tr> <td>30-600A DTFC & DTNFC DT</td> <td>200,000</td> <td>Class R, J or T Fuse</td> </tr> <tr> <td>800 & 1200A HD</td> <td>200,000</td> <td>Class L or T Fuse</td> </tr> </tbody> </table>	Sw. Rating & Type	AIC Rating	Protective Device [Ⓞ]	All Heavy Duty & DT	10,000	Circuit Breaker	30-600A HD & DT	10,000	Class H Fuse	30-600A HD	200,000	Class R, J or T Fuse	30-600A DTFC & DTNFC DT	200,000	Class R, J or T Fuse	800 & 1200A HD	200,000	Class L or T Fuse	
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30-600A DTFC & DTNFC DT	200,000	Class R, J or T Fuse																																		
800 & 1200A HD	200,000	Class L or T Fuse																																		
Fuses	Fusible switches will accept the following CSA class fuses: 30 "LF" - 30A max plug Fuses 30-200A "GD" Class H & K, Class R with kit 100-200A "GD" Class J-move base 100-200A "GD" Class T with kit	Fusible switches will accept the following CSA class fuses: 30-600A "HD" Class H & K, Class R with kit 30-600A, 600V "HD" Class J-move base 100-600A, 240V "HD" Class J-move base 100-200A "HD" Class T with kit 400-600A "HD" Class T-move bases 800-1200A "HD" Class L, Class T with kit [Ⓜ]	Fusible switches will accept the following CSA class fuses: 30-200A "DT" - Class H & K, Class R with kit 30 & 60A 600V "DT" - Class J-move base 100-200A "DT" - Class J-move base, Class T with kit 400-600A "DT" - Class J-standard, Class T-move bases																																	
Cover Interlocks	Voidable – cover interlocks on switches prevent the switch door from being opened when in the "ON" position. No cover interlock on plug fuse type switches.	Voidable dual cover interlocks standard on all heavy duty switches. Prevents cover from being opened when switch is in the "ON" position and prevents switch from being turned "ON" when door is opened.	Dual cover interlocks standard on all double throw switches. Prevents cover from being opened when switch is in the "ON" position and prevents switch from being turned "ON" when door is opened.																																	
Specifications	CSA certified under file #24563 as enclosed switches. Fusible switches also suitable as service entrance when neutral bonded to the enclosure is installed. Meets CSA C22.2 No.4 Enclosed Switches. Meet NEMA standard KS-1-2001 for type GD switches.	Meet NEMA standard KS-1-2001 for type HD switches.	CSA certified under file #24563 as enclosed switches. Meets CSA C22.2 No.4 Enclosed switches. Meet NEMA standard KS-1-2001 type HD for "DT" switches.																																	
Seismic Qualifications	All GD & HD switches and "DT" type double throw switches have been tested and comply with the 2010 California Building Code (CBC) and with the 2009 International Building Code (IBC) - Compliance Level SDS = 1.85 g																																			
Groundable Neutral (All neutrals are bondable for service entrance use.)	Fusible switches have groundable neutral blocks factory installed.	All switches (both Fusible and Non-Fusible) are either supplied with factory installed neutrals or accept field addable neutrals.	All 2-3 pole DT will accept field addable neutrals.																																	
Padlocks	Padlockable cover latch. OFF padlock provisions on handle.	Padlockable cover latch and multiple OFF padlock provisions on handle.	Padlockable cover latch and multiple OFF padlock provisions on handle.																																	
HP & Load Break Ratings	All General Duty, Heavy Duty and Double Throw Switches are both load break and horsepower rated.																																			

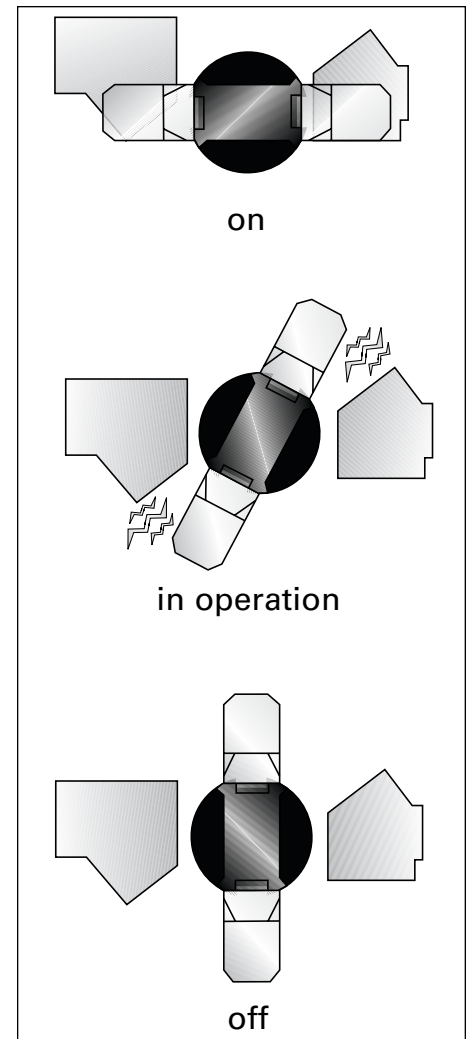
Ⓞ The protective device can either be a fuse installed in a fusible switch or an upstream fuse or circuit breaker protecting a non-fusible switch. The ampere rating of the upstream protective device must not exceed the switch ampere rating.

Ⓜ Class T kit available for 240V max. applications on 1200A switches.

Feature Comparison

Product Overview

General Duty	Heavy Duty	Double Throw	Features / Ratings
▪	▪	▪	30 thru 600 Amps
–	▪	–	800 and 1200 Amps
▪	▪	▪	240 Volt AC
–	▪	▪	600 Volt AC
▪	▪	▪	250 Volt DC
–	▪	–	600 Volt DC
▪	▪	▪	Double-break visible blade design (30-200A)
▪	▪	▪	Quick-make, quick-break switching action
▪	▪	▪	Highly visible ON/OFF handle indication
–	▪	–	Handle design for hook stick operation
▪	▪	▪	Padlockable cover latch
▪	▪	▪	Padlockable handle
▪③	–	▪	Single voidable cover interlock
–	▪	▪	Dual voidable cover interlock
▪	▪	▪	Type 1 enclosure
▪	▪	▪	Type 3R enclosure
–	▪	–	Type 12 enclosure
–	▪	–	Type 4/4X enclosures
▪	▪	▪	Generous wiring gutters that meet CSA and CEC wire-bending space requirements
▪	▪	▪	Lugs suitable for copper or aluminum at 60° or 75°C
▪	▪	▪	CU/AL wire lugs that meet CSA C22.2 No.65-03 requirements
–	▪	▪	Suitable for field-convertible compression connectors
▪④	▪	▪	All plated copper current carrying parts (except lugs)
▪	▪	▪	Spring reinforced Fuse Clips (except 30A general duty)②
–	▪	▪	Clear pivoting line terminal shield
▪	▪	▪	Replacement parts
–	▪	–	Field addable 200% neutral
▪⑦	▪①⑦	▪①⑦	Provisions for CSA Class T, R and H Fuses
–	▪	▪①	Provisions for CSA Class J and L Fuses
–	▪	▪	Metal nameplate
60-200A	▪	▪	Aux. switch kits
–	▪④	–	Type 4X with stainless steel interior parts
▪⑤	▪	–	Rolled flange enclosure design (30-200A)
–	▪	▪	Isolated ground kits



Double Break Switching Action

Like the time-proven Vacu-Break Design, the Siemens VBI double break switching action breaks the arc in two places in 30-200A ratings. This reduces heat generation and increases switching speed by doubling the breaking distance. The result is enhanced performance and increased longevity. We also provide the most visible blade design available today. Unlike conventional knife blade switches, the blades are self-aligning to ensure positive contact. In addition, they have no wear and friction point since the “electrical hinge” has been eliminated. The result is a very fast, positive and reliable switching action for even the most severe applications.

① 400, 600V & 600A fusible, double-throw switches accept only Class J or T fuses. Only 800 & 1200A HD switches will accept Class L fuses.

② 30A general duty switches have fuse clips constructed of spring type copper.

③ Not supplied on 30A outdoor & plug fuse switches.

④ 30-200A Type VBI in stainless steel enclosures.

⑤ 60-200A.

⑥ 200A general duty switches have aluminum neutral assemblies.

⑦ 100-200A GD, 100-600A DT and 100-1200A HD switches will accept Class T fuses.

Safety Switches

General Duty and Heavy Duty

Product Overview

Enclosure Types

- A Type 1** enclosures are intended for indoor use primarily to provide protection against contact with the enclosed equipment in locations where unusual service conditions do not exist.
- B Type 3R** enclosures are intended for outdoor use primarily to provide a degree of protection against falling rain and sleet and must remain undamaged by the formation of ice on the enclosure. They are not intended to provide protection against conditions such as dust, internal condensation, or internal icing.
- C Type 4, 4X** enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, splashing water and hose-directed water. They are not intended to provide protection against conditions such as internal condensation or internal icing. Also meets 4X definition by providing a high degree of protection against corrosion. Siemens 30-200A stainless steel 4X switches are supplied stainless interior parts and hardware as standard.
- D Type 4** enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, splashing water and hose-directed water. They are not intended to provide protection against conditions such as internal condensation or internal icing.
- E Type 12[®]** enclosures are intended for indoor use primarily to provide a degree of protection against dust, falling dirt and dripping water. They are not intended to provide protection against conditions such as internal condensation.



Load Break Ratings

All Siemens safety switches are load break rated. The load break rating is assigned by CSA after the switching unit has successfully performed the following tests:

Switch Ampere Rating	Number of ON/OFF Operations per Minute	Number of Operations		
		With Current	Without Current	Total
30-100	6	6000	4000	10000
200	5	6000	2000	8000
400	4	1000	5000	6000
600	3	1000	4000	5000
800	2	500	3000	3500
1200	1	500	2000	2500

Horsepower Ratings

All Siemens safety switches, where appropriate, are horsepower rated. The assignment of such ratings is made by CSA only after the switching unit has undergone testing to determine its acceptability which includes repeated interruption of the locked rotor current of the motor for which it is to be rated as follows:

Max HP Rating	Number of ON/OFF Operations per minute	Number of Cycles of Operation
100	6	50
500	1	10

Non-Fusible Safety Switch AIC Ratings When Protected by a Circuit Breaker^{2,3}

Breaker Frame	Non-Fused Switch	Short Circuit Current Rating
NEG, NGB, ED4	30 DT (240V)	18 kA Thru 240 VAC
NEB, NEG, NGG, NGB, ED4	60-100A GD & DT (240V)	18 kA Thru 240 VAC
NEB, NEG, NGG, NGB, ED4	30-100A HD & DT (600V)	18 kA Thru 480 VAC
ED6	30-100A HD & DT (600V)	18 kA Thru 600 VAC
FD6-A, JD6-A	200A HD & DT (600V)	18 kA Thru 600 VAC
JD6-A, LD6-A	400A DT (240V)	18 kA Thru 240 VAC
JD6-A, LD6-A	400A HD & DT (600V)	18 kA Thru 600 VAC
LD6-A	600A DT (240V)	25kA Thru 240 VAC
LD6-A	600A HD & DT (600V)	25kA Thru 600 VAC
NNG	1200A HD (600V)	25 kA Thru 600 VAC

① VBII Type 12 switches are also rated 3R & 3S for outdoor use. Type 3R is defined in B above. 3S rated enclosures provide a degree of protection against windblown dust and allow operation when the enclosure is ice laden.
 ② All switches above are rated at 10 KA when protected by any CSA certified or cUL Listed CB
 ③ Circuit breaker trip rating must not exceed switch ampere rating

Catalogue Numbering System

Type VBII Safety Switch Catalogue Numbering System

Product Overview

SAFETY SWITCHES 1

H F C 3 6 4 N R CH

Switch Type

L = General Duty
10k AIC Max.
(Plug Fused &
60A Max
Non-Fused)
G = Gen. Duty
H = Heavy Duty
DT = Double Throw

Special Applications With:

CH = Crouse-Hinds Receptacle
W = Viewing Window

Fused or Non-Fused

F = Fused
NF = Non-Fused

Enclosure Type

Omit = Type 1, Indoor
R = Type 3R, Outdoor
S = Type 4/4X, Stainless Steel
J = Type 12, Industrial

C = Built to meet Canadian requirements

Number of Poles

1 = 1
2 = 2
3 = 3
4 = 4
6 = 6

With or Without Neutral

Omit = Less Neutral
N = With Neutral

Voltage

1 = 120V or 120/240V
2 = 240V
6 = 600V

Amperes

1 = 30A **5** = 400A
2 = 60A **6** = 600A
3 = 100A **7** = 800A
4 = 200A **8** = 1200A

Type VBII Accessories Catalogue Numbering System

H R 6 4

Switch Type

H = Heavy Duty
G = General Duty

Amperes

1 = 30A
2 = 60A
12 = 30/60A
3 = 100A
23 = 60/100A
123 = 30/60/100A
1234 = 30/60/100/200A
4 = 200A
56 = 400/600A
5678 = 400/600/800/1200A
78 = 800/1200A

Accessory Type

A1 = Auxiliary Switch 1/NO and 1/NC
A2 = Auxiliary Switch 2/NO and 2/NC
A3 = Auxiliary Switch Low Current
CL = Compression Lug Barrier /
Mounting Kit
G = Ground Lug Kit
G2 = Insulated Ground Lug Kit
LC = Copper Lug Kit
NC = Neutral
NC2 = 200% Neutral
P = Fuse Puller Kit
R = Class R - Fuse Clip Kit
T = Class T - Fuse Kit

Maximum Voltage

2 = 240V Max
6 = 600V Max

General Duty Enclosed Switches

Plug Fuse and 60A Special Application Type

Selection

Features

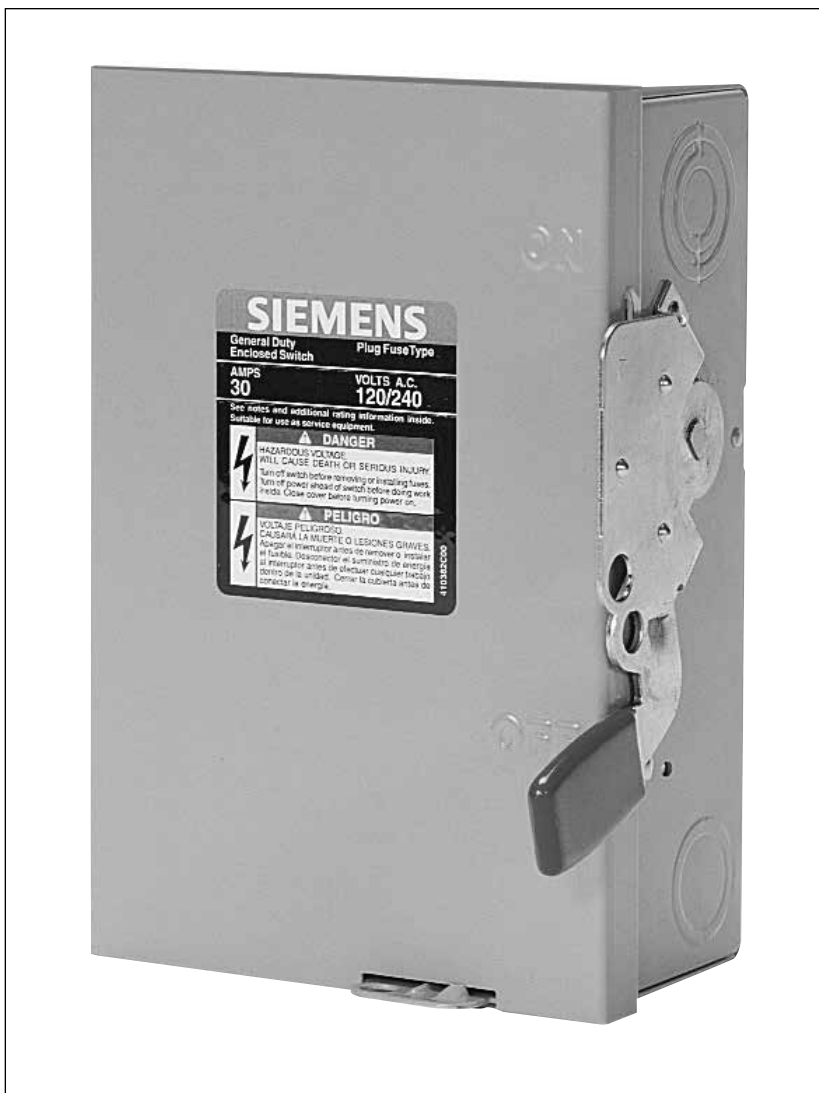
- CSA Certified under file #24563
- Compact size
- Horsepower rated
- Indoor and outdoor enclosures
- Quick make-quick break mechanism
- Visible "ON"-"OFF" indications
- Padlock-off handle feature
- Door padlock provision
- All fusible switches suitable for use as service entrance equipment
- Bondable neutral (where indicated)
- Lugs suitable for copper or aluminum wire
- Switches accept plug fuses only - fuses not included
- Hubs[®] — see page 1-21
- Lugs — see page 1-21
- Ground Bar Kit: **GSGK60**[®]
- Knockout diagrams — see page 1-26 and 1-27

Dimensions - in. (mm)

Enclosure Type	Height	Width	Depth
1	8 1/4 (210)	5 1/2 (140)	3 (76)
3R	8 1/4 (210)	5 1/2 (137)	3 1/2 (79)

Wire Range Table

Switch Type	Wire Range
120/240 Volt Fusible 30 Amp	#14 AWG - #8 AWG Al/Cu [®]
120/240 Volt Non-Fusible 60 Amp	#14 AWG - #3 AWG Al/Cu



1 SAFETY SWITCHES

Ampere Rating	Indoor — Type 1		Outdoor — Type 3R		Horsepower Ratings [®]	
	Catalogue Number	Ship. Wt. (lbs.)	Catalogue Number	Ship. Wt. (lbs.) Pkg. of 10	1-Phase, 2-Wire	
					Standard	Maximum

120/240 Volt Fusible

1-Pole and Solid Neutral [®]				120 Volt — 1-Phase, 2-Wire		
30	LFC111N	3.6	—	—	1/2	2

2-Pole and Solid Neutral [®]				120/240 Volt — 2-Phase, 3-Wire		
30	LFC211N	3.5	LFC211NR	35	1/2	2

240 Volt Non-Fused

2-Pole Special Application Switch				240 Volt — 1-Phase, 2-Wire		
60	—	—	LNFC222R [®]	35	3	10

[®]Dual horsepower ratings:
Std. — applies when non-time delay plug fuses are installed.
Max — applies when time-delay plug fuses are installed.

[®]Has service entrance label. CSA certified as "Enclosed Switches" (suitable for use as service equipment where indicated).
[®]Bottom cable entry and exit only. No hub provision supplied. **GSGK60** is included and factory installed.

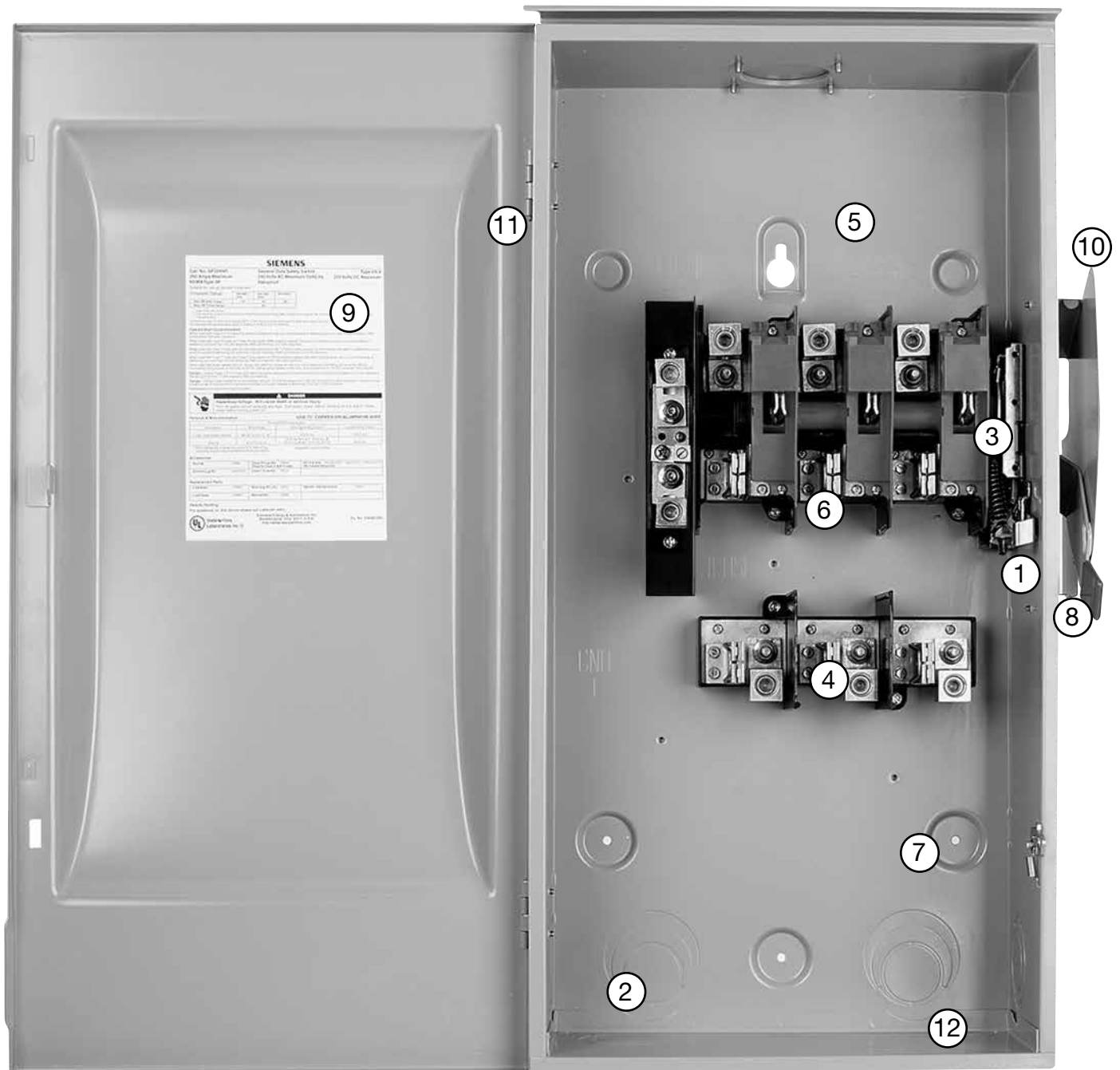
[®]Line lugs are CSA approved for #14 to #6 Cu/Al cable.

General Duty Safety Switches

Features (60-200A)

Product Overview

1
SAFETY
SWITCHES



1. Cover interlock
2. Tangential knockouts through 200A for easy conduit lineup
3. Quick-make, quick-break operating mechanism that ensures positive operation
4. Provisions for T, R, J, H, and K class fuses (T & J 100-200A)
5. Generous wiring gutters that meet or exceed CEC wire-bending space requirements
6. Visible blade, double-break switch action
7. Positive 2 or 3 point mounting
8. Highly visible red handle grip
9. Informative door labeling which includes replacement parts list
10. Handle and cover padlocking provisions
11. Side-hinged door that opens 180 degrees for easier wiring
12. A unique enclosure design that adds rigidity and strength. Its rolled edge prevents cuts and scrapes to conductors and to installer's hands

General Duty Safety Switches

Selection

1
SAFETY
SWITCHES



System	Ampere Rating	Indoor – Type 1		Horsepower Ratings ^①						
				240V AC						250 Volt DC
		Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	1-Phase, 2-Wire		2-Phase, 4-Wire		3-Phase, 3-Wire		
						Std.	Max.	Std.	Max.	Std.

240 Volt Fusible

2-Pole, 2-Fuse, and Solid Neutral^{②③④}

240 Volt AC/250 Volt DC

Diagram	Ampere Rating	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	1-Phase, 2-Wire Std.	1-Phase, 2-Wire Max.	2-Phase, 4-Wire Std.	2-Phase, 4-Wire Max.	3-Phase, 3-Wire Std.	3-Phase, 3-Wire Max.	250 Volt DC Std.
	30	GFC221N	35 ^⑤	1 1/2	3	—	—	3	7 1/2	5
	60	GFC222N	14	3	10	—	—	7 1/2	15	10
	100	GFC223N	23	7 1/2	15	—	—	15	30	20
	200	GFC224N	47	15	—	—	—	25	60	40

3-Pole, 3-Fuse, and Solid Neutral^④

240 Volt AC/250 Volt DC

Diagram	Ampere Rating	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	1-Phase, 2-Wire Std.	1-Phase, 2-Wire Max.	2-Phase, 4-Wire Std.	2-Phase, 4-Wire Max.	3-Phase, 3-Wire Std.	3-Phase, 3-Wire Max.	250 Volt DC Std.
	30	GFC321N	24 ^⑤	1 1/2	3	—	—	3	7 1/2	5
	60	GFC322N	15	3	10	—	—	7 1/2	15	10
	100	GFC323N	25	7 1/2	15	—	—	15	30	20
	200	GFC324N	49	15	—	—	—	25	60	40

① Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when time-delay fuses are installed.

② These switches are CSA certified for application on grounded B-phase systems.

③ Suitable for use on 3-phase motor loads.

④ Suitable for use as service entrance when neutral is bonded to the enclosure.

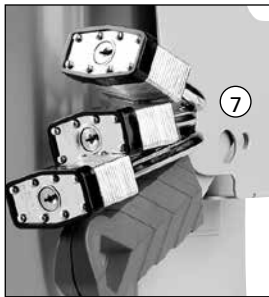
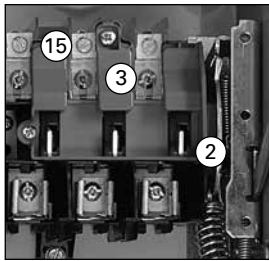
⑤ 10 switches per standard package.

⑥ 5 switches per standard package.

Heavy Duty Safety Switches

Features

1
SAFETY
SWITCHES



1. Quick-make, quick-break operating mechanism that ensures positive operation.
2. Visible blade, double-break switching action.
3. Arc chutes dissipate heat and prolong switch life.
4. Highly visible red handle grip. Designed for hook stick operation.
5. Defeatable dual cover interlock.
6. Center punch provided for field drilling to allow ON padlocking.
7. Handle can be padlocked in the OFF position with up to (3) padlocks with 5/16" hasps.
8. Generous top, bottom and side gutters that meet or exceed CEC wire-bending space requirements.
9. Informative door labeling which includes replacement parts list.
10. Tangential knockouts through 600A for easy conduit lineup.
11. Side-hinged door that opens past 180 degrees for easier wiring.
12. Unique enclosure design increases rigidity and prevents cuts and scrapes to conductors and installer's hands.
13. Spring reinforced fuse clips that assure reliable contact for cool operation.
14. Door latch securely holds door closed and allows cover padlocking.
15. Front removable mechanical lugs that are suitable for CU/Al 60 or 75° C conductors.
16. Lugs are field convertible to copper body and to a wide variety of compression connectors.
17. Hinged clear line terminal shield with probe holes for inspecting or testing line side terminals.
18. Embossed aluminum nameplate on Heavy Duty Switches.
19. Drawn cover for increased rigidity and resistance to abuse.
20. Top key hole and bottom mounting holes provide easy 2 or 3 point mounting.

Heavy Duty Safety Switches

Selection

1
SAFETY
SWITCHES



System	Ampere Rating	Indoor – Type 1		Outdoor – Type 3R			Horsepower Ratings [ⓐ]				
		Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Hub Type [ⓓ]	240V AC				250 Volt DC
							1-Phase, 2-Wire		3-Phase, 3-Wire		
Std.	Max.	Std.	Max.								

240 Volt Fusible^①

2-Pole, 2-Fuse and Solid Neutral^③ (Also used for 2-Pole, 2-Wire Applications) 240 Volt AC/250 Volt DC

Ampere Rating	Indoor Type 1 Catalogue Number	Indoor Type 1 Ship. Wt. (lbs.) Std. Pkg.	Outdoor Type 3R Catalogue Number	Outdoor Type 3R Ship. Wt. (lbs.) Std. Pkg.	Hub Type [ⓓ]	1-Phase, 2-Wire		3-Phase, 3-Wire		250 Volt DC
						Std.	Max.	Std.	Max.	
30	HFC221N	12	HFC221NR	13	ECHS	1 ^{1/2}	3	3	7 ^{1/2}	5
60	HFC222N	18	HFC222NR	19		3	10	7 ^{1/2}	15	10
100	HFC223N	23	HFC223NR	24	ECHV	7 ^{1/2}	15	15	30	20
200	HFC224N	47	HFC224NR	48		15	—	25	60	40
400	HFC225N	153	HFC225NR	157		15	—	50	125	50
600	HFC226N	155	HFC226NR	159		15	—	75	200	50
800	HFC227N	365	HFC227NR	365	—	—	100	250	50	
1200	HFC228N	385	HFC228NR	385	—	—	100	250	50	

3-Pole, 3-Fuse and Solid Neutral (Also used for 3-Pole, 3-Wire Applications) 240 Volt AC/250 Volt DC

Ampere Rating	Indoor Type 1 Catalogue Number	Indoor Type 1 Ship. Wt. (lbs.) Std. Pkg.	Outdoor Type 3R Catalogue Number	Outdoor Type 3R Ship. Wt. (lbs.) Std. Pkg.	Hub Type [ⓓ]	1-Phase, 2-Wire		3-Phase, 3-Wire		250 Volt DC
						Std.	Max.	Std.	Max.	
30	HFC321N	14	HFC321NR	15	ECHS	1 ^{1/2}	3	3	7 ^{1/2}	5
60	HFC322N	19	HFC322NR	20		3	10	7 ^{1/2}	15	10
100	HFC323N	25	HFC323NR	26	ECHV	7 ^{1/2}	15	15	30	20
200	HFC324N	49	HFC324NR	50		15	—	25	60	40
400	HFC325N	158	HFC325NR	162		15	—	50	125	50
600	HFC326N	161	HFC326NR	165		15	—	75	200	50
800	HFC327N	375	HFC327NR	375	—	—	100	250	50	
1200	HFC328N■	395	HFC328NR■	388	—	—	100	250	50	

240 Volt Fusible^①

2-Pole, 2-Fuse 240 Volt AC/250 Volt DC

Ampere Rating	Type 4/4X Stainless [ⓔ]		Type 12 Industrial [ⓔ]		Hub Type [ⓓ]	1-Phase, 2-Wire Std.	1-Phase, 2-Wire Max.	3-Phase, 3-Wire Std.	3-Phase, 3-Wire Max.	250 Volt DC
	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.						
30	HFC221NS	13	HFC221NJ	13	SSH	1 ^{1/2}	3	3	7 ^{1/2}	5
60	HFC222NS	19	HFC222NJ	19		3	10	7 ^{1/2}	15	10
100	HFC223NS	24	HFC223NJ	24		7 ^{1/2}	15	15	30	20
200	HFC224NS	48	HFC224NJ	48		15	—	25	60	40

3-Pole, 3-Fuse (Also used for 2-Pole, 2-Wire Applications in 400–800A Ratings) 240 Volt AC/250 Volt DC

Ampere Rating	Type 4/4X Stainless [ⓔ]		Type 12 Industrial [ⓔ]		Hub Type [ⓓ]	1-Phase, 2-Wire Std.	1-Phase, 2-Wire Max.	3-Phase, 3-Wire Std.	3-Phase, 3-Wire Max.	250 Volt DC
	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.						
30	HFC321NS	14	HFC321NJ	14	SSH	1 ^{1/2}	3	3	7 ^{1/2}	5
60	HFC322NS	20	HFC322NJ	20		3	10	7 ^{1/2}	15	10
100	HFC323NS	25	HFC323NJ	25		7 ^{1/2}	15	15	30	20
200	HFC324NS	49	HFC324NJ	49		15	—	25	60	40
400	HFC325NS	154	HFC325NJ■	110	*	15	—	50	125	50
600	HFC326NS	157	HFC326NJ■	161		15	—	75	200	50
800	HFC327NS■	370	HFC327NJ■	365		—	—	100	250	50

■ Built to order.

① Suitable for use as service equipment when neutral is bonded to the enclosure.

② Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when time-delay fuses are installed.

③ These switches are CSA certified for application on grounded B-phase systems and are suitable for 3-phase motor applications.

④ Hub catalogue numbers available p. 1-21

⑤ 304 grade stainless steel.

⑥ Also rated for Type 3S/3R application. Factory provided drain plug must be removed from the bottom of the enclosure for type 3S/3R application.

⑦ Hub type SSH are suitable for type 4/4X and type 12 applications.

* Consult Siemens representative.

Heavy Duty Safety Switches

Selection

1
SAFETY
SWITCHES



System	Ampere Rating	Indoor – Type 1		Outdoor – Type 3R			Horsepower Ratings ^④									
		Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Hub Type ^⑥	480V AC				600V AC				250 Volt DC	600 Volt DC
							1-Phase, 2-Wire		3-Phase, 3-Wire		1-Phase, 2-Wire		3-Phase, 3-Wire			
Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.			

600 Volt Fusible

2-Pole, 2-Fuse^③

480 Volt AC/600 Volt AC/600 Volt DC

	30	HFC261	15	HFC261R	15	ECHS	3	7 ^{1/2}	—	—	3	10	—	—	5	15
	60	HFC262	20	HFC262R	20		10	20	—	—	10	25	—	—	10	30
	100	HFC263	26	HFC263R	27	ECHV	15	30	—	—	15	40	—	—	20	50
	400	HFC265■	149	HFC265R■	152		—	50	—	—	50	—	—	—	40	50
	600	HFC266■	150	HFC266R■	155		—	50	—	—	50	—	—	—	50	50

3-Pole, 3-Fuse

480 Volt AC/600 Volt AC/250 Volt DC^①

	30	HFC361	14	HFC361R	15	ECHS	3	7 ^{1/2}	5	15	3	10	7 ^{1/2}	20	5	—
	60	HFC362	19	HFC362R	20		5	20	15	30	10	25	15	50	10	30 ^②
	100	HFC363	24	HFC363R	25	ECHV	5	20	25	60	15	40	30	75	20	50 ^②
	200	HFC364	48	HFC364R	49		25	50	50	125	30	50	60	150	40	50
	400	HFC365	154	HFC365R	157		—	—	100	250	—	—	125	350	50	—
	600	HFC366	157	HFC366R	161		—	—	150	400	—	—	200	500	50	—
	800	HFC367	365	HFC367R	365		—	—	200	500	—	—	250	500	50	—
	1200	HFC368	383	HFC368R	385		—	—	200	500	—	—	250	500	50	—

3-Pole, 3-Fuse and Solid Neutral^⑤

480 Volt AC/600 Volt AC/250 Volt DC^①

	30	HFC361N	14	HFC361NR	15	ECHS	3	7 ^{1/2}	5	15	3	10	7 ^{1/2}	20	5	—
	60	HFC362N	19	HFC362NR	20		5	20	15	30	10	25	15	50	10	30 ^②
	100	HFC363N	25	HFC363NR	26	ECHV	10	30	25	60	15	40	30	75	20	50 ^②
	200	HFC364N	49	HFC364NR	50		25	50	50	125	30	50	60	150	40	50
	400	HFC365N	158	HFC365NR	162		—	—	100	250	—	—	125	350	50	—
	600	HFC366N	161	HFC366NR	165		—	—	150	400	—	—	200	500	50	—
	800	HFC367N	375	HFC367NR	375		—	—	250	500	—	—	250	500	50	—
	1200	HFC368N	395	HFC368NR	388		—	—	250	500	—	—	250	500	50	—

600 Volt Fusible^⑦ (For 2-Pole Applications use outside poles of 3-Pole Switches)

2-Pole, 2-Fuse^③

480 Volt AC/600 Volt AC/600 Volt DC

	Ampere Rating	Type 4/4X Stainless ^⑧	Type 12 Industrial ^⑦	Hub Type ^{⑥⑨}													
		Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	SSH	*	480V AC				600V AC				250 Volt DC	600 Volt DC
Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.
	30	HFC261S	15	HFC261J■	15	SSH	3	7 ^{1/2}	—	—	3	10	—	—	5	15	
	60	HFC262S	20	HFC262J■	20		5	20	—	—	10	25	—	—	10	30	
	100	HFC263S■	27	HFC263J■	27	*	10	30	—	—	15	40	—	—	20	50	
	400	HFC265S■	153	HFC265J■	155		—	50	—	—	50	—	—	—	40	50	
	600	HFC266S■	156	HFC266J■	156		—	50	—	—	50	—	—	—	50	50	

3-Pole, 3-Fuse

480 Volt AC/600 Volt AC/250 Volt DC^①

	30	HFC361S	13	HFC361J	14	SSH	—	—	5	15	—	—	7 ^{1/2}	20	5	—
	60	HFC362S	20	HFC362J	20		—	—	15	30	—	—	15	50	10	30 ^②
	100	HFC363S	25	HFC363J	25	*	—	—	25	60	—	—	30	75	20	50 ^②
	200	HFC364S	49	HFC364J	49		—	—	50	125	—	—	60	150	40	50
	400	HFC365S	158	HFC365J	160		—	—	100	250	—	—	125	350	50	—
	600	HFC366NS ^⑩	161	HFC366J	161		—	—	150	400	—	—	200	500	50	—
	800	HFC367NS ^⑩	370	HFC367NJ ^⑩ ■	365		—	—	200	500	—	—	250	500	50	—
	1200	HFC368NS ^⑩ ■	388	HFC368NJ ^⑩ ■	388		—	—	250	500	—	—	250	500	50	—

■ Built to order.

① 60-200A 3-Pole switches are also rated 600V DC.

② 600V DC & 600V DC horsepower rating shown requires (2) poles to be connected in series.

③ Use 3-Pole switch for 200A applications.

④ Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when time-delay fuses are installed.

⑤ Suitable for use as service equipment when neutral is bonded to the enclosure, except for 1200A when used on 480V or 600V grounded wye system.

⑥ Hub catalogue number available p.1-21

⑦ When a neutral is required use neutral kit displayed on p.1-19

⑧ Also rated for Type 3S/3R application. Factory provided drain plug must be removed from the bottom of the enclosure for type 3S/3R application.

⑨ 304 grade stainless steel.

⑩ Hub type SSH are suitable for type 4/4X and type 12 applications.

⑪ 3-Pole, 3-Fuse with solid neutral factory installed, suitable for use as service equipment.

* Consult Siemens representative

Heavy Duty Safety Switches

Selection

1
SAFETY
SWITCHES



System	Ampere Rating	Indoor — Type 1		Outdoor — Type 3R			Horsepower Ratings							
		Catalogue Number	Ship. Wt. (lbs.)	Catalogue Number	Ship. Wt. (lbs.)	Hub® Type	240 Volt		480 Volt		600 Volt		250V DC	600V DC
							1-Phase	3-Phase	1-Phase	3-Phase	1-Phase	3-Phase		

600 Volt Non-Fusible

2-Pole^③

480 Volt AC / 600 Volt AC / 600 Volt DC

	30	HNFC261	12	HNFC261R	13	ECHS	—	—	7 ^{1/2}	—	10	—	5	15
	60	HNFC262	19	HNFC262R	20		—	—	20	—	25	—	10	30
	100	HNFC263	24	HNFC263R	25	ECHV	—	—	30	—	40	—	20	50
	400	HNFC265	109	HNFC265R	113		15	—	50	—	50	—	40	50
	600	HNFC266■	111	HNFC266R■	115		15	—	50	—	50	—	50	50

3-Pole

480 Volt AC/600 Volt AC/250 Volt DC

	30	HNFC361	12	HNFC361R	13	ECHS	5	10	7 ^{1/2}	20	10	30	5	—
	60	HNFC362 ^①	18	HNFC362R ^①	19		10	20	20	50	25	60	10	30 ^②
	100	HNFC363 ^①	23	HNFC363R ^①	24		15	40	30	75	40	100	20	50 ^②
	200	HNFC364 ^①	46	HNFC364R ^①	47	15	60	50	125	50	150	40	50	
	400	HNFC365	114	HNFC365R	118	ECHV	15	125	50	250	50	350	50	—
	600	HNFC366	116	HNFC366R	120		15	200	50	400	50	500	50	—
800	HNFC367	295	HNFC367R	295	15		250	50	500	50	500	50	—	
1200	HNFC368	305	HNFC368R	307	15	250	50	500	50	500	50	—		

600 Volt Non-Fusible^②

2-Pole^③

480 Volt AC / 600 Volt AC / 600 Volt DC

		Type 4/4X Stainless ^②		Type 12 Industrial ^②		Hub Type ^④								
	30	HNFC261S	13	HNFC261J	13	SSH	—	—	7 ^{1/2}	—	10	—	5	15
	60	HNFC262S	20	HNFC262J	20		—	—	20	—	25	—	10	30
	100	HNFC263S■	25	HNFC263J■	25		—	—	30	—	40	—	20	50
	400	HNFC265S■	113	HNFC265J■	114	*	15	—	50	—	—	—	40	50
	600	HNFC266S■	115	HNFC266J■	120		15	—	50	—	—	—	50	50

3-Pole

480 Volt AC / 600 Volt AC / 250 Volt DC

	30	HNFC361S	13	HNFC361J	13	SSH	5	10	7 ^{1/2}	20	10	30	5	—
	60	HNFC362S ^①	19	HNFC362J ^①	19		10	20	20	50	25	60	10	30 ^②
	100	HNFC363S ^①	24	HNFC363J ^①	24		15	40	30	75	40	100	20	50 ^②
	200	HNFC364S ^①	47	HNFC364J ^①	47	15	60	50	125	50	150	40	50	
	400	HNFC365S	118	HNFC365J	119	*	15	125	50	250	50	350	50	—
	600	HNFC366S	120	HNFC366J	120		15	200	50	400	50	500	50	—
800	HNFC367S	295	HNFC367J■	295	15		250	50	500	50	500	50	—	
1200	—	—	HNFC368J■	310	15	250	50	500	50	500	50	—		

■ Built to order.

① Also rated 600V DC.

② When neutral is required, use neutral kit displayed on p.1-19

③ Use 3-Pole switch for 200A application.

④ Hub catalogue numbers available p.1-21

⑤ Also rated for Type 3S/3R application. Factory provided drain plug must be removed from the bottom of the enclosure for type 3S/3R application.

⑥ 600V DC horsepower rating shown requires (2) poles to be connected in series.

⑦ 304 grade stainless steel.

⑧ Hub type SSH are suitable for type 4/4X and type 12 applications.

*Consult Siemens representative.

Heavy Duty Safety Switches

Type 4/4X & 12 with Viewing Window

Selection

Description

30–600A, 3-pole 600V max. in fusible and non-fusible versions in Type 4/4X stainless steel and Type 12 enclosures.

All allow viewing of visible blade position. 30–200A also allow viewing of indicating type fuses.

Features

- Rugged installer-friendly enclosure design features a gasket flange with continuously welded seams
- Tool-free cover latches
- Two, three and four point mounting

- Metal handle with large insulating grip features a positive stop in both ON and OFF position
- Ground lugs provided as standard
- Type 12 enclosures are fabricated from galvanized steel and are also rated for 3R/3S outdoor applications
- Type 4X stainless steel switches (30–200A) are 304 grade stainless steel and are provided with stainless steel interior parts
- The widest range of accessories available including 200% neutrals, gold plated PLC auxiliary contacts and isolated ground kits



System	Ampere Rating	Catalogue Number	Hub Type	Ship. Wt. (lbs.)	Maximum Horsepower Ratings ^②						
					240V AC		480V AC	600V AC		250V DC	600V DC
					1-Phase, 2-Wire	3-Phase, 3-Wire	3-Phase, 3-Wire	3-Phase, 3-Wire			
3-Pole, 3-Wire Fusible, Type 12^{③④} (For 2-Pole Applications use outside poles of 3-Pole Switches)					600 Volt AC / 250 Volt DC^①						
	30	HFC361JW	SSH	17	3	7 ^{1/2}	15	20	5	—	
	60	HFC362JW		22	10	15	30	50	10	30 ^⑤	
	100	HFC363JW		26	15	30	60	75	20	30 ^⑤	
	200	HFC364JW		53	—	60	125	150	40	50	
	400	HFC365JW	*	166	—	125	250	350	50	—	
	600	HFC366JW		168	—	200	400	500	50	—	
3-Pole, 3-Wire Non-Fusible, Type 12^③					600 Volt AC / 250 Volt DC^①						
	30	HNFC361JW	SSH	14	3	10	20	30	5	—	
	60	HNFC362JW		21	10	20	50	60	10	30 ^⑤	
	100	HNFC363JW		25	15	40	75	100	20	50 ^⑤	
	200	HNFC364JW		51	15	60	125	150	40	50	
	400	HNFC365JW	*	133	15	125	250	350	50	—	
3-Pole, 3-Wire Fusible, Type 4X Stainless^{④⑥} (For 2-Pole Applications use outside poles of 3-Pole Switches)					600 Volt AC / 250 Volt DC^①						
	30	HFC361SW	SSH	17	3	7 ^{1/2}	15	20	5	—	
	60	HFC362SW		23	10	15	30	50	10	30 ^⑤	
	100	HFC363SW		28	15	30	60	75	20	50 ^⑤	
	200	HFC364SW		55	—	60	125	150	40	50	
	400	HFC365SW	*	168	15	125	250	350	50	—	
3-Pole, 3-Wire Non-Fusible, Type 4X Stainless^④					600 Volt AC / 250 Volt DC^①						
	30	HNFC361SW	SSH	15	3	10	20	30	5	—	
	60	HNFC362SW		23	10	20	50	60	10	30 ^⑤	
	100	HNFC363SW		27	15	40	75	100	20	50 ^⑤	
	200	HNFC364SW		54	15	60	125	150	40	50	
	400	HNFC365SW	*	134	15	125	250	350	50	—	

① 200A switches are also rated 600V DC.

② Maximum HP ratings listed apply only when time delay fuses are used.

③ Also rated for Type 3S/3R application. Factory provided drain plug must be removed from the bottom of the enclosure for type 3S/3R application.

④ Suitable for use as service equipment when neutral is bonded to the enclosure.

⑤ 600V DC horsepower rating shown requires (2) poles to be connected in series.

⑥ 304 grade stainless steel.

* Consult Siemens representative.

Heavy Duty Safety Switches

Type VBII 4 & 6-Pole Heavy Duty Safety Switches

Selection

Application

4 & 6-pole Switches are commonly used as a disconnecting means for two-speed, two-winding motors. Fused switches provide both over current and short circuit protection. Non-fusible switches normally provide a local disconnection means for two-speed motors which are remote from their motor controller. 4-pole switches are also used in 3-phase, 4-wire circuits when a switching neutral is required.

Description

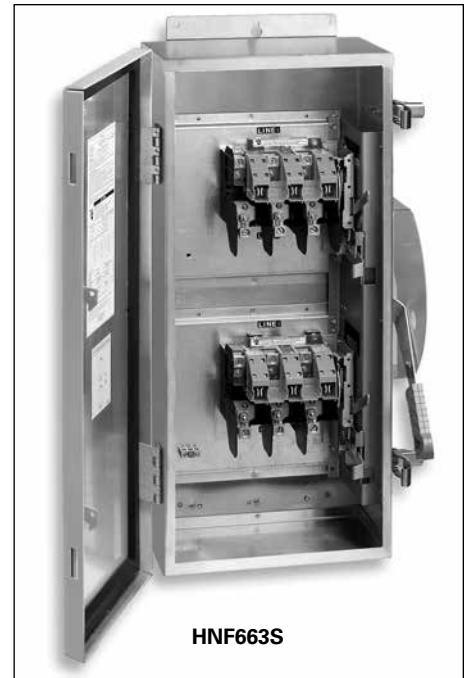
4 & 6-pole switches are available in 30-200A ratings and in both fusible and non-fusible versions. 4-pole switches are supplied with either Type 1 or Type 12/3R enclosures. 6-pole switches are available with either Type 12/3R or Type 4X stainless steel enclosures.

Standards

- cUL & UL listed under file #E4776
- Meets UL98 for enclosed switches
- Meets NEMA Standard KS-1 for enclosed switches
- Meets CEC wire bending space requirements

Features

- Visible blade, double break switching action
- Highly visible ON/OFF indication
- Defeatable dual cover interlock
- Padlock option in OFF position
- All copper current carrying parts^①
- Tangential knockouts (Type 1, 4-pole switches)



HNF663S

1 SAFETY SWITCHES

4-Pole Type VBII Switches^①

System	Ampere Rating	Indoor Type 1		Type 12/3R Industrial ^④			Horsepower Ratings ^⑤								
		Catalogue Number	Ship. Wt. (lbs.)	Catalogue Number	Ship. Wt. (lbs.)	Hub Type ^⑥	240V, 2Ø, 4W		240V 3Ø		480V, 3Ø		600V, 3Ø		250V DC
							Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	

Fusible 600 Volt AC, 250 Volt DC — 4-Pole, 4 Fuse^③

Rating	30	60	100	200	HF461	HF462	HF463	HF464	HF461J	HF462J	HF463J	HF464J	SSH	3	7½	15	25	3	7½	15	25	30	30	60	125	60	150	5	10	20	30	40
30	36	40	43	88	HF461	HF462	HF463	HF464	HF461J	HF462J	HF463J	HF464J	SSH	3	7½	15	25	3	7½	15	25	30	30	60	125	60	150	5	10	20	30	40

Non-fusible 600 Volt AC, 250 Volt DC — 4-Pole

Rating	30	60	100	200	HNF461	HNF462	HNF463	HNF464	HNF461J	HNF462J	HNF463J	HNF464J	SSH	—	10	20	50	—	10	20	40	75	125	—	20	50	100	150	5	10	20	4
30	32	34	36	78	HNF461	HNF462	HNF463	HNF464	HNF461J	HNF462J	HNF463J	HNF464J	SSH	—	10	20	50	—	10	20	40	75	125	—	20	50	100	150	5	10	20	4

6-Pole Type VBII Switches^{①④}

System	Ampere Rating	Type 12 Industrial		Type 4X Stainless Steel			Horsepower Ratings ^⑤								
		Catalogue Number	Ship. Wt. (lbs.)	Catalogue Number	Ship. Wt. (lbs.)	Hub Type ^⑥	240V 3Ø		480V, 3Ø		600V, 3Ø		250V DC		
							Std.	Max.	Std.	Max.	Std.	Max.			

Fusible 600 Volt AC, 250 Volt DC — 6-Pole, 6 Fuse^③

Rating	30	60	100	200	HF661J	HF662J	HF663J	HF664J	HF661S	HF662S	HF663S	HF664S	SSH	3	7½	15	25	5	15	25	50	125	7½	15	30	60	150	5	10	20	40
30	37	41	44	90	HF661J	HF662J	HF663J	HF664J	HF661S	HF662S	HF663S	HF664S	SSH	3	7½	15	25	5	15	25	50	125	7½	15	30	60	150	5	10	20	40

Non-fusible 600 Volt AC, 250 Volt DC — 6-Pole

Rating	30	60	100	200	HNF661J	HNF662J	HNF663J	HNF664J	HNF661S	HNF662S	HNF663S	HNF664S	SSH	—	10	20	40	60	—	20	50	75	125	—	30	60	100	150	5	10	20	40
30	33	35	37	80	HNF661J	HNF662J	HNF663J	HNF664J	HNF661S	HNF662S	HNF663S	HNF664S	SSH	—	10	20	40	60	—	20	50	75	125	—	30	60	100	150	5	10	20	40

■ Built to order.

① Lugs are aluminum alloy as standard. Optional copper body lugs are available.

② Dual horsepower ratings: Std. – applies when non-time-delay fuses are installed. Max. – applies when time delay fuses are installed.

③ Fusible switches accept Class H Fuses as the standard. Class R & J fuses can also be installed and increase the rating from 10,000 to 200,000 AIC. For Class J, the load base is moved upward. For Class R fuses, rejection kits are required.

④ Supplied with factory installed ground lugs.

⑤ Hub catalogue number available p. 1-21

⑥ Hub type SSH are suitable for type 4/4X and type 12 applications.

Heavy Duty Safety Switches

Special Application Switches / Interlocked Receptacle Switches

Selection

1 SAFETY SWITCHES

Application

Receptacle Safety Switches provide cord connection protection of heavy-duty portable equipment (welders, infrared ovens, batch feeders, portable conveyors, assembly line fixtures and tools, refrigerator trucks, etc.) under load or fault conditions.

Standards

All receptacle switches with a viewing window are CSA certified under file #24563 and UL listed under file #E4776.

Description^{①②}

Type 12 and 4/4X Receptacle Safety Switches are available with 3-phase, 4-wire grounded type Crouse-Hinds Arkite™, pre-wired and mounted with interlock linkage to the switch mechanism. Insertion or removal of the plug is prevented by the interlock linkage while the switch is in the "ON" position. Receptacle prevents operation of switch if incorrect plug is inserted.



Crouse-Hinds Interlocked Receptacle Switches

Ampere Rating ^③	Type 12 ^②	Type 4/4X ^②	Hub Type ^④	Shipping Wt. (lbs.) Std. Pkg.	Accepts Crouse-Hinds Arkite ^① Plug Catalogue Number
	Catalogue Number	Catalogue Number			

600V Fusible, 3-Pole, 3-Wire with Viewing Window

30	HF361JCHW	HF361SCHW	SSH	24	APJ3485 & NPJ3485
60	HF362JCHW	HF362SCHW		30	APJ6485 & NPJ6485
100	HF363JCHW	HF363SCHW		36	APJ10487 & NPJ10487

600V Non-Fusible, 3-Pole, 3-Wire with Viewing Window

30	HNF361JCHW	HNF361SCHW	SSH	22	APJ3485 & NPJ3485
60	HNF362JCHW	HNF362SCHW		29	APJ6485 & NPJ6485
100	HNF363JCHW	HNF363SCHW		35	APJ10487 & NPJ10487

Receptacle switches dimensions

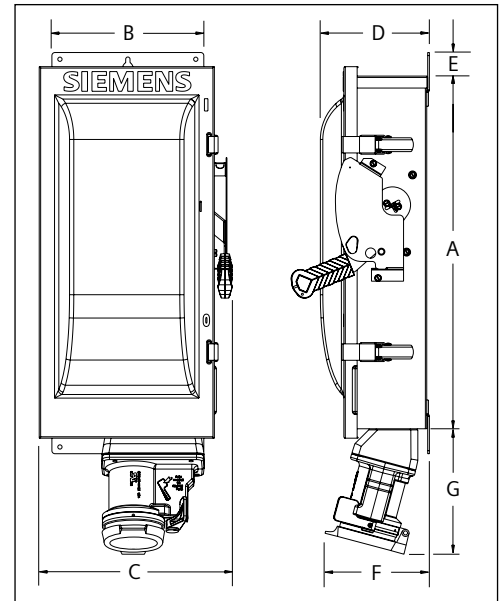
Ampere Rating	Dimensions - Inches (mm)						
	A	B	C	D	E	F	G

Cr-H Type Fusible (240 & 600V)

30	14.27 (363)	7.42 (188)	9.02 (229)	6.22 (158)	1.52 (39)	6.1 (155)	6.0 (152)
60	16.27 (413)	9.17 (233)	11.47 (291)	6.34 (161)	1.52 (39)	6.4 (163)	7.4 (188)
100	21.96 (558)	9.65 (245)	12.02 (305)	6.80 (172)	1.52 (39)	6.5 (165)	7.6 (193)

Cr-H Type Non-Fused (600V max.)

30	14.27 (363)	7.42 (188)	9.02 (229)	6.22 (158)	1.52 (39)	6.1 (155)	6.0 (152)
60	16.27 (413)	9.17 (233)	11.47 (291)	6.34 (161)	1.52 (39)	6.4 (163)	7.4 (188)
100	21.96 (558)	9.65 (245)	12.02 (305)	6.80 (172)	1.52 (39)	6.5 (165)	7.6 (193)



① Arkite™ is a registered trademark of the Crouse-Hinds Company. Plugs are not sold or supplied by Siemens.

② Also rated Type 3R/3S.

③ Enclosure is constructed of Type 304 stainless steel.

④ Hub catalogue available p.1-21

General and Heavy Duty Safety Switches

Accessories

Selection



HR612

Class R Fuse Clip Kits

All General Duty and Heavy Duty Switches are field convertible to accept Class R Fuse Clip Kits. The kits prevent the installation of Class H and K fuses (one kit required per 3-pole switch).

Class R Fuse Clip Kits

Catalogue Number	Description
GSRK321	30A, 240V Kit (GD only)
HR21	30A, 240V Kit (HD only)
HR612	30A, 600V Kit/60A, 240V Kit
HR62	60A, 600V Kit
HR63	100A Kit
HR64	200A Kit
HR656	400A/600A Kit

Class J Fusing

All 30-600A, 600V and 100-600A, 240V fusible Heavy Duty Switches are field convertible to accept Class J fuses by moving the load base to a pre-drilled J fuse position. All 100-600A, 240V fusible General Duty switches can also be field converted to accept Class J fuses.

Internal Shield Kits (for fusible switches)

Kits provide a clear plastic inner door to prevent accidental contact with live parts. Test probe holes are provided and fuses can be replaced without removal of kit.

NEW Internal Shield Kits

Switch Ampere Rating	Kit Catalogue Number
30A HD	HSK61SSW
60A HD	HSK62SSW
100A HD	HSK63SSW
200A HD	HSK64SSW

© One kit per pole required.



HT63

Class T Fuse Adapter Kits

All 100-600A, General Duty and 100-1200A Heavy Duty Switches are field convertible to accept Class T fuses. 400-600A switches are field convertible to accept Class T fuses by moving the load base to a pre-drilled T fuse position.

Class T Fuse Adapter Kits[©]

Catalogue Number	Description
HT23	100A, 240V Kit
HT63	100A, 600V Kit
HT24	200A, 240V Kit
HT64	200A, 600V Kit
TFAK72	800A, 240V Kit
TFAK75	800A, 600V Kit
TFAK82	1200A, 240V Kit

Neutral Kits

Standard Neutral Kits can be field installed in General and Heavy Duty Switches.

Neutral Kits

Switch Ampere Rating	Catalogue Number
30 GD	W410190
30 HD, 60 GD	HNC612
60, 100 HD, 100 GD	HNC623
200	HNC64
400 & 600	HNC656
800 & 1200	HNC678



HP61



HNC612

HNC264

200% Neutral Kits

CSA certified 200% Neutrals are available on 100-600A Heavy Duty Switches. They are typically used with non-linear transformers or where increased neutral ampacity/lug capacity is required.

200% Neutral Kits

Switch Ampere Rating	Catalogue Number	Wire Range Line & Load Lugs (Cu/Al)
100	HNC263	(2) #14 AWG - 1/0 AWG
200	HNC264	(2) #6 AWG - 300 Kcmil
400	HNC656	(2) 1/0 AWG - 750 Kcmil or (4) 1/0 AWG - 250 Kcmil
600	HNC678	(4) 1/0 AWG - 750 Kcmil

Fuse Puller Kits

Fuse Puller Kits are field installable in 30-100A Type VBII Heavy Duty Switches (one kit required per 3-pole switch).

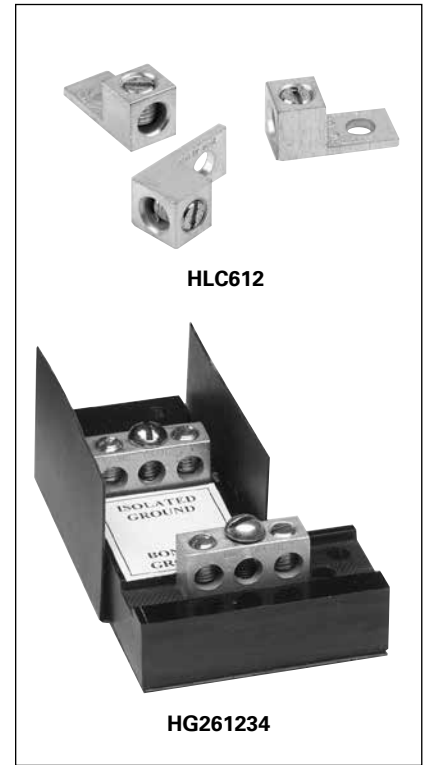
Fuse Puller Kits

Switch Ampere Rating	Fuse Puller Kit Catalogue Number
30	HP61
60	HP62
100	HP63

General and Heavy Duty Safety Switches

Accessories

Selection



Auxiliary Contacts

Auxiliary Contacts are available only for Heavy Duty Switches. The auxiliary contacts are available in 1 normally open and 1 normally closed or 2 normally open and 2 normally closed configurations. Siemens offers a PLC Auxiliary Switch (30-200A) that has very low resistance for low voltage and current typical in PLC circuits. All auxiliary contacts make after and break before main switch contacts.

Auxiliary Contacts

Switch Ampere	Aux. Switch Catalogue Number	Kit Ampere Rating			Horsepower Rating	
		125V AC Max.	250V AC Max.	28V DC Max.	125V AC Max.	250V AC Max.

With 1 NO & 1 NC Isolated Contacts

30-200	HA161234	10	10	—	1/2	3/4
400-1200	HA165678	10	10	—	1/2	3/4

With 2 NO & 2 NC Isolated Contacts

30-200	HA261234	10	10	7	1/2	3/4
400-1200	HA265678	10	10	7	1/2	3/4

Low Current PLC Type with 1 NO & 1 NC Gold Plated Contacts

30-200	HA361234	10	10	—	1/2	3/4
400-1200	HA365678	10	10	—	1/2	3/4

Isolated Ground Kits

Isolated Ground Kits are available on 30-600A Heavy Duty Switches. They are normally used on circuits with a high content of computer or other electronic loading which require a ground which is isolated from the building ground and neutral circuits. The kit includes both isolated and grounded terminals as listed below.

Isolated Ground Kits

Switch Ampere Rating	Catalogue Number	Number of Terminals		Wire Range Per Terminal (Cu/Al)
		Isolated	Grounded	
30-200	HG261234	2	2	#14-4 AWG
400-600	HG2656	4	4	#14-2/0 AWG

Copper Lug Kits

Heavy duty switches are CSA approved to accept field installed copper lug kits.

Copper Lug Kits

Switch Ampere Rating	Copper Lug Catalogue Number	Description
30-60	HLC612	(9) Lugs/Kit #14-4 AWG Cu
100	HLC63▲	(9) Lugs/Kit #14-1/0 AWG Cu
200	HLC64▲	(9) Lugs/Kit #6 AWG-300 Kcmil Cu
400-1200	HLC65678	(1) Lugs/Kit #1/0 AWG-600 Kcmil Cu

Equipment Ground Kits

Equipment Ground Lug Kits are available for all General and Heavy Duty Switches. They are field installable in Type 1 and Type 3R Switches and are factory installed as standard in Type 4/4X, Type 12 and also in all VBII 4&6-pole Switches.

Equipment Ground Kits

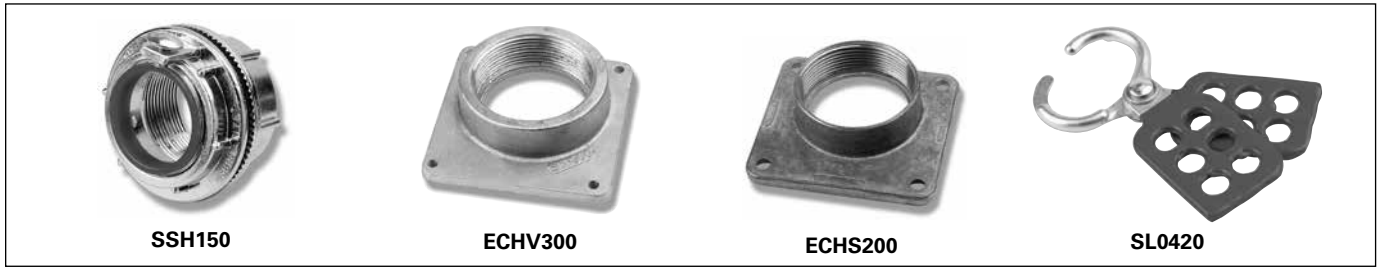
Switch Ampere Rating	Catalogue Number	Number of Terminals	Wire Range Per Terminal (Cu/Al)
30A GD	GSGK60	2	#14-8 AWG
60-200 GD	HG61234	2	#14-4 AWG
30-200 HD	HG61234	2	#14-4 AWG
400 & 600	HG656	4	#14-2/0 AWG
800-1200	HG678	8	#6 AWG-250 Kcmil

General and Heavy Duty

Hub and Lug Data

Selection

1
SAFETY
SWITCHES



SSH150

ECHV300

ECHS200

SL0420

Interchangeable Hubs

Conduit hubs are available for Type 3R, 12 and 4 / 4X applications. 30-200A Type 3R Switches are provided with a conduit hub provision and a removable hub plate on their top rainshed.

Hubs

Conduit Size (inches)	Catalogue Number	Used On
-----------------------	------------------	---------

Type 3R^①

Cover	Catalogue Number	Used On
3/4	ECHA000	30A GD Only
1	ECHA075	
1 1/4	ECHA100	
	ECHA125	
3/4	ECHS000	30-200A
1	ECHS075	
1 1/4	ECHS100	
1 1/2	ECHS125	
2	ECHS150	
2 1/2	ECHS200	
	ECHS250	
	ECHS250	
2 1/2	ECHV250	400-1200A
3	ECHV300	
3 1/2	ECHV350	
4	ECHV400	

Type 4/4X^②

Cover	Catalogue Number	Used On
3/4	SSH075	30-200A
1	SSH100	
1 1/4	SSH125	
1 1/2	SSH150	
2	SSH200	

Note: 30 thru 200A Type 3R Switches have removable hub plates on rainshed. 400A and larger Type 3R Switches have no provisions for mounting hubs. Drill or punch hole in the field to accommodate hub size desired.

Compression Lug Mounting & Neutral Barrier Kit

All Heavy Duty Switches are field convertible for crimp type lugs. When compression lugs are required for 30-100A switches, a neutral barrier kit is required for 1-Phase, 3W or 3-Phase, 4W applications. When compression lugs are required on 400-1200A switches, lug mounting kits are required.

Compression Lug Mounting^③ and Neutral Barrier Kits

Switch Ampere Rating	Catalogue Number	Kit Description
30	HCL612	Neutral Barrier Kit
60 & 100	HCL623	Neutral Barrier Kit
400 ^④	HCL65	1 Pole, Compression Lug Mounting Kit
400 & 600 ^⑤	HCL65678	1 Pole, Compression Lug Mounting Kit
800 & 1200 ^⑥	HCL65678	1 Pole, Compression Lug Mounting Kit

Lugs

30 & 60A Switches are suitable for use with 60° or 75°C wire. 100-1200A are suitable for use with 75°C rated wire.

Multiple Padlock Accessory

A tamper-proof device to provide for multiple padlocking to meet OSHA or plant requirements. Accepts up to 6 1/4" padlocks. Catalog number **SL0420**. Standard Carton-12.

Wire Ranges

(Line, Load and Standard Neutral)

Switch Ampere Rating	Lug Wire Range
30GD	#14-8 AWG (Cu/Al) ^⑦
30HD	#14-2 AWG (Cu/Al)
60 ^⑧	#14-2 AWG (Cu/Al)
100	#14-1/0 AWG (Cu/Al)
200 ^⑨	#6 AWG-300 Kcmil (Cu/Al)
400	(1) 1/0 AWG-750 Kcmil (Cu/Al) or (2) 1/0 AWG-250 Kcmil (Cu/Al)
600	(2) 1/0 AWG-750 Kcmil (Cu/Al) or (4) 1/0 AWG-250 Kcmil (Cu/Al)
800	(3) 1/0 AWG-750 Kcmil (Cu/Al) Line Load (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral
1200	(4) 1/0 AWG-750 Kcmil (Cu/Al) Line Load (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral

① Hubs suitable for 3R Switches.

② Also suitable for Type 12 applications.

③ Neutral Barrier kits are required on 30-100A switches only and only with 1-Phase / 3W or 3-Phase / 4W loads. Compression Lugs mounting kits are required on 400-1200A switches only.

④ Provides mounting for a single line or load lug.

⑤ Provides mounting for (2) compression lugs per phase on line or load.

⑥ Line lugs are CSA approved to accept #14-6 CU/Al cable.

⑦ All 200A Heavy Duty Switches have a wire range & wire bending space for (1) #6-300 Kcmil (Cu/Al).

⑧ All but 60A GD are also CSA approved for #2 Cu/Al conductors.

General and Heavy Duty

VBII Safety Switch Replacement Parts

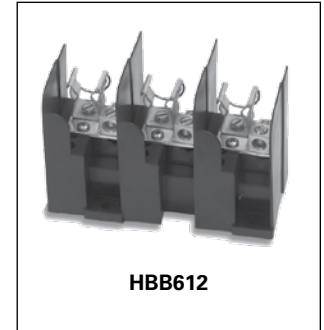
Selection

VBII Safety Switch Replacement Parts

Ampere Rating	Line Base Catalogue Number	Load Base Catalogue Number	Handle / Handle Guard	
			General Duty Catalogue Number	Heavy Duty Catalogue Number

Fusible 2- and 3-Pole 60-600A General Duty & 30-1200A Heavy Duty^{⑤⑧}

30 HD 240V	HFB21 ^②	HBB21 ^②	—	HH6123 ^⑦
60 GD	HFB612 ^②	HBB612 ^②	GH223	—
60 HD 240V	HFB22 ^②	HBB22 ^②	—	HH6123 ^⑦
30 600V	HFB612 ^②	HBB612 ^②	—	HH6123 ^⑦
60 600V	HFB62 ^②	HBB62 ^②	—	HH6123 ^⑦
100	HFB63 ^②	HBB63 ^②	GH223	HH6123 ^⑦
200	HFB64 ^②	HBB64 ^②	GH24	HH64 ^⑦
400	HFB65 ^{③④}	HBB656 ^{③④}	HH65678	HH65678 ^⑦
600	HFB66 ^{③④}	HBB656 ^{③④}	HH65678	HH65678 ^⑦
800	HFB67A ^{②④}	HBB67A ^{②④}	—	HH65678 ^⑦
1200	HFB68 ^{②④}	HBB68 ^{②④}	—	HH68 ^⑦



Non-Fusible 3-Pole 60-600A General Duty & 30-1200A Heavy Duty^{⑤⑧}

30 HD	HNB612 ^②	—	—	HH6123 ^⑦
60 GD	HNB612 ^②	—	GH223	—
60 HD	HNB623 ^②	—	—	HH6123 ^⑦
100	HNB623 ^②	—	GH223	HH6123 ^⑦
200	HNB64 ^②	—	GH24	HH64 ^⑦
400	HNB65 ^{③④}	—	HH65678	HH65678 ^⑦
600	HNB66 ^{③④}	—	HH65678	HH65678 ^⑦
800	HNB67A ^{②④}	—	—	HH65678 ^⑦
1200	HNB678 ^②	—	—	HH68 ^⑦



Ampere Rating	Mechanism Assembly	Line & Load Lugs
	Catalogue Number	Catalogue Number

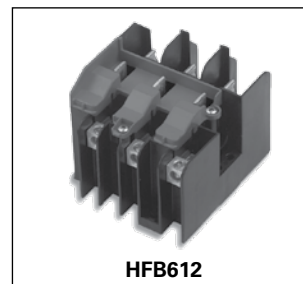
Fusible 2- and 3-Pole 60-600A General Duty & 30-1200A Heavy Duty^{⑤⑧}

30 HD 240V	HM6123 ^⑦	HL612 ^①
60 GD	HM6123	HL612 ^①
60 HD 240V	HM6123 ^⑦	HL612 ^①
30 600V	HM6123 ^⑦	HL612 ^①
60 600V	HM6123 ^⑦	HL612 ^①
100	HM6123 ^⑦	HL63 ^①
200	HM64 ^⑦	HL64 ^①
400	HM65	HL65678 ^④
600	HM66	HL65678 ^④
800	HM67A	HL67A ^{⑥⑦}
1200	HM678	⑥



Non-Fusible 3-Pole 60-600A General Duty & 30-1200A Heavy Duty^{⑤⑧}

30 HD	HM6123 ^⑦	HL612 ^①
60 GD	HM6123	HL612 ^①
60 HD	HM6123 ^⑦	HL612 ^①
100	HM6123 ^⑦	HL63 ^①
200	HM64 ^⑦	HL64 ^①
400	HM65	HL65678 ^④
600	HM66	HL65678 ^④
800	HM67A	HL67A ^{⑥⑦}
1200	HM678	⑥



① Three lugs included in kit.

② Includes lugs.

③ Lugs not included.

④ One lug per kit.

⑤ One per switch required unless otherwise noted.

⑥ One required per pole.

⑦ For type 4/4X stainless steel switches add "S" to end of catalogue number.

⑧ For replacement door for heavy duty switches add "DOOR" to end of switch catalogue number.

⑨ Lugs included with line and load bases.

General and Heavy Duty Safety Switches

Dimensions

Safety Switch Dimensions & Shipping Weights

Catalogue Number	Height - Inches (mm)			Width - Inches (mm)		Depth - Inches (mm)		Knockout Diagram ^①	Shipping Weight (lbs.)
	Box A	With Door B	With Rain Shed C	Box D	With Handle E	Box F	With Handle G		
GFC221N	7.79 (202)	8.13 (207)	—	5.50 (140)	5.94 (151)	3.00 (76)	5.88 (149)	S1	35 ^②
GFC222N	14.26 (362)	15.45 (392)	—	6.64 (169)	8.70 (221)	5.05 (128)	8.63 (219)	S6	14
GFC223N	21.95 (558)	23.15 (588)	—	9.84 (245)	11.70 (297)	5.05 (128)	8.63 (219)	S10	23
GFC224N	29.90 (760)	31.07 (789)	—	14.62 (391)	16.68 (424)	6.36 (162)	10.92 (277)	S12	47
GFC321N	7.97 (202)	8.19 (208)	—	7.19 (183)	7.69 (195)	3.00 (76)	5.88 (149)	S2	24 ^②
GFC322N	14.26 (362)	15.45 (392)	—	6.64 (169)	8.70 (221)	5.05 (128)	8.63 (219)	S6	15
GFC323N	21.95 (558)	23.15 (588)	—	9.64 (245)	11.70 (297)	5.05 (128)	8.63 (219)	S10	25
GFC324N	29.90 (760)	31.07 (789)	—	14.62 (371)	16.68 (424)	6.36 (162)	10.92 (277)	S12	49
HFC221NJ	14.27 (363)	17.33 (440)	—	6.64 (169)	9.02 (229)	5.32 (135)	10.46 (266)	—	13
HFC221N	14.26 (362)	15.45 (392)	—	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S6	12
HFC221NR	14.39 (366)	—	15.77 (401)	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S8	13
HFC221NS	14.27 (263)	17.33 (440)	—	6.64 (169)	9.01(229)	5.32 (135)	10.46 (266)	—	13
HFC222NJ	16.22 (412)	19.31 (491)	—	9.17(233)	11.47 (291)	5.33 (135)	10.46 (266)	—	19
HFC222N	16.26 (413)	17.46 (444)	—	9.15 (232)	11.53 (293)	5.05 (128)	10.17 (258)	S16	18
HFC222NR	16.26 (413)	—	17.77 (451)	9.16 (233)	11.53 (293)	5.05 (128)	10.17 (258)	S17	19
HFC222NS	16.22 (413)	19.31 (491)	—	9.17 (233)	11.47 (291)	5.33 (135)	10.46 (266)	—	19
HFC223NJ	21.96 (558)	23.16 (588)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	24
HFC223N	21.95 (558)	23.15 (588)	—	9.64 (245)	12.01 (305)	5.05 (128)	10.17 (258)	S10	23
HFC223NR	21.95 (558)	—	23.46 (596)	9.64 (245)	11.97 (304)	5.05 (128)	10.17 (258)	S11	24

① Knocks not provided on Type 4 / 4X and 12 or on 800 & 1200A switches.

General and Heavy Duty Safety Switches

Dimensions

Safety Switch Dimensions & Shipping Weights

SAFETY SWITCHES 1

Catalogue Number	Height - Inches (mm)			Width - Inches (mm)		Depth - Inches (mm)		Knockout Diagram ^①	Shipping Weight (lbs.)
	Box A	With Door B	With Rain Shed C	Box D	With Handle E	Box F	With Handle G		
HFC223NS	21.96 (558)	23.16 (508)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	24
HFC224NJ	29.96 (761)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (269)	—	48
HFC224N	29.90 (760)	31.07 (789)	—	14.62 (371)	16.98 (431)	6.36 (162)	12.33 (313)	S12	47
HFC224NR	29.90 (760)	—	31.42 (798)	14.61 (371)	16.99 (432)	6.36 (162)	12.33 (313)	S13	48
HFC224NS	29.96 (761)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (269)	—	48
HFC225N	56.00 (1422)	56.57 (1183)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	153
HFC225NR	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	162
HFC226N	56.00 (1422)	56.57 (1183)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	155
HFC226NR	56.07 (1429)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	159
HFC227N	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	360
HFC227NR	66.67 (1693)	—	67.74 (1721)	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	362
HFC228N	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	352
HFC228NR	66.67 (1693)	—	67.74 (1721)	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	364
HFC265	56.00 (1422)	56.57 (1183)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	149
HFC265J	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	155
HFC265R	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	152
HFC265S	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	153
HFC266	56.00 (1422)	56.57 (1183)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	155
HFC266J	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.68 (373)	—	156
HFC266R	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	155
HFC266S	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.68 (373)	—	161
HFC321NJ	14.27 (363)	17.33 (440)	—	6.65 (169)	9.02 (229)	5.32 (135)	10.46 (266)	—	14
HFC321N	14.26 (362)	15.45 (392)	—	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S6	14
HFC321NR	14.39 (366)	—	15.77 (401)	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S8	15
HFC321NS	14.27 (363)	17.33 (440)	—	6.65 (169)	9.02 (229)	5.32 (135)	10.46 (266)	—	14
HFC322NJ	16.27 (413)	19.31 (490)	—	9.17 (233)	11.47 (291)	5.33 (135)	10.46 (266)	—	20
HFC322N	16.26 (413)	17.46 (443)	—	9.15 (232)	11.53 (293)	5.05 (128)	10.17 (258)	S16	19
HFC322NR	16.26 (413)	—	17.77 (451)	9.16 (233)	11.53 (293)	5.05 (128)	10.17 (258)	S17	20
HFC322NS	16.27 (413)	19.31 (440)	—	9.17 (233)	11.47 (291)	5.33 (135)	10.46 (266)	—	20
HFC323NJ	21.96 (558)	23.16 (588)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	25
HFC323N	21.96 (558)	23.15 (588)	—	6.64 (169)	12.01 (305)	5.05 (128)	10.17 (258)	S10	25
HFC323NR	21.95 (558)	—	23.46 (596)	6.64 (169)	11.97 (304)	5.05 (128)	10.17 (258)	S11	26
HFC323NS	21.96 (558)	23.16 (588)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	25
HFC324NJ	29.96 (761)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (269)	—	49
HFC324N	29.90 (760)	31.07 (789)	—	14.62 (371)	16.98 (431)	6.36 (162)	12.33 (313)	S12	49
HFC324NR	29.90 (760)	—	31.42 (798)	14.61 (371)	16.99 (432)	6.36 (162)	12.33 (313)	S13	50
HFC324NS	21.96 (558)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (269)	—	49
HFC325NJ	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	S14	160
HFC325N	56.00 (1422)	56.57 (1183)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	158
HFC325NR	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	162
HFC325NS	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	158
HFC326NJ	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	161
HFC326N	56.00 (1422)	56.57 (1183)	—	24.64 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	161
HFC326NR	56.07 (1424)	—	57.19 (1453)	24.64 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	165
HFC326NS	56.14 (1426)	56.67 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	161
HFC327NJ	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	367
HFC327N	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	380
HFC327NR	66.67 (1693)	—	64.74 (1721)	38.40 (975)	40.25 (1022)	9.24 (235)	14.68 (373)	—	383
HFC327NS	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	367
HFC328N	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	382
HFC328NR	66.67 (1693)	—	67.74 (1721)	38.40 (975)	40.25 (1022)	9.24 (235)	14.68 (373)	—	385
HFC361	14.26 (302)	15.45 (1545)	—	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S6	14
HFC361J, JW, NJW	14.27 (413)	17.33 (440)	—	6.65 (245)	9.02 (229)	5.32 (135)	10.46 (266)	—	14
HFC361N	14.26 (362)	15.45 (1545)	—	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S6	14
HFC361NR	14.39 (366)	—	15.77 (401)	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S8	15
HFC361R	14.39 (366)	—	15.77 (401)	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S8	15
HFC361S, SW, NSW	14.27 (413)	17.33 (440)	—	6.65 (245)	9.02 (229)	5.32 (135)	10.46 (266)	—	15
HFC362	16.26 (413)	17.46 (443)	—	9.15 (232)	11.53 (313)	5.05 (128)	10.17 (258)	S16	19

① Knocks not provided on Type 4/4X and 12 or on 800 & 1200A switches.

General and Heavy Duty Safety Switches

Dimensions

Safety Switch Dimensions & Shipping Weights

Catalogue Number	Height - Inches (mm)			Width - Inches (mm)		Depth - Inches (mm)		Knockout Diagram [®]	Shipping Weight (lbs.)
	Box A	With Door B	With Rain Shed C	Box D	With Handle E	Box F	With Handle G		
HFC362J, JW, NJW	16.27 (413)	19.31 (490)	—	9.17 (233)	11.47 (291)	5.33 (135)	10.46 (266)	—	20
HFC362N	16.26 (413)	17.46 (444)	—	9.15 (232)	11.53 (293)	5.05 (128)	10.17 (258)	S16	19
HFC362NR	16.26 (413)	—	17.77 (457)	9.16 (233)	11.53 (293)	5.05 (128)	10.17 (258)	S17	20
HFC362R	16.26 (413)	—	17.77 (457)	9.16 (233)	11.53 (293)	5.05 (128)	10.17 (258)	S17	20
HFC362S, SW, NSW	16.27 (413)	19.31 (490)	—	9.17 (233)	11.47 (291)	5.33 (135)	10.46 (266)	—	20
HFC363	21.95 (558)	23.15 (588)	—	9.64 (245)	12.01 (305)	5.05 (128)	10.17 (258)	S10	24
HFC363J, JW, NJW	21.96 (558)	23.16 (588)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	25
HFC363N	21.95 (558)	23.15 (588)	—	9.64 (245)	12.01 (305)	5.05 (128)	10.17 (258)	S10	25
HFC363NR	21.95 (558)	—	23.46 (596)	9.64 (245)	11.97 (304)	5.05 (128)	10.17 (258)	S11	26
HFC363R	21.95 (558)	—	23.46 (596)	9.64 (245)	11.97 (304)	5.05 (128)	10.17 (258)	S11	25
HFC363S, SW, NSW	21.96 (558)	23.16 (588)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	35
HFC364	29.90 (760)	31.07 (789)	—	14.62 (371)	16.98 (431)	6.36 (162)	12.33 (313)	S12	48
HFC364J, JW, NJW	29.96 (761)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (320)	—	49
HFC364N	29.90 (760)	31.07 (789)	—	14.62 (371)	16.98 (431)	6.36 (162)	12.33 (313)	S12	49
HFC364NR	29.90 (760)	—	31.42 (798)	14.61 (371)	16.99 (431)	6.36 (162)	12.33 (313)	S13	48
HFC364R	29.90 (760)	—	31.42 (798)	14.61 (371)	16.99 (431)	6.36 (162)	12.33 (320)	S13	49
HFC364S, SW, NSW	29.96 (761)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (320)	—	49
HFC365	56.00 (1422)	56.57 (1437)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	154
HFC365J, JW, NJW	56.14 (1426)	56.57 (1437)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	160
HFC365N	56.00 (1422)	56.57 (1437)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	158
HFC365NR	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	162
HFC365R	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	157
HFC365S, SW, NSW	56.14 (1426)	56.57 (1437)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	158
HFC366	56.00 (1422)	56.57 (1437)	—	24.64 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	157
HFC366J, JW, NJW	56.14 (1426)	56.57 (1437)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	161
HFC366N	56.00 (1422)	56.57 (1437)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	161
HFC366NR	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	165
HFC366R	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	161
HFC366NS	56.14 (1426)	56.57 (1437)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	161
HFC367	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (234)	14.68 (373)	—	380
HFC367NJ	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (234)	14.68 (373)	—	380
HFC367N	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (234)	14.68 (373)	—	382
HFC367NR	66.67 (1693)	—	67.74 (1712)	38.40 (975)	40.25 (1022)	9.24 (234)	14.68 (373)	—	386
HFC367R	66.67 (1693)	—	67.74 (1712)	38.40 (975)	40.25 (1022)	9.24 (234)	14.68 (373)	—	382
HFC367NS	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (234)	14.68 (373)	—	380
HFC368, NS, NS	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (234)	14.68 (373)	—	383
HFC368N	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (234)	14.68 (373)	—	385
HFC368NR	66.67 (1693)	—	67.74 (1712)	38.40 (975)	40.25 (1022)	9.24 (234)	14.68 (373)	—	388
HFC368R	66.67 (1693)	—	67.74 (1712)	38.40 (975)	40.25 (1022)	9.24 (234)	14.68 (373)	—	385
HNFC265	44.00 (1118)	44.57 (1132)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	109
HNFC265J	44.14 (1121)	44.57 (1132)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	119
HNFC265R	44.07 (1119)	—	45.19 (1148)	24.64 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	118
HNFC265S	44.14 (1121)	44.57 (1132)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	118
HNFC266	44.00 (1118)	44.57 (1132)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	111
HNFC266J	44.14 (1121)	44.57 (1132)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	115
HNFC266R	44.07 (1119)	—	45.19 (1148)	24.64 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	120
HNFC266S	44.14 (1121)	44.57 (1132)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	115
HNFC361	11.11 (282)	12.31 (313)	—	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S7	12
HNFC361J, JW	11.12 (282)	14.14 (359)	—	6.65 (169)	9.02 (229)	5.56 (141)	10.46 (266)	—	13
HNFC361R	11.11 (282)	—	12.63 (321)	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S9	13
HNFC361S, SW	11.12 (282)	14.14 (339)	—	6.65 (169)	9.02 (229)	5.56 (141)	10.46 (266)	—	13
HNFC362	16.26 (413)	17.46 (444)	—	9.15 (232)	11.53 (293)	5.05 (128)	10.17 (258)	S16	18
HNFC362J, JW	16.27 (413)	17.46 (444)	—	9.17 (232)	11.47 (291)	5.33 (135)	10.46 (266)	—	19
HNFC362R	16.26 (413)	—	17.77 (451)	9.16 (233)	11.53 (293)	5.05 (128)	10.17 (258)	S17	19
HNFC362S, SW	16.27 (413)	17.46 (444)	—	9.17 (233)	11.47 (291)	5.33 (135)	10.46 (266)	—	19
HNFC363	21.95 (558)	23.15 (588)	—	9.64 (245)	12.01 (305)	5.05 (128)	10.17 (258)	S10	23
HNFC363J, JW	21.95 (558)	23.16 (588)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	24
HNFC363R	21.95 (558)	—	23.46 (596)	9.64 (245)	11.97 (304)	5.05 (128)	10.17 (258)	S11	24
HNFC363S, SW	21.96 (558)	23.16 (588)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	24
HNFC364	29.90 (760)	31.07 (789)	—	14.62 (371)	16.98 (431)	6.36 (162)	12.33 (313)	S12	46
HNFC364J, JW	29.96 (761)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (320)	—	47
HNFC364R	29.90 (760)	—	31.42 (798)	14.61 (371)	16.99 (431)	6.36 (162)	12.33 (313)	S13	47
HNFC364S, SW	29.96 (761)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (320)	—	47

© Knocks not provided on Type 4 / 4X and 12 or on 800 & 1200A switches.

General and Heavy Duty Safety Switches

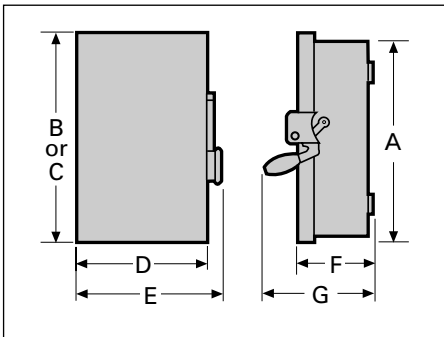
Dimensions

Safety Switch Dimensions & Shipping Weights

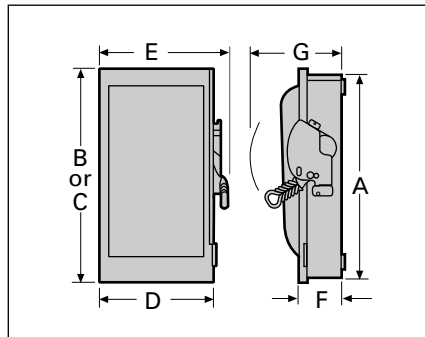
SAFETY SWITCHES 1

Catalogue Number	Height - Inches (mm)			Width - Inches (mm)		Depth - Inches (mm)		Knockout Diagram ^①	Shipping Weight (lbs.)
	Box A	With Door B	With Rain Shed C	Box D	With Handle E	Box F	With Handle G		
HNFC365	44.00 (1118)	44.57 (1132)	—	24.65 (626)	26.21 (626)	9.23 (234)	14.68 (373)	S14	114
HNFC365J, JW	44.14 (1121)	44.57 (1132)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	114
HNFC365R	44.07 (1119)	—	45.19 (1148)	24.65 (626)	26.95 (685)	9.23 (234)	14.68 (373)	S15	118
HNFC365S, SW	44.14 (1121)	44.57 (1132)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	118
HNFC366	44.00 (1118)	44.57 (1132)	—	24.65 (626)	26.21 (626)	9.23 (234)	14.68 (373)	S14	116
HNFC366J, S	44.14 (1121)	44.57 (1132)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	115
HNFC366R	44.07 (1119)	—	45.19 (1148)	24.65 (626)	26.95 (685)	9.23 (234)	14.68 (373)	S15	120
HNFC367, J	54.67 (1389)	55.16 (1401)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	302
HNFC367R	54.67 (1389)	—	55.70 (1515)	38.40 (975)	40.25 (1022)	9.24 (235)	14.68 (373)	—	304
HNFC367S	54.67 (1389)	55.16 (1401)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	302
HNFC368, J	54.67 (1389)	55.16 (1401)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	305
HNFC368R	54.67 (1389)	55.16 (1401)	—	38.40 (975)	40.25 (1022)	9.24 (235)	14.68 (373)	—	307
LFC11N	7.97 (202)	8.13 (207)	—	5.50 (140)	5.94 (151)	3.00 (76)	5.38 (137)	S2	36 [Ⓢ]
LFC211N	7.97 (202)	8.13 (207)	—	5.50 (140)	5.94 (151)	3.00 (76)	5.38 (137)	S1	35 [Ⓢ]
LFC211NR	8.07 (205)	—	8.16 (207)	5.16 (131)	5.94 (151)	3.13 (80)	5.38 (137)	S3	35 [Ⓢ]
LNFC222R	8.07 (205)	—	8.16 (207)	5.16 (131)	5.94 (151)	3.13 (80)	5.38 (137)	S5	35 [Ⓢ]

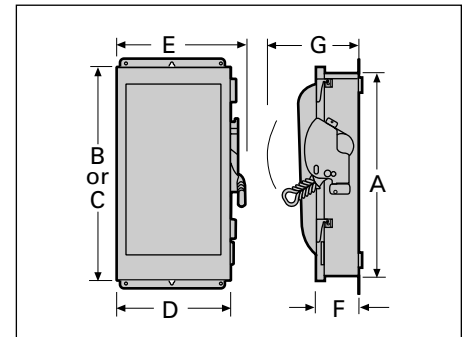
Type 1 or 3R
30A GD Type VBII, LFC & LNFC



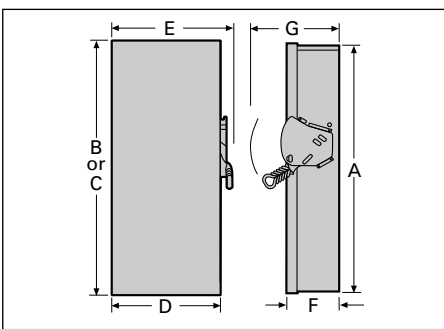
Type 1 or 3R
60-200A GD, 30-200A HD Type VBII



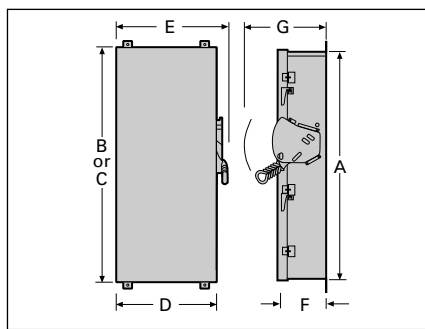
Type 4/4X or 12
30-200A HD Type VBII



Type 1 or 3R
400-1200A HD Type VBII



Type 4/4X or 12
400-1200A HD Type VBII



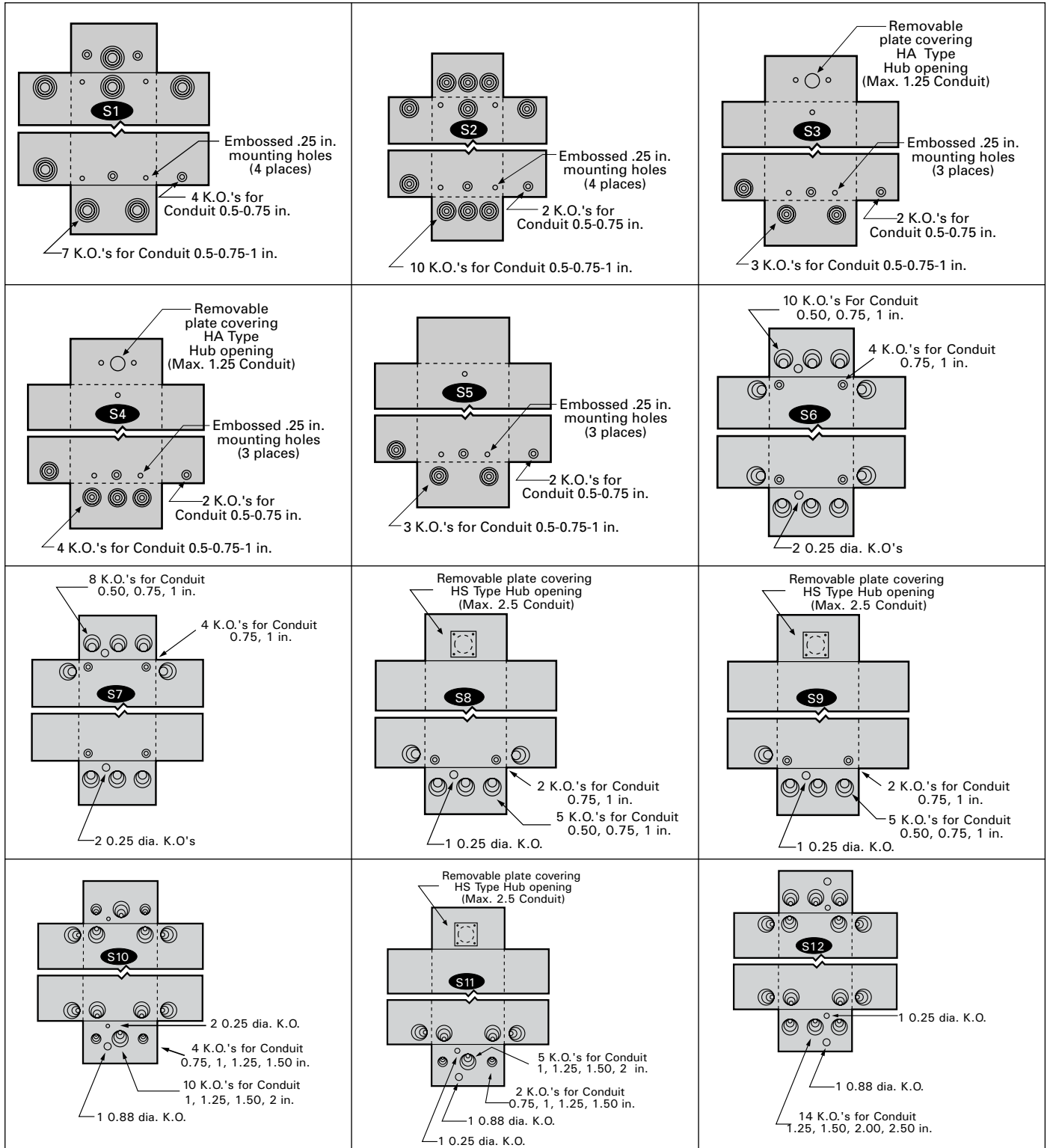
① Knocks not provided on Type 4 / 4X and 12 or on 800 & 1200A switches.

General and Heavy Duty Safety Switches

Knockout Diagrams

Type 1 & 3R Enclosures

1
SAFETY
SWITCHES



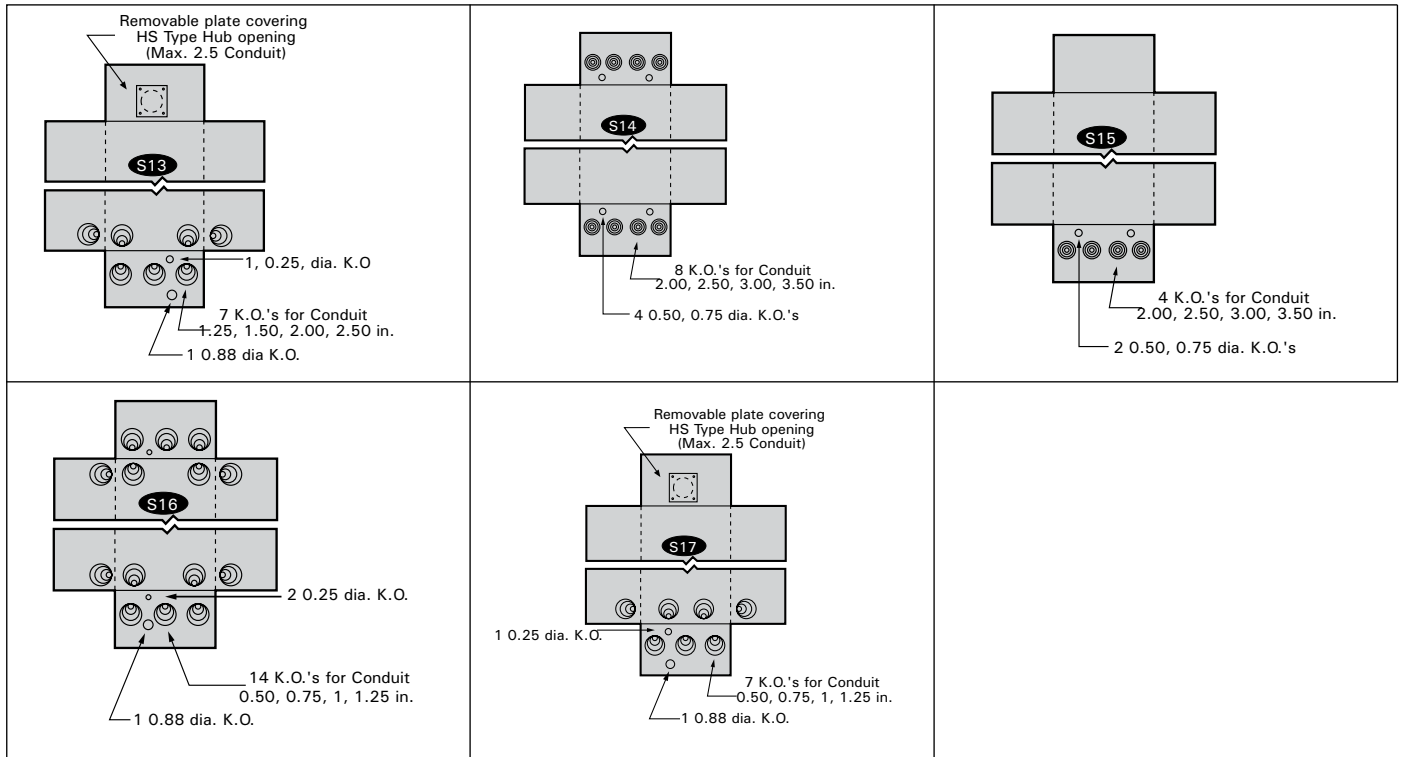
*For inches / millimeters conversion, multiply inches by 25.4.

General and Heavy Duty Safety Switches

Knockout Diagrams

Type 1 & 3R Enclosures

SAFETY SWITCHES 1



*For inches / millimeters conversion, multiply inches by 25.4.

Special Application Safety Switches Dimension Drawings

4-Pole & 6-Pole

Dimensions

4 & 6-Pole Safety Switch Dimensions

Catalogue Number	Enclosure - Inches (mm)			Mounting - Inches (mm)		
	A	B	C	D	E	F

Figure 1, 4-Pole Fusible and Non-fusible, Type 1

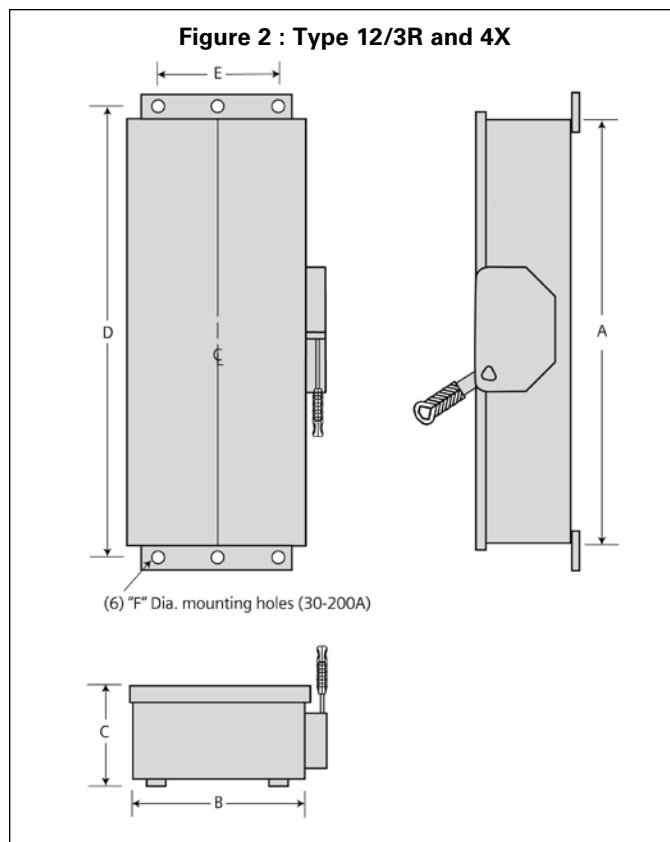
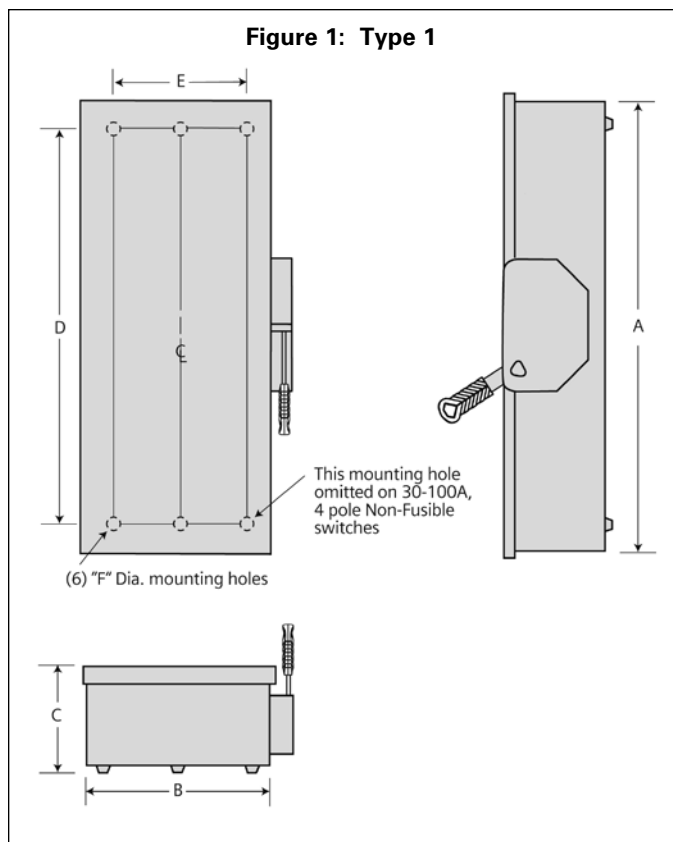
HNF461	24.50 (622)	9.53 (242)	6.09 (155)	19.00 (483)	6.75 (171)	0.268 (7)
HF461	29.12 (740)	9.53 (242)	6.09 (155)	23.50 (597)	6.75 (171)	0.268 (7)
HNF462	24.88 (632)	11.50 (292)	6.09 (155)	19.00 (483)	9.38 (238)	0.268 (7)
HF462	33.53 (852)	11.50 (292)	6.09 (155)	27.50 (699)	9.38 (238)	0.268 (7)
HNF463	27.62 (702)	12.18 (309)	6.09 (155)	19.36 (492)	8.00 (203)	0.268 (7)
HF463	36.44 (926)	12.18 (309)	6.09 (155)	28.11 (714)	8.00 (203)	0.268 (7)
HNF464	36.00 (914)	19.12 (486)	6.42 (163)	30.88 (784)	15.00 (381)	0.44 (11)
HF464	49.48 (1257)	19.12 (486)	6.42 (163)	45.50 (1130)	15.00 (381)	0.44 (11)

Figure 2, 4 & 6-Pole Fusible Type 12/3R and 4X

HF461J, HF661J, HF661S	29.50 (622)	9.53 (242)	6.48 (165)	31.65 (804)	5.47 (139)	0.27 (7)
HF462J, HF662J, HF662S	33.53 (852)	11.50 (292)	6.48 (165)	35.69 (907)	8.00 (203)	0.27 (7)
HF463J, HF663J, HF663S	36.44 (926)	12.18 (309)	6.48 (165)	38.67 (982)	8.47 (215)	0.27 (7)
HF464J, HF664J, HF664S	49.48 (1257)	19.12 (486)	6.78 (172)	51.64 (1312)	13.44 (341)	0.33 (8)

Figure 2, 4 & 6-Pole Non-fusible Type 12/3R and 4X

HNF461J, HNF661J, HNF661S	24.50 (622)	9.53 (242)	6.48 (165)	26.65 (667)	5.47 (139)	0.27 (7)
HNF462J, HNF662J, HNF662S	24.88 (632)	11.50 (292)	6.48 (165)	27.03 (687)	8.00 (203)	0.27 (7)
HNF463J, HNF663J, HNF663S	27.54 (700)	12.18 (309)	6.48 (165)	29.77 (756)	8.47 (215)	0.27 (7)
HNF464J, HNF664J, HNF664S	36.00 (914)	19.12 (486)	6.78 (172)	38.16 (969)	13.44 (341)	0.33 (8)



Safety Switches

Cross References for SE and ID switches

System	Ampere Rating	Indoor – Type 1	
		Catalogue Number	VBII Cross Reference

General Duty 240 Volt Fusible

2-Pole, 2-Fuse, Service Entrance and Solid Neutral

System	Ampere Rating	Indoor – Type 1	VBII Cross Reference
	30	SE221	GFC221N
	60	SE222	GFC222N
	100	SE223	GFC223N
	200	SE224	GFC224N

3-Pole, 3-Fuse, Service Entrance and Solid Neutral

System	Ampere Rating	Indoor – Type 1	VBII Cross Reference
	30	SE321	GFC321N
	60	SE322	GFC322N
	100	SE323	GFC323N
	200	SE324	GFC324N



System	Ampere Rating	Indoor – Type 1		Type 12 Industrial		Type 4/4X Stainless	
		Catalogue Number	VBII Cross Reference	Catalogue Number	VBII Cross Reference	Catalogue Number	VBII Cross Reference

Fusible Heavy Duty

2-Pole, 2-Fuse and Solid Neutral

240 Volt / 250 Volt DC

System	Ampere Rating	Indoor – Type 1	VBII Cross Reference	Type 12 Industrial	VBII Cross Reference	Type 4/4X Stainless	VBII Cross Reference
	30	—	—	12ID221	HFC221NJ + HNC612	4ID221	HFC221NS + HNC612
	60	—	—	12ID222	HFC222NJ + HNC623	4ID222	HFC222NS + HNC623
	100	—	—	12ID223	HFC223NJ + HNC623	4ID223	HFC223NS + HNC623
	200	—	—	12ID224	HFC224NJ + HNC64	4ID224	HFC224NS + HNC64
	400	ID225	HFC225N	12ID225	HFC325NJ + HNC656	—	—
	600	ID226	HFC226N	12ID226	HFC326NJ + HNC656	—	—

3-Pole, 3-Fuse

240 Volt / 250 Volt DC

System	Ampere Rating	Indoor – Type 1	VBII Cross Reference	Type 12 Industrial	VBII Cross Reference	Type 4/4X Stainless	VBII Cross Reference
	30	ID321	HFC321N ^①	12ID321	HFC321NJ ^{②③}	4ID321	HFC321NS + HNC612 ^{②③}
	60	ID322	HFC322N ^①	12ID322	HFC322NJ ^{②③}	4ID322	HFC322NS + HNC623 ^{②③}
	100	ID323	HFC323N ^①	12ID323	HFC323NJ ^{②③}	4ID323	HFC323NS + HNC623 ^{②③}
	200	ID324	HFC324N ^①	12ID324	HFC324NJ ^{②③}	4ID324	HFC324NS + HNC64 ^{②③}
	400	ID425	HFC325N ^①	12ID425	HFC325NJ ^{②③}	—	—
	600	ID426	HFC326N ^①	12ID426	HFC326NJ ^{②③}	—	—

System	Ampere Rating	Indoor – Type 1		Type 12 Industrial		Type 4/4X Stainless		Type 12 with Receptacle		Type 4/4X with Receptacle	
		Catalogue Number	VBII Cross Reference	Catalogue Number	VBII Cross Reference	Catalogue Number	VBII Cross Reference	Catalogue Number	VBII Cross Reference	Catalogue Number	VBII Cross Reference

Fusible Heavy Duty

3-Pole, 3-Fuse

480 Volt AC / 600 Volt AC / 250 Volt DC

System	Ampere Rating	Indoor – Type 1	VBII Cross Reference	Type 12 Industrial	VBII Cross Reference	Type 4/4X Stainless	VBII Cross Reference	Type 12 with Receptacle	VBII Cross Reference	Type 4/4X with Receptacle	VBII Cross Reference
	30	ID361	HFC361	12ID361	HFC361JW	4ID361	HFC361SW	12ID361W	HF361JCHW	4ID361W	HF361SCHW
	60	ID362	HFC362	12ID362	HFC362JW	4ID362	HFC362SW	12ID362W	HF362JCHW	4ID362W	HF362SCHW
	100	ID363	HFC363	12ID363	HFC363JW	4ID363	HFC363SW	12ID363W	HF363JCHW	—	—
	200	ID364	HFC364	12ID364	HFC364JW	4ID364	HFC364SW	—	—	—	—
	400	ID365	HFC365	12ID365	HFC365JW	—	—	—	—	—	—
	600	ID366	HFC366	12ID366	HFC366JW	—	—	—	—	—	—

Non-Fusible Heavy Duty

3-Pole, 3-Fuse

480 Volt AC / 600 Volt AC / 250 Volt DC

System	Ampere Rating	Indoor – Type 1	VBII Cross Reference	Type 12 Industrial	VBII Cross Reference	Type 4/4X Stainless	VBII Cross Reference	Type 12 with Receptacle	VBII Cross Reference	Type 4/4X with Receptacle	VBII Cross Reference
	30	ID361NF	HNFC361	12ID361NF	HNFC361JW	4ID361NF	HNFC361SW	12ID361NFW	HNFC361JCHW	4ID361NFW	HNFC361SCHW
	60	ID362NF	HNFC362	12ID362NF	HNFC362JW	4ID362NF	HNFC362SW	12ID362NFW	HNFC362JCHW	4ID362NFW	HNFC362SCHW
	100	ID363NF	HNFC363	12ID363NF	HNFC363JW	4ID363NF	HNFC363SW	12ID363NFW	HNFC363JCHW	—	—
	200	ID364NF	HNFC364	12ID364NF	HNFC364JW	4ID364NF	HNFC364SW	—	—	—	—
	400	ID365NF	HNFC365	12ID365NF	HNFC365JW	—	—	—	—	—	—
	600	ID366NF	HNFC366	12ID366NF	HNFC366J ^②	—	—	—	—	—	—

① Solid neutral factory installed.

② No viewing window.

Industrial Duty Safety Switches

Replacement parts for ID switches

Selection

Neutral Kits

Switch Ampere Rating	Neutral Kit for ID Switches
30	N60
60	N60
100	N100
200	N200
400	N400ID
600	N600ID

Auxiliary Contacts

Switch Ampere Rating	Aux. Contact Kit for ID Switches ^①	
	1NO-1NC	2NO-2NC
30	MSSAK116	MSSAK216
60	MSSAK116	MSSAK216
100	MSSAK116	MSSAK216
200	MSSAK126	MSSAK226
400	—	—
600	—	—

Fuse Puller

Switch Ampere Rating	Fuse Puller Kits for ID switches
30	FP2
60	FP2
100	FP3
200	FP4
400	—
600	—

Fuse Conversion Kits

Switch Ampere Rating	Conversion Kits for HRCI-R and HRCI-T			
	HRCI-R 240V	HRCI-R 600V	HRCI-T 240V	HRCI-T 600V
30	RFAK21 [®]	RFAK61	—	—
60	RFAK22	RFAK62	—	—
100	RFAK3	RFAK3	TFAK32	TFAK35
200	RFAK4	RFAK4	TFAK42	TFAK45
400	—	—	TFAK52	TFAK55
600	—	—	TFAK62	TFAK65

Lug Size Data ID switches

Switch Ampere Rating	Number of Lugs per pole	Line, Load	Neutral
		Wire range Al/Cu	Wire range Al/Cu
30	1	(1) #14 AWG - #2 AWG	(1) #14 AWG - #2 AWG
60	1	(1) #14 AWG - #2 AWG	(1) #14 AWG - #2 AWG
100	1	(1) #6 AWG - 2/0 AWG	(1) #14 AWG - 2/0 AWG
200	1	(1) #6 AWG - 300 Kcmil	(1) #14 AWG - 300 Kcmil
400	1	(1) 1/0 AWG - 750 Kcmil or (2) 1/0 AWG - 250 Kcmil	(1) 1/0 AWG - 750 Kcmil or (2) 1/0 AWG - 250 Kcmil
600	2	(1) 1/0 AWG - 750 Kcmil or (2) 1/0 AWG - 250 Kcmil	(1) 1/0 AWG - 750 Kcmil or (2) 1/0 AWG - 250 Kcmil

① Auxiliary contacts for ID safety switches are of a positive action design and meet CSA standards & section 38 of the Canadian Electrical Code.

Special Application Safety Switches Dimension Drawings

Selection

Double Throw

Description

Double throw switches are intended to transfer loads from one power source to another. All 2 & 3-pole double throw switches are CSA certified and both horsepower and load break rated. Switches are rated for use on systems up to 10,000A when protected with Class H fuses or 200,000A when protected with Class R or Class T fuses². They can also be used to connect a single source of power to either of two loads. In this application it is necessary to field modify fusible switches so that the fuses are on the load side of the switching mechanism.

A cover interlock is provided on all ampere ratings. The operating handle may be padlocked in the off position.

Fuse Capabilities of Fusible DT Switches

Amp Rating	Fuse Type			
	H	R	T	J
30 & 60A, 240V	Std	Yes (kit)	No	No
30 & 60A, 600V	Std	Yes (kit)	No	Yes ³
100 & 200A	Std	Yes (kit)	Yes (kit)	Yes ³



SAFETY SWITCHES 1

Double Throw Switches

System	Voltage	Number of Poles	Amps	Type 1 – Indoor
				Catalogue Number

Heavy Duty Fusible (30-200A) with Class H fuse spacings – Less Neutral²

	240 Volt AC or 250 Volt DC	3	30 60 100 200	DTFC321 DTFC322 DTFC323 DTFC324
	600 Volt AC, 250 Volt DC		3	30 60 100 200

System	Voltage	Number of Poles	Amps	Type 1 – Indoor	Type 3R – Outdoor ¹	
				Catalogue Number	Catalogue Number	Hub Type ¹

Heavy Duty Non-Fusible – Less Neutral²

	240 Volt AC or 250 Volt DC	2	30 60 100 200 400	DTNFC221 DTNFC222 DTNFC323 DTNFC224 DTNFC225	— — — — DTNFC225R	*
			3	30 60 100 200 400 600	DTNFC321 DTNFC322 DTNFC323 DTNFC324 DTNFC325 DTNFC326	— — DTNFC323R DTNFC324R — —
	600 Volt AC, or 250 Volt DC	3		30 60 100 200 400 600	DTNFC361 DTNFC362 DTNFC363 DTNFC364 DTNFC365 DTNFC366	DTNFC361R DTNFC362R DTNFC363R DTNFC364R DTNFC365R DTNFC366R

¹ Hub catalogue number available p.1-33

² All Heavy Duty double throw switches with a catalogue number starting with "DT" are rated 200,000 AIC max. when protected by Class R, J or T fuses. Fuse ampere rating must not exceed switch ampere rating.

³ Move load base.

* Consult Siemens representative, 400A and larger Switches do not have hub provisions.

Safety Switches

Double Throw

Selection

Accessories, Lug Data and Horsepower Ratings

Accessories – 2 and 3-Pole Switches Type “DT” Only^①

Description		Catalogue Number
Neutral Kits	30 60 & 100A 200A 400 & 600A	HNC612 HNC263 HNC264 HNC678
Equipment Ground Kit	30-200A (2) #14-4 AWG 400 & 600A (4) #14-2/0	HG61234 HG656
Auxiliary Contacts (HD Only) (two required per switch) ^②	30-200A with (1) NO & (1) NC contact 30-200A with (2) NO & (2) NC contact 400-600A with (1) NO & (1) NC contact 400-600A with (2) NO & (2) NC contact	HA161234 HA261234 HA165678 HA265678
Class R Fuse Clip Kits (two required per switch)	30A, 240V Kit 30A, 600V Kit and 60A, 240V Kit 60A, 600V Kit 100A Kit 200A Kit	HR21 HR612 HR62 HR63 HR64
Class T Fuse Adapter Kits (two required per pole)	100A, 240V Kit 100A, 600V Kit 200A, 240V Kit 200A, 600V Kit	HT23 HT63 HT24 HT64
Type 3R Hubs (20-200A)	For 3/4" Conduit For 1" Conduit For 1 1/4" Conduit For 1 1/2" Conduit For 2" Conduit For 2 1/2" Conduit	ECHS075 ECHS100 ECHS125 ECHS150 ECHS200 ECHS250

Wire Ranges (Line, Load and Neutral) per CEC Requirements

30-200A – 2 & 3-Pole Switches

Switch Ampere Rating	Wire Range (Cu/Al) DT VBII Design Line, Load and Neutral
30	(1) #14-6
60	(1) #14-2
100	(1) #14-1/0 AWG
200	(1) #6-250 kcmil

400-600A – 2 & 3-Pole Switches

Switch Ampere Rating	Wire Range (Cu/Al) DT VBII Design Line, Load and Neutral
400	(1) 1/0 AWG-750 kcmil or (2) 1/0 AWG-250 kcmil
600	(2) 1/0 AWG-500 kcmil

Maximum Horsepower Ratings

Fused

Ampere Rating	1-Phase AC		3-Phase AC			250V DC
	240V	240V	480V	600V	600V	
30	3	7 ^{1/2}	15	20	5	
60	10	15	30	50	10	
100	15	30	60	75	20	
200	15	60	125	150	40	
400	—	125	125	125	50	
600	—	125	—	—	50	

Non-Fused

30	5	10	20	30	5
60	10	20	50	60	10
100	15	40	75	100	20
200	15	60	125	150	40
400-600	—	125	250	350	50

Replacement Parts – 2 and 3-Pole Switches Only^①

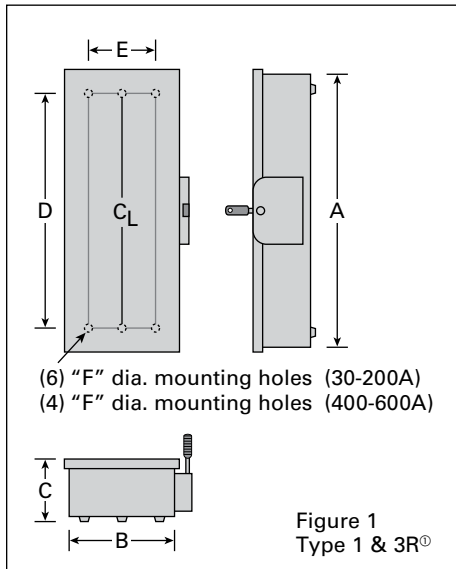
Description		Catalogue Number
Type 1, 3R Replacement Handle	30-200A	HHD61234
Replacement Handle	400-600A	HHD656

^① For “DT” VBII Type switches only.

^② One aux. required for normal and one required for emergency switch line base.

VBI Design Double Throw Dimensions

Catalogue Number	Enclosure dimensions - Inches (mm)					
	A	B	C	D	E	F
Figure 1 (30-600A Type 1 & 3R)						
DTNFC221, DTNFC321, DTNFC361, DTNFC361R	24.50 (622)	9.53 (242)	6.09 (155)	19.00 (483)	6.75 (171)	0.268 (7)
DTFC321, DTFC321R, DTFC361	29.12 (740)	9.53 (242)	6.09 (155)	23.50 (597)	6.75 (171)	0.268 (7)
DTNFC222, DTNFC322, DTNFC362, DTNFC362R	24.88 (632)	11.50 (292)	6.09 (155)	19.00 (483)	9.38 (238)	0.268 (7)
DTFC322, DTFC362	33.45 (852)	11.50 (292)	6.09 (155)	27.50 (699)	9.38 (238)	0.268 (7)
DTNFC223, DTNFC323, DTNFC323R, DTNFC363, DTNFC363R	27.62 (702)	12.18 (309)	6.09 (155)	19.36 (492)	8.00 (203)	0.268 (7)
DTFC323, DTFC363	36.44 (926)	12.18 (309)	6.09 (155)	28.11 (714)	8.00 (203)	0.268 (7)
DTNFC224, DTNFC224R, DTNFC324, DTNFC324R, DTNFC364, DTNFC364R	36.00 (914)	19.12 (486)	6.42 (163)	31.00 (787)	15.00 (381)	0.44 (11)
DTFC324, DTFC364	49.44 (1256)	19.12 (486)	6.42 (163)	44.50 (1130)	15.00 (381)	0.44 (11)
DTNFC225, DTNFC225R, DTNFC325, DTNFC365, DTNFC365R	57.71 (1466)	28.22 (717)	9.44 (240)	49.75 (1264)	16.00 (406)	0.56 (14)
DTNFC326, DTNFC366, DTNFC366R	57.71 (1466)	28.22 (717)	9.44 (240)	49.75 (1264)	16.00 (406)	0.56 (14)



Ⓞ Drip hood not shown but provided on Type 3R enclosures.

Enclosed Switches

Rotary Disconnect Switches in Non-Metallic Enclosures^④

Selection

Application

Siemens Rotary Disconnect switches are ideally suited for use as "in sight" disconnects for motor loads and other electrical equipment which is remotely located from its branch circuit protective device. All are supplied in non-metallic enclosures which are UL & cUL or CSA approved for a wide range of both indoor and outdoor environments. All meet UL508 requirements.

Description

16–125A non-fusible switches are available in fiberglass reinforced polycarbonate enclosures which are UL approved as Type 12 & 4X and for either indoor or outdoor use. All are horsepower and load break rated. All are panel mounted and are either supplied with factory installed aux. contacts or will accept contact kits. All are compact in size while providing ample wiring space for copper line & load conductors.

Siemens Enclosed Rotary Disconnect Switches

- 16–125A, Non-Fusible
- 600VAC max. rated (except catalogue no. HNF3100CX is rated 480VAC max.)
- Available in both Type 12 and 4X non-metallic enclosures
- Both screw and hinged cover designs available
- Listed and marked "suitable for use as motor disconnect" per NEC Section 430-109
- Screw cover switches are UL listed under File No. E47705 and are CSA certified under File No. 249236
- IEC 60947-3 rated and CE marked (enclosures are IP65 rated)
- Hinged door switches are UL listed for multiple line and load conductors per phase in 30–100A ratings. They are UL & cUL listed under File No. E191706



- HP rated
- Rotary handles are available in black, red, and yellow and in pistol grip designs
- 16–63A screw cover switches have factory installed ground bars. All hinge cover switches accept ground lug kits
- Screw cover switches are provided with knockouts
- Padlockable in OFF position with up to (3) padlocks

1 SAFETY SWITCHES

Ampere Rating	Catalogue Number		Shipping Weight (lbs.)	Horsepower Ratings			
	3 Pole, 3 Wire	3 Pole, 3 Wire with (1) NO & (1) NC Aux. Contact ^{⑦⑧}		240V AC		480V AC	600V AC
				1 Phase	3 Phase	3 Phase	3 Phase

Non-Fusible, Type 1, 4X & 12K^① with Screw Cover and Black Rotary Handle 600V AC Max.^④

16	3LD2064-0TB51-0US2	3LD2064-1GP51-0US2	1	1½	3	7½	10
25	3LD2164-0TB51-0US2	3LD2164-1GP51-0US2	1	3	7½	10	15
30	3LD2264-0TB51-0US2	3LD2264-1GP51-0US2	1	3	7½	15	20
30	—	3LD2264-1TS51-0US2 ^②	1	3	7½	15	20
30	—	3LD2264-2TW51-0US2 ^②	1	3	7½	15	20
63	3LD2565-0TB51-0US2	3LD2565-1GP51-0US2	3	10	15	40	50
100	3LD2766-0TB51-0US2	3LD2766-1GP51-0US2	6	—	30	60	75
125	3LD2866-0TB51-0US2	3LD2866-1GP51-0US2	6	—	40	75	100

Non-Fusible, Type 1, 4X & 12K^① with Screw Cover and Red and Yellow Rotary Handle 600V AC Max.^④

16	3LD2064-0TB53-0US2	3LD2064-1GP53-0US2	1	1½	3	7½	10
25	3LD2164-0TB53-0US2	3LD2164-1GP53-0US2	1	3	7½	10	15
30	3LD2264-0TB53-0US2	3LD2264-1GP53-0US2	1	3	7½	15	20
30	—	3LD2264-1TS53-0US2 ^②	1	3	7½	15	20
30	—	3LD2264-2TW53-0US2 ^②	1	3	7½	15	20
63	3LD2565-0TB53-0US2	3LD2565-1GP53-0US2	3	10	15	40	50
100	3LD2766-0TB53-0US2	3LD2766-1GP53-0US2	6	—	30	60	75
125	3LD2866-0TB53-0US2	3LD2866-1GP53-0US2	6	—	40	75	100

Non-Fusible, Type 4X^③ with Hinged Door and Black Pistol Grip Rotary Handle 480V AC Max.^{②④}

30	HNF3030CX	—	4	3	7½	15	20
60	HNF3060CX	—	4	10	15	40	50
100	HNF3100CX	—	5	15	25	50	—

① Approved for both indoor and outdoor use. No cover interlock provided.

② 30 and 60A switches are also rated 600V AC.

③ Also rated as Type 12 and UL approved for both indoor and outdoor use. Defeatable cover interlock provided.

④ Screw cover enclosures are constructed from Makrolon 9425. Hinged cover enclosures are constructed from fiberglass reinforced polycarbonate.

⑤ Switch is supplied with (2) NO and no NC aux. contacts.

⑥ Switch is supplied with (4) NO and no NC aux. contacts. Ground bar is not provided or available.

⑦ Aux. contacts break about 3 Ms before and make about 3 Ms after main switch contacts.

⑧ 6P, 25A, switch with 1 NO & 1 NC aux. contacts and a black operating handle is also available. Order catalogue number 3LD2165-4VD51.

Enclosed Switches

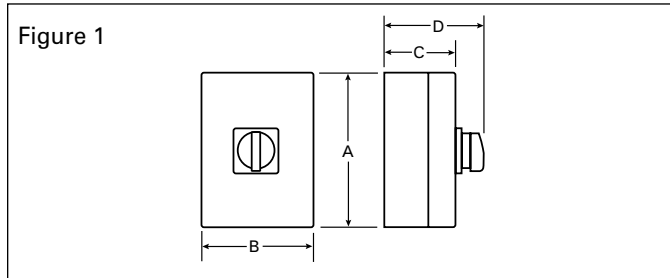
Rotary Disconnect Switches

Selection

Enclosed Disconnect Switch Dimensions

Catalogue Number	Ampere Rating	Fig. No.	Dimensions - Inches (mm)			
			A	B	C	D
3LD2064-	16	1	5.52 (140) ^④	3.94 (100)	3.19 (81)	4.57 (116)
3LD2164-	25		5.52 (140) ^④	3.94 (100)	3.19 (81)	4.57 (116)
3LD2264-	30		5.52 (140) ^④	3.94 (100)	3.19 (81)	4.57 (116)
3LD2565-	63		6.93 (176) ^⑤	5.75 (146)	4.10 (104)	5.87 (149)
3LD2766-	100		11.90 (302)	8.35 (212)	5.36 (136)	7.13 (181)
3LD2866-	125		11.90 (302)	8.35 (212)	5.36 (136)	7.13 (181)
HNF3030CX	30	2	7.87 (200)	7.87 (200)	5.20 (132)	7.29 (185)
HNF3060CX	60		11.77 (299)	7.87 (200)	5.20 (132)	7.29 (185)
HNF3100CX	100		11.77 (299)	7.87 (200)	5.20 (132)	7.29 (185)

Note: 3LD2 Type switches only have top and bottom end KO's as follows:
16-30A - 1/2" & 3/4", 63A - 3/4" & 1", 100 & 25A - 1" & 1 1/4"



UL and cUL Short Circuit Withstand Ratings

Ampere Rating	Short Circuit Withstand Rating and Fuse Class				
	With Line Side Fusing			With Load Side Fusing ^①	
	5 kA at 600V Max	10 kA at 600V Max	18 kA at 480V Max	5 kA at 480V Max	18 kA at 480V Max
16	—	—	—	—	—
25 & 30	—	—	—	—	—
63	—	—	—	—	—
100 & 125	—	—	—	—	—

3LD2 Type Switches^③

16	RK5 (50A Max)	—	—	—	—
25 & 30	RK5 (80A Max)	—	—	—	—
63	RK5 (175A Max)	—	—	—	—
100 & 125	—	RK5 (200A Max)	—	—	—

HNF Type Switches

30	—	H, K & RK5 (100A Max)	J, T & CC (100A Max)	H, K & RK5 (30A Max)	Ferraz Shawmut A50P or lower let-through semiconductor fuses (60A Max)	
60	⑥	H, K & RK5 (150A Max)		H, K & RK5 (60A Max)		Ferraz Shawmut A50P or lower let-through semiconductor fuses (100A Max)
100		⑥				

- ① For use as supplemental protection on the load side of the branch circuit over current protective device.
- ② Ground lug kit has two lugs for #14-4 Cu/Al wire.
- ③ Factory installed ground lugs supplied as follows: 16-30A #14-10 Cu, 63A #14-8 Cu. Ground lug not provided and is not available on catalogue numbers 3LD2264-2TW51-0US2 and 3LD2264-2TW53-0US2.
- ④ 6.38 inches (162mm) high including mounting feet.
- ⑤ 7.85 inches (199mm) high including mounting feet.
- ⑥ 60 & 100A HNF switches are rated 10kA at 480V max. with line side Class H, K & RK5 150A max. fuses.
- ⑦ Wire range (1) #14-2 AWG 60/75 °C Cu only.
- ⑧ 16-63A 3LD switches are also rated 5kA at 600VAC max when protected by a 3RV type MSP of the same or lesser ampere rating.

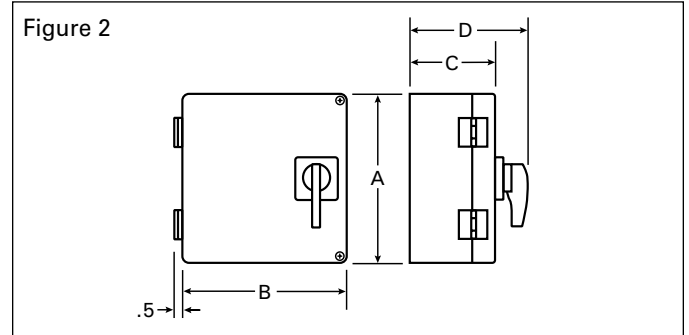
Wire ranges 60/75°C Cu Only

3LD2 Type Switches^③

16 Amps	(1) #18-10 AWG
25-30 Amps	(1) #14-10 AWG
63 Amps	(1) #14-6 AWG
100-125 Amps	(1) #12-1 AWG

HNF Type Switches

30 Amps	(1) #14-#10 AWG Solid (1) #14-#4 AWG Stranded Up to (4) #12 AWG Solid Up to (3) #12 AWG Stranded Up to (6) #14 AWG Stranded Up to (4) #14 AWG Stranded with (1) #10 AWG Stranded
60 & 100 Amps	(1) #14-#10 AWG Solid (1) #14-#1 AWG Stranded (2) #6 AWG Stranded Up to (3) #8 AWG Stranded Up to (6) #10 AWG Stranded Up to (6) #12 AWG Solid



IEC Fuse and Withstand Ratings

Ampere Rating	gG Fuse Size	Short Circuit Rating
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3LD2 Screw Cover Switches

16	20A	5k Arms
25	25A	10k Arms
32	50A	10k Arms
63	63A	15k Arms
100	100A	20k Arms
125	125A	20k Arms

HNF Hinged Cover Switches

30	63A	10k Arms
60	100A	10k Arms
100	100A	10k Arms

Accessories

Switch Ampere Rating	Catalogue Number	Description
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3LD2 Type Switches^③

16-30A	3LD9220-2C	Neutral Kit
63A	3LD9250-2CA	Neutral Kit
100-125A	3LD9280-2C	Neutral Kit

HNF Type Switches

30-100A	GSGK60	Ground Lug Kit ^②
30A	LBRA1	Auxiliary Contact Kit (1 NO-1 NC)
60-100A	LBRA2	Auxiliary Contact Kit (1 NO-1 NC)
30-100A	HF63CX ^⑦	Neutral Kit

Disconnect Switches

Compact Non-Fusible — Rotary and Toggle

Selection

Features

- 16–250 Ampere, to 100 hp, 480V & 600V
- Rotary and Toggle actuation models
- LBR Type switches are padlockable in the OFF position and are cUL & UL listed under File No. E191706 as manual motor controllers per UL Standard UL508
- 3LD2 Type switches are padlockable in the OFF position and are CSA certified under file No. 203576 and are UL listed under file No. E47705
- Base, DIN-rail and door mounting
- Multiple conductor, distribution terminal type rating LBR & LBT Type (40A -100A only)
- IEC 947-1 rated, CE marked
- Listed and marked “suitable as motor disconnect” per NEC Section 430-109

Application

Siemens Load Break Switches are listed as manual motor controllers and are suitable as motor disconnects. They are load break rated and act as enclosure disconnects when short circuit protection is provided upstream of the switch. If upstream over current protection is not provided, use a Siemens fusible Type VBII, CFS or MCS Disconnect Switch.

Ordering Information

Door Mounted Switches (Rotary Type Only) — Order either complete “3LD2” assemblies or individual “LBR” components as follows:

Complete Assemblies include switch, handle, and shaft. Certain 25 and 32A assemblies are also available with factory installed neutral blocks and/or aux. contacts. These accessories can also be ordered as field installed kits.

Individual Components are ordered as follows:

25A — LBR3025D switch + LBRH3 or 4 handle.

40–100A — LBR switch + LBRH3 or 4 handle + LBRD1.

Notes: (LBR Type switches only)

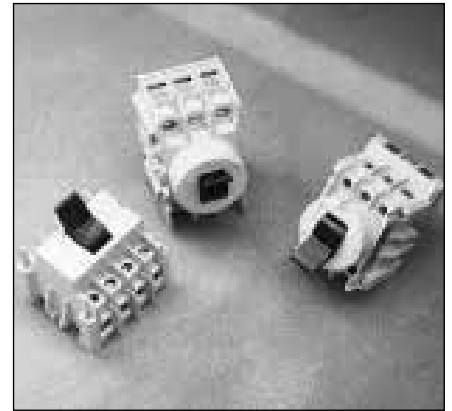
1. Aux contacts are available as field installed kits on 25A units only.
2. Lugs on 25A units face to the rear and lugs on 40–100A units face toward the front.

③ Includes auxiliary contacts (1 NO and 1 NC).

② Handles are IP65 rated and are also UL Listed for Type 1, 4X and 12 applications.



Type LBR Rotary Switches



Type LBT Toggle Switches



3LD2254-0TK51

Base/DIN Rail Mounted Switches (Rotary or Toggle Type) — Order individual components as follows:

Toggle — Order the LBT switch required and a toggle switch cover plate if needed.

Rotary, Base Mounted with Door Mounted Handle — Order “LBR” switch + door mounted handle + shaft + any accessories.

Rotary, Base Mounted with Direct Mounted Handle — Order “LBR” switch + direct mounted handle.

Door Mounted Complete Assemblies (Operator, Shaft, & Switch) 600V AC Max. ②

Shaft Mounted	4 Hole Mounted	Number of Poles	Ampere Rating	AC Horsepower Ratings				
				120V 1Ø	240V 1Ø 3Ø		480V 3Ø	600V 3Ø
—	3LD2003-1TP53③	3	16	½	1½	3	7½	10
3LD2154-0TK 3LD2154-1TP 3LD2154-1TL 3LD2154-2EP	3LD2103-0TK 3LD2103-1TP 3LD2103-1TL 3LD2103-2EP	3 3③ 3 + N 3 + N③	25	2	3	7½	10	15
3LD2254-0TK 3LD2254-1TL	3LD2203-0TK 3LD2203-1TL	3 3 + N	32	2	3	10	20	20
3LD2555-0TK	3LD2504-0TK	3	63	—	10	15	40	50
—	3LD2704-0TK	3	100	—	—	30	60	75
—	3LD2804-0TK	3	125	—	—	40	75	100

③ Add 51 for a black handle or 53 for a red & yellow handle to the end of the catalogue number.

④ 100-250A 3LD2 switches are rated 10kA when protected by 200A Max. Class RK5 fuses.

Short Circuit Withstand Ratings

Switch Rating & Type	Max. Line Side Fuse Rating
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5kA with Line Side Class H, K, or RK5 Fuses

25 & 32A 3LD2	80A Max. at 600V AC Max.
63A 3LD2	175A Max. at 600V AC Max.

10kA with Line Side Class H, K, or RK5 Fuses④

25A LBR	30A Max. at 480V AC Max.
40A, 4P LBR & LBT	60A Max. at 480V AC Max.
40 & 60A, 3P LBR & LBT	100A Max. at 480V AC Max.
80 & 100A LBR & LBT	150A Max. at 480V AC Max.

18kA with Line Side Class J, T, or CC Fuses

40–100A, 3P LBR & LBT	100A Max. at 480V AC Max.
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Note: 3LD2 switches are also rated 5kA at 600V AC Max. when protected by a 3RV motor starter with a FLA rating equal to or less than the switch ampere rating.

Disconnect Switches

Compact Non-Fusible — Rotary and Toggle

Selection

3LD Type Base Mounted Complete Assemblies (Operator, Shaft, & Switch) 600V AC Max.Ⓜ

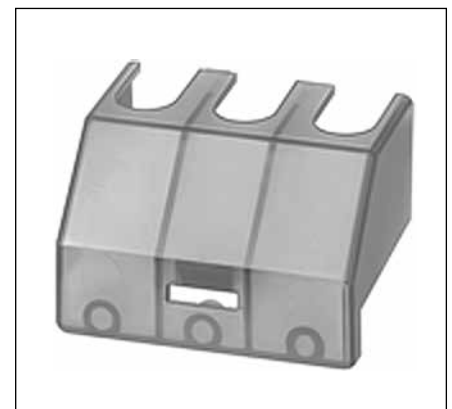
Handle mounting [Ⓜ]			Number of Poles	Ampere Rating	AC Horsepower Ratings				
Shaft (center hole)	4 Hole (no defeat)	4 Hole (with defeat)			120V	240V	480V	600V	
Catalogue Number	Catalogue Number	Catalogue Number	1Ø	1Ø	3Ø	3Ø	3Ø		
—	3LD2013-0TK5	3LD2017-0TK1 3LD2017-1TL1	3 3 + N	16	½	1½	3	7½	10
3LD2144-0TK5 3LD2144-1TL5	3LD2113-0TK5 3LD2113-1TL5	—	3 3 + N	25	2	3	7½	10	15
3LD2244-0TK5 3LD2244-1TL53	3LD2213-0TK5 3LD2213-1TL53	3LD2217-0TK1 3LD2217-1TL1	3 3 + N	32	2	3	10	20	20
3LD2545-0TK5	—	3LD2517-0TK1 3LD2517-1TL1	3 3 + N	63	3	10	15	40	50
—	3LD2714-0TK5	—	3	100	—	—	30	60	75
—	3LD2814-0TK5	—	3	125	—	—	40	75	100
—	3LD2318-0TK1	—	3	160	—	—	40	75	75
—	3LD2318-1TK1 [Ⓜ]	—	3 + N						
—	3LD2418-0TK1	—	3						
—	3LD2418-1TK1 [Ⓜ]	—	3 + N	250	—	—	50	100	75



3LD2217-0TK13



3LD9220-2C



3LD9251-0A

Accessories for Front Mounted 3LD2 Switches

Catalogue Number	Description	Switches Used With
3LD9200-5B [Ⓜ] 3LD9200-5BF [Ⓜ]	1 NO, 1 NC Aux. Contact 1 NO, 1 NC Aux. with Gold Plated Contacts	25-125A 25-125A
3LD9220-2B 3LD9250-2BA 3LD9280-2B	Neutral/Ground Terminal Neutral/Ground Terminal Neutral/Ground Terminal	25 & 32A 63A 100 & 125A
3LD9220-0B 3LD9250-0BA 3LD9280-0B	4th Pole (leading ON, lagging OFF) 4th Pole (leading ON, lagging OFF) 4th Pole (leading ON, lagging OFF)	25 & 32A 63A 100 & 125A
3LD9224-1B [Ⓜ] 3LD9284-1B [Ⓜ] 3LD9224-3B [Ⓜ] 3LD9284-3B [Ⓜ]	Black Handle (4 hole mtg.) Black Handle (4 hole mtg.) Red/Yellow Handle (4 hole mtg.) Red/Yellow Handle (4 hole mtg.)	25 & 32A 63-125A 25 & 32A 63-125A
3LD9224-1D [Ⓜ] 3LD9284-1D [Ⓜ] 3LD9224-3D [Ⓜ] 3LD9284-3D [Ⓜ]	Black Handle (shaft mtg.) [Ⓜ] Black Handle (shaft mtg.) [Ⓜ] Red/Yellow Handle (shaft mtg.) [Ⓜ] Red/Yellow Handle (shaft mtg.) [Ⓜ]	25 & 32A 63-125A 25 & 32A 63-125A
3LD9221-2A [Ⓜ] 3LD9221-0A [Ⓜ] 3LD9251-0A [Ⓜ]	Terminal Cover 1P (Pack of 4) Terminal Cover 3P (Pack of 4) Terminal Cover 3P (Pack of 4)	25 & 32A 25 & 32A 63A

Accessories for Base Mounted 3LD2 Switches

3LD9200-5C [Ⓜ] 3LD9200-5CF [Ⓜ]	1 NO, 1 NC Aux. Contact 1 NO, 1 NC Aux. with Gold Plated Contacts	25-250A 25-250A
3LD9220-2C 3LD9250-2CA 3LD9280-2C 3LD9240-2C	Neutral/Ground Terminal Neutral/Ground Terminal Neutral/Ground Terminal Neutral/Ground Terminal	25 & 32A 63A 100 & 125A 160 & 250A
3LD9220-0C 3LD9250-0CA 3LD9280-0C 3LD9240-0C	4th Pole (leading ON, lagging OFF) 4th Pole (leading ON, lagging OFF) 4th Pole (leading ON, lagging OFF) 4th Pole (leading ON, lagging OFF)	25 & 32A 63A 100 & 125A 160 & 250A
3LD9224-1B [Ⓜ] 3LD9284-1B [Ⓜ] 3LD9224-3B [Ⓜ] 3LD9284-3B [Ⓜ]	Black Handle (4 hole mtg. no defeat) Black Handle (4 hole mtg. no defeat) Red/Yellow Handle (4 hole mtg. no defeat) Red/Yellow Handle (4 hole mtg. no defeat)	25 & 32A 63-125A 25 & 32A 63-125A
3LD9224-1D [Ⓜ] 3LD9284-1D [Ⓜ] 3LD9224-3D [Ⓜ] 3LD9284-3D [Ⓜ]	Black Handle (shaft mtg.) Black Handle (shaft mtg.) Red/Yellow Handle (shaft mtg.) Red/Yellow Handle (shaft mtg.)	25 & 32A 63-125A 25 & 32A 63-125A
3LD9221-2A [Ⓜ] 3LD9221-0A [Ⓜ] 3LD9251-0A [Ⓜ]	Terminal Cover 1P (Pack of 4) Terminal Cover 3P (Pack of 4) Terminal Cover 3P (Pack of 4)	25 & 32A 25 & 32A 63A

[Ⓜ] Handles and line side terminal covers are supplied as standard with 3LD2 switches.

[Ⓜ] Add suffix 1 for a black or 3 for a red & yellow handle to the catalogue number (except 3LD2244-1TL53 & 3LD2213-1TL53). Handles are IP65 rated and are also listed by UL for Type 1, 4X and 12 applications.

[Ⓜ] Aux. contacts break about 30 Ms before and make about 3 Ms after main switch contacts.

Ratings	10A	at 120V AC
	6A	at 240V AC
	1.4A	at 480V AC

[Ⓜ] Can be used as replacement handles on enclosed 3LD2 switches.

[Ⓜ] Base mounted switches with direct mount handles are also available (3LD2330-0TK1_Ⓜ rated 160A and 3LD2430-0TK1_Ⓜ rated 250).

Disconnect Switches

Compact Non-Fusible — Rotary and Toggle

Selection

Individual Components

Rotary and Toggle Switches

Catalogue Number	Switch Type	No. of Poles	Ampere Rating	Max AC Volt	AC Horsepower Ratings					
					115V		240V		480V	600V
					1Ø	1Ø	3Ø	3Ø	3Ø	
LBR3025	Rotary	3	25	480	¾	2	5	10	—	
LBR3025D ^①	Rotary	3	25	480	¾	2	5	10	—	
LBR3040 ^②	Rotary	3	40	600	2	3	7½	20	25	
LBR3060 ^②	Rotary	3	60	480	2	5	10	25	—	
LBR3080 ^②	Rotary	3	80	600	3	10	20	40	50	
LBR3100 ^②	Rotary	3	100	480	5	15	25	50	—	
LBR4040	Rotary	4	40	480	2	3	7½	20	—	
LBT3040	Toggle	3	40	600	2	3	7½	20	25	
LBT3060	Toggle	3	60	480	2	5	10	25	—	
LBT3080	Toggle	3	80	600	3	10	20	40	50	
LBT3100	Toggle	3	100	480	5	15	25	50	—	
LBT4040	Toggle	4	40	480	2	3	7½	20	—	



Standard Duty Rotary Switch Door Handles



Heavy Duty Rotary Switch Door Handle

LBR Type Handles

Catalogue Number	Used on Rotary Switches	NEMA Type	Mounting	Marking	Colour	Cover Interlock Supplied	Padlockable
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Standard Duty

LBRH2 ^②	All	1	Door	ON/OFF	Black	No	No
LBRH3 ^②	All	1, 3R, 12, 4X	Door	O/I, ON/OFF	Black	Yes ^①	Yes
LBRH4 ^②	All	1, 3R, 12, 4X	Door	O/I, ON/OFF	Red/Yel	Yes ^①	Yes
LBRH9 ^②	All (Pistol Grip Type)	1, 3R, 12, 4X	Door	O/I, ON/OFF	Black	Yes	Yes
LBRH10 ^②	All (Pistol Grip Type)	1, 3R, 12, 4X	Door	O/I, ON/OFF	Red/Yel	Yes	Yes
LBRH5	25 Amps	1	Direct Mount	O/I	Black	—	Yes
LBRH6	3-Pole, 40-60 Amps	1	Direct Mount	O/I	Black	—	Yes
LBRH7	3-Pole, 80-100 Amps	1	Direct Mount	O/I	Black	—	Yes
LBRH8	4-Pole, 40-60 Amps	1	Direct Mount	O/I	Black	—	Yes

Heavy Duty

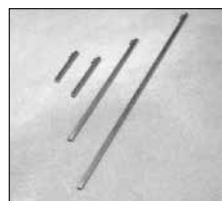
CFSH10B12	All	1, 3R, 12	Door	O/I, ON/OFF	Black	Yes	Yes
CFSH10R12	All	1, 3R, 12	Door	O/I, ON/OFF	Red/Yel	Yes	Yes

LBR Type Rotary Shafts

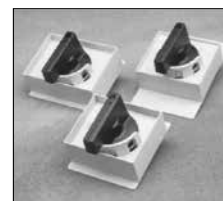
Catalogue Number	Length - In. (mm)
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For Standard Duty Handles

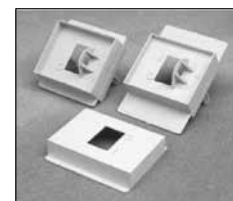
LBR5040	1.57 (40)
LBR5050	1.97 (50)
LBR5055	2.17 (55)
LBR5080	3.15 (80)
LBR5120	4.72 (120)
LBR5180	7.09 (180)
LBR5305	12.00 (305)



Rotary Shafts



Rotary Switch Direct Mount Handles



Toggle Switch Cover Plates

For Heavy Duty Handles

CFSS5200H	7.9 (200)
CFSS5400H	15.7 (400)

25 Amp, 4th Pole

Used on Catalogue No	Catalogue Number
LBR3025	LBRP25
LBR3025D	LBRP25D

Auxiliary Switch Kits

Used on Rotary Switch	Catalogue Number	Contact Arrangement
LBR3025	LBRA25 ^{③④}	1 NO & 1 NC
LBR3025D	LBRA25D ^{③④}	1 NO & 1 NC
LBR3040, LBR3060	LBRA1 ^{③④}	1 NO/1 NC with common point
LBR3080, LBR3100	LBRA2 ^{③④}	1 NO/1 NC with common point

LBR Type Toggle Switch Cover Plate

Used on Toggle Switches	Catalogue Number
LBT3040, LBT3060	LBTCP1
LBT3080, LBT3100	LBTCP2
LBT4040	LBTCP3

LBR Type Rotary Switch Door Mounting Kit (For use with LBRH3 & LBRH4 only)

Used on Rotary Switch	Catalogue Number
40-100 Amps	LBRD1

LBR/LBT Neutral Kit^⑤

Used with Catalogue Number	Catalogue Number
All	HF63CX

^① No cover interlock defeat mechanism provided. To eliminate cover interlock, order additional catalogue number LBRDC1.

^② LBRH2 is IP54 rated. All others are IP65.

^③ Ratings

15.1A resistive at 250V AC max.
.5A at 125V DC
.25A at 250V DC
.5 HP at 250V AC max.

^④ Auxiliary switch contacts break about 30 Ms before and make about 3 Ms after main switch contacts.

^⑤ Lug wire ranges:
HF63CX — (1) #14-2 AWG 60/75°C Cu only

^⑥ Only door mountable and for use with LBRH3 & 4 handles only.

^⑦ For door mounting of 40-100A LBR switches use door mounting kit LBRD1 & LBRH3 or 4 handle.

Disconnect Switches

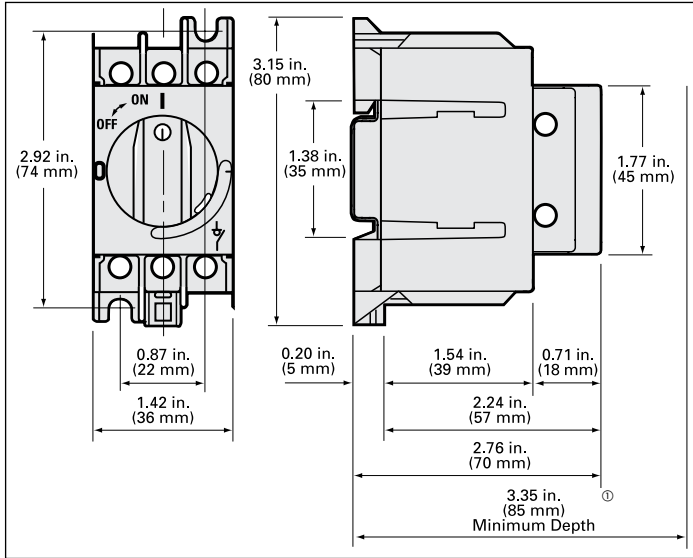
Compact Non-Fusible — Rotary and Toggle

Dimensions

Dimension Drawings and Wire Ranges

DISCONNECT SWITCHES

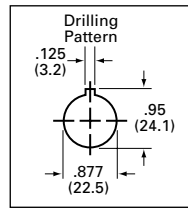
LBR3025



Wire Ranges 60/75°C Cu only

25 Amps LBR	(1) #14 - #10 AWG Solid (1) #14 - #8 AWG Stranded
40 & 60 Amps LBR & LBT	(1) #14 - #10 AWG Solid (1) #14 - #4 AWG Stranded Up to (4) #12 AWG Solid Up to (3) #12 AWG Stranded Up to (6) #14 AWG Stranded Up to (4) #14 AWG Stranded with (1) #10 AWG Stranded
80 & 100 Amps LBR & LBT	(1) #14 - #10 AWG Solid (1) #14 - #1 AWG Stranded (2) #6 AWG Stranded Up to (3) #8 AWG Stranded Up to (6) #10 AWG Stranded Up to (6) #12 AWG Solid
16A, 3LD20 25A, 3LD21 32A, 3LD22 63A, 3LD25 100, 125A, 3LD2 160, 250A, 3LD2	(1) #18-10 AWG (1) #14-8 AWG (1) #14-8 AWG (1) #14-6 AWG (1) #12-1 AWG (1) #1-400 MCM

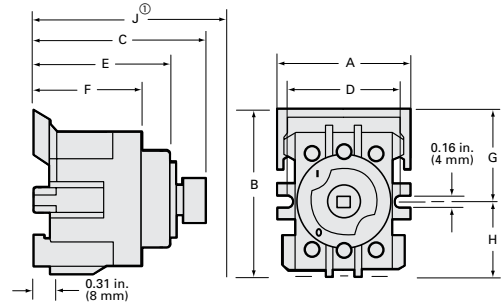
Shaft Mounted 3LD2 Handle Cutout



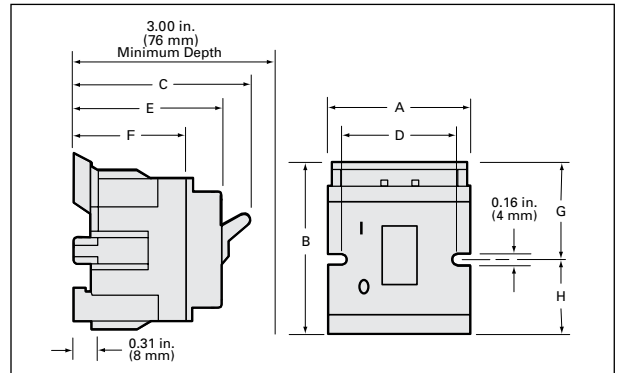
LBR 40-100 Amps & 3LD2 16-250A

Dimension J Minimum Depth^① - Inches (mm)

Switch	Dimension J
LBR 40-100A	3.35 (85)
3LD2 25 & 32A Front Shaft Mounted	3.07 (78)
3LD2 63 Front Shaft Mounted	3.35 (85)
3LD2 16-32A Front 4-hole Mounted	2.13 (54)
3LD2 63A Front 4-hole Mounted	2.48 (63)
3LD2 100 & 125A Front 4-hole Mounted	2.56 (65)
3LD2 25 & 32A Base w/shaft Mtg. Handle	6.46 (164)
3LD2 63A Base w/shaft Mtg. Handle	6.77 (172)
3LD2 16-32A Base w/4-hole Mtg. Handle	5.59 (142)
3LD2 63A Base w/4-hole Mtg. Handle	5.99 (152)
3LD2 100-250A Base w/4-hole Mtg. Handle	6.07 (154)



LBT Toggle — 40-100 Amps



Switch Type	Switch Catalog No.	Dimensions - Inches (mm)							
		A	B	C	D	E	F	G	H
Rotary	LBR3040	2.00 (51)	2.72 (69)	2.72 (69)	1.78 (45)	2.16 (55)	1.67 (42)	1.50 (38)	1.22 (31)
Rotary	LBR3060	2.00 (51)	2.72 (69)	2.72 (69)	1.78 (45)	2.16 (55)	1.67 (42)	1.50 (38)	1.22 (31)
Rotary	LBR3080	2.09 (53)	3.32 (84)	2.92 (74)	1.97 (50)	2.29 (58)	1.69 (42)	1.66 (42)	1.66 (42)
Rotary	LBR3100	2.09 (53)	3.32 (84)	2.92 (74)	1.97 (50)	2.29 (58)	1.69 (42)	1.66 (42)	1.66 (42)
Rotary	LBR4040	2.42 (61)	2.72 (69)	2.72 (69)	2.28 (58)	2.16 (55)	1.67 (42)	1.50 (38)	1.22 (31)
Rotary Front Mtg.	3LD20 ^②	1.89 (48)	1.97 (50)	1.97 (50)	—	—	—	—	—
Rotary Front Mtg.	3LD21 & 2 ^②	1.81 (46)	2.17 (55)	1.97 (50)	—	—	—	—	—
Rotary Front Mtg.	3LD25 ^②	2.36 (60)	2.52 (64)	2.32 (59)	—	—	—	—	—
Rotary Front Mtg.	3LD27 & 8 ^②	2.40 (61)	3.27 (83)	2.40 (61)	—	—	—	—	—
Rotary Base Mtg.	3LD20 ^②	1.89 (48)	1.97 (50)	2.29 (58)	—	—	—	—	—
Rotary Base Mtg.	3LD21 & 2 ^②	1.81 (46)	2.17 (55)	2.29 (58)	—	—	—	—	—
Rotary Base Mtg.	3LD25 ^②	2.36 (60)	2.52 (64)	2.68 (68)	—	—	—	—	—
Rotary Base Mtg.	3LD27 & 8 ^②	2.80 (71)	3.27 (83)	2.76 (70)	—	—	—	—	—
Rotary Base Mtg.	3LD23 & 4	4.41 (112)	5.83 (148)	4.10 (104)	—	—	—	—	—
Toggle	LBT3040	2.00 (51)	2.72 (69)	2.75 (70)	1.78 (45)	2.16 (55)	1.67 (42)	1.50 (38)	1.22 (31)
Toggle	LBT3060	2.00 (51)	2.72 (69)	2.75 (70)	1.78 (45)	2.16 (55)	1.67 (42)	1.50 (38)	1.22 (31)
Toggle	LBT3080	2.09 (53)	3.32 (84)	2.90 (74)	1.97 (50)	2.29 (58)	1.69 (42)	1.66 (42)	1.66 (42)
Toggle	LBT3100	2.09 (53)	3.32 (84)	2.90 (74)	1.97 (50)	2.29 (58)	1.69 (42)	1.66 (42)	1.66 (42)
Toggle	LBT4040	2.42 (61)	2.72 (69)	2.75 (70)	2.28 (58)	2.16 (55)	1.67 (42)	1.50 (38)	1.22 (31)

① Depth from outside of cover to back of switch.

② Handle front plate dimensions:
3LD 16-32A—2.64 inches square
3LD 63-125—3.55 inches square

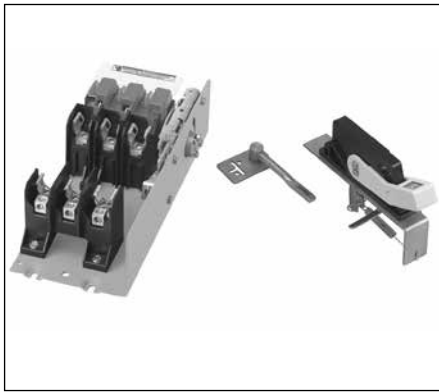
Disconnect Switches

Type VBII (30-600A) with Flange Mounted Operating Handle

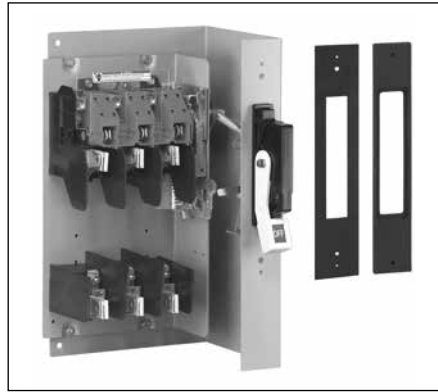
Features and Ordering Information

Features

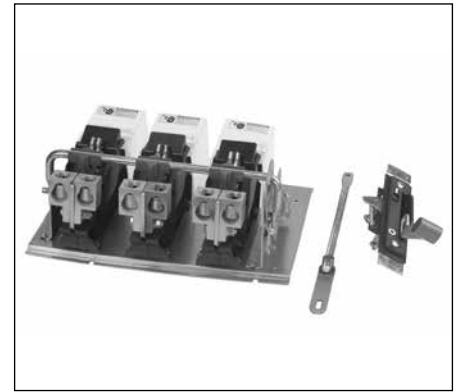
- 30-600A, 600VAC and DC ratings
- 240 & 600V AC switches are CSA certified under file number 154852 and UL recognized under file E121152, Vol. 3.
- Visible blade quick make and break switching action
- Panel and Flange mounted assemblies facilitate installation
- Panel mounted switches are variable depth
- Short circuit rating of 10,000 AIC with class H fuse, and of 200,000 AIC with class R or J fuses.
- Flange mounted handles rated as Type 1, 3R & 12 or 4X are padlockable in the off position with up to (3) padlocks with 5/16 hasps
- Meets UL98 requirements and suitable for both main and branch circuit applications
- A complete line of aux contacts are available
- Load break and horsepower rated
- Defeatable cover interlock standard with all handles
- Meets NFPA79 requirements
- Seismic qualified — complies with the 2010 California Building Code (CBC) — and with the International Building Code (IBC) — Compliance Level SDS = 1.85 g



VBFS361, VBLK1 & VBH1



VBFS363F



VBNFS365, VBLK4 & VBH2

Ordering Information

1. Determine the ratings required (amps, volts, HP, Fusible, NF), the mounting needed (Panel or Flange), and select the appropriate switch.
2. For panel mounted switches with a rigid operating shaft (30-600A), order panel mounted switch, flange mounted operating handle & rigid linkage kit based on depth required.
3. For panel mounted switches with a Max-Flex operator, order panel mounted switch, Max-Flex Handle & Adapter Kit and drive cable.
4. Select accessories if required.

Disconnect Switches

Type VBII (30-600A) with Flange Mounted Operating Handle

Selection

Switches—for Standard 600V Max AC or DC Applications

Switch Ampere Rating	Max. AC Voltage Rating	Catalogue Number	Horsepower Rating, Switches and 3-Phase ^④						600 Volts DC (max) ^⑤
			240 Volts AC		480 Volts AC		600 Volts AC		
			Standard	Max.	Standard	Max.	Standard	Max.	

Fusible Panel Mounted Variable Depth Switches - 3-Pole^⑥

30	240	VBFS321	3	7 ¹ / ₂	—	—	—	—	— ^①
60	240	VBFS322	7 ¹ / ₂	15	—	—	—	—	— ^②
30	600	VBFS361	—	—	5	15	7 ¹ / ₂	20	15 ^③
60	600	VBFS362	—	—	15	30	15	50	30 ^③
100	600	VBFS363	—	—	25	60	30	75	50 ^③
200	600	VBFS364	—	—	50	125	60	150	50
400	600	VBFS365	—	—	100	250	125	350	— ^②
600	600	VBFS366	—	—	150	400	200	500	— ^②

Non-fusible Panel Mounted Variable Depth Switches - 3-Pole^⑥

30	600	VBNFS361	—	10	—	20	—	30	15 ^③
60	600	VBNFS362	—	20	—	50	—	60	30 ^③
100	600	VBNFS363	—	40	—	75	—	100	50 ^③
200	600	VBNFS364	—	60	—	125	—	150	50
400	600	VBNFS365	—	125	—	250	—	300	— ^②
600	600	VBNFS366	—	200	—	400	—	500	— ^②

Fusible Flange Mounted Switches - 3-Pole^⑥

30	240	VBFS321F	3	7 ¹ / ₂	—	—	—	—	— ^①
60	240	VBFS322F	7 ¹ / ₂	15	—	—	—	—	— ^②
30	600	VBFS361F	—	—	5	15	7 ¹ / ₂	20	15 ^③
60	600	VBFS362F	—	—	15	30	15	50	30 ^③
100	600	VBFS363F	—	—	50	60	30	75	50 ^③
200	600	VBFS364F	—	—	100	125	60	150	50

Non-fusible Flange Mounted Switches - 3-Pole^⑥

30	600	VBNFS361F	—	10	—	20	—	30	15 ^③
60	600	VBNFS362F	—	20	—	50	—	60	30 ^③
100	600	VBNFS363F	—	40	—	75	—	100	50 ^③
200	600	VBNFS364F	—	60	—	125	—	150	50

Note: Fusible switches include fuse provisions for Class H Fuses. The load base can be moved to pre-drilled holes for Class J Fuses on all 600V switches. If Class R Fuses are required, add a Class R Fuse Clip Kit.

Cable Kit

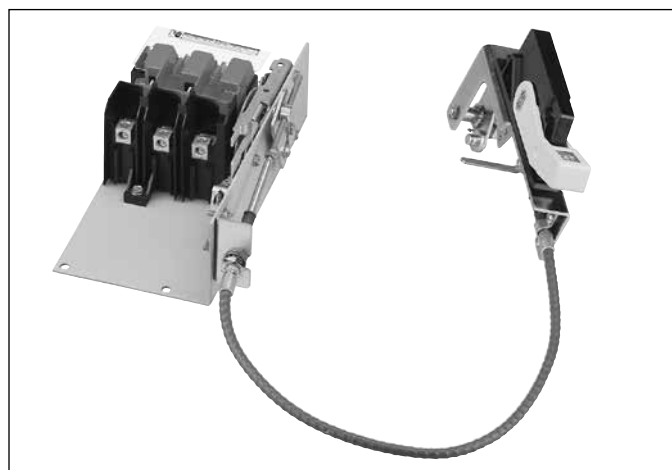
For use with 30-200A panel mounted switches and Max-Flex handle and adapter kit.

Catalogue Number	Description
FHOEC036	36" long drive cable
FHOEC048	48" long drive cable

Max-Flex™ Handle and Adapter Kit

(Type 1, 12, 3R & 4X) Use with 30-200A panel mounted switches and cable kit.

Catalogue Number	Description
VBHM1	30-200A Max-Flex Adapter Kit



VBNFS361, VBHM1 & FHOEC036

① Rated 5 HP at 250V DC.

② Rated 10 HP at 250V DC.

③ 600V DC & 600V DC horsepower rating shown requires (2) poles to be connected in series.

④ Std. - applies when non-time delay fuses are used.
Max. - applies when time delay fuses are used.

⑤ Includes line base, load base, operating mechanism and line and load lugs. Order operating handle and linkage kits from tables on pages 1-42 or 1-40.

⑥ Includes line base, load base, operating mechanism line and load lugs plastic operating handle and required linkage.

⑦ Rated 250V DC max and 50HP at 250V DC.

Disconnect Switches

Type VBII (30-600A) with Flange Mounted Operating Handle

Selection & Accessories

Flange Mounted Operating Handles

For use with Panel Mounted Switches. Plastic handle is included with Flange Mounted Switches as standard.

Catalogue Number	Operating Handle Description
------------------	------------------------------

Plastic Handles

VBH1	30-200A Type 1, 3R & 12
VBH14X	30-200A Type 4X

Metal Handles

VBH112	30-200A Type 1, 3R & 12
VBH14	30-200A Type 4X
VBH2	400A Type 1 & 12
VBH2R	400 & 600A Type 1, 3R & 12
VBH24X	400 & 600A Type 4X

Rigid Linkage Kits

For use with Panel Mounted Switches. Not required for Flange Mounted Switches.

Catalogue Number	Switch Ampere Rating	Enclosure Depth ^① - Inches (mm)	
		Min.	Max.
VBK1	30-200	6.94 ^② (176)	6.94 ^② (176)
VBK2	30-200	6.94 ^② (176)	19.0 (483)
VBK3	400 & 600	9.00 (229)	8.75 (222)
VBK4	400 & 600	9.00 (229)	19.0 (483)



HR612



HT63



HNC612

Class R Fuse Clip Kits

These kits prevent the installation of Class H and K fuses (one kit required per switch).

Class R Fuse Clip Kits

Catalogue Number	Description
HR21	30A, 240V Kit (HD only)
HR612	30A, 600V Kit/60A, 240V Kit
HR62	60A, 600V Kit
HR63	100A Kit
HR64	200A Kit
HR656	400A/600A Kit

Internal Door Latch Kits

For use with enclosures with door mounted latching bar. Required when a flange mounted switch is mounted in a Hoffmann or Rittal enclosure provided with an AB cutout.

Catalogue Number	Description
DKR2	2 point (for use with enclosures less than 40" high)
DKR3	3 point (for use with enclosures 40" or larger in height)

Class T Fuse Adapter Kits

100-600A fusible switches are field convertible to accept Class T fuses. 400-600A switches are field convertible to accept Class T fuses by moving the load base to a pre-drilled T fuse position.

Class T Fuse Adapter Kits^③

Catalogue Number	Description
HT23	100A, 240V Kit
HT63	100A, 600V Kit
HT24	200A, 240V Kit
HT64	200A, 600V Kit

Class J Fuse Provisions

All 30-600A, 600V fusible switches are field convertible to accept Class J fuses by moving the load base to a pre-drilled J fuse position.

Window Kits (Type 1, 12, 3R and 4x)

Allows viewing of visible blades and of indicating fuses through 200A.

Catalogue Number	Description
VBWK1	30A Window Kit
VBWK2	60 & 100A Window Kit
VBWK3	200-600A Window Kit

Neutral Kits^④

Standard Neutral Kits can be field installed in 30-100A switches.

Neutral Kits

Switch Ampere Rating	Kit Catalog Number
30A 600V, 60A 240V	HNC612
60A, 600V & 100A	HNC623

200% Neutral Kits

CSA certified 200% Neutrals are available on 60 & 100A switches. They are typically used with non-linear transformers or where increased neutral ampacity/lug capacity is required.

200% Neutral Kits

Switch Ampere Rating	Kit Catalogue Number	Wire Range Line & Load Lugs (Cu/Al)
60 & 100A	HNC263	(2) #14-1/0 AWG

① Dimensions (min. & max.) from enclosure mounting pan to outside surface of enclosure handle mounting flange.

② 7.12 for 200A switches.

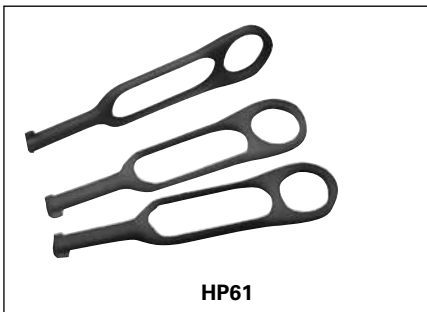
③ One kit per pole required.

Disconnect Switches

Type VBII (30-600A) with Flange Mounted Operating Handle

Accessories

DISCONNECT SWITCHES 1



Auxiliary Contacts

The auxiliary contacts are available in 1 normally open and 1 normally closed or 2 normally open and 2 normally closed configurations. Siemens offers a PLC Auxiliary Switch (30-200A) that has very low resistance for low voltage and current typical in PLC circuits. All auxiliary contacts make after and break before main switch contacts.

Switch Ampere Rating	Aux. Switch Catalogue Number	Kit Ampere Rating			Kit Horsepower Rating		
		125V AC Max.	250V AC Max.	28V DC Max.	125V AC Max.	250V AC Max.	28V DC Max.

With 1 NO & 1 NC Isolated Contacts

30-200	HA161234	10	10	—	1/2	3/4	—
400-600	HA165678	10	10	—	1/2	3/4	—

With 2 NO & 2 NC Isolated Contacts

30-200	HA261234	10	10	7	1/2	3/4	—
400-600	HA265678	10	10	7	1/2	3/4	—

Low Current PLC Type with 1 NO & 1 NC Gold Plated Contacts

30-200	HA361234	10	10	—	1/2	3/4	—
400-600	HA365678	10	10	—	1/2	3/4	—

Fuse Puller Kits

Fuse Puller Kits are field installable in 30-100A Type VBII Heavy Duty Switches (one kit required per 3-pole switch).

Switch Ampere Rating	Fuse Puller Kit Catalogue Number
30	HP61
60	HP62
100	HP63

Copper Lug Kits

All switches are CSA approved to accept field installed copper lug kits.

Switch Ampere Rating	Copper Lug Catalogue Number	Description
30-60	HLC612	(9) Lugs/Kit #14-4 AWG Cu
100	HLC63	(9) Lugs/Kit #14-1/0 AWG Cu
200	HLC64	(9) Lugs/Kit #6 AWG-300 Kcmil Cu
400-600A	HLC65678	(1) Lugs/Kit #1/0 AWG-600 Kcmil Cu

Equipment Ground Kits

Equipment Ground Lug Kits are available for all switches.

Switch Ampere Rating	Catalogue Number	Number of Terminals	Wire Range Per Terminal (Cu/Al)
30-200	HG61234	2	#14-4 AWG
400 & 600	HG656	4	#6 AWG-250 Kcmil

NEW Internal Shield Kits (for fusible switches)

Kits provide a "skirt" that encloses the VBII switch and also a clear plastic inner door to prevent accidental contact with live parts. Test probe holes are provided and fuses can be replaced without removal of kit.

Switch Ampere Rating	Shield Kit Catalogue Number
30A	HSK61
60-100A	HSK623
200A	HSK64

Disconnect Switches

Type VBII (30-600A) with Flange Mounted Operating Handle

Lug Wire Ranges & Dimensions

Lugs

30 & 60A switches are suitable for use with 60° or 75°C wire. 100–600A switches are suitable for use with 75°C rated wire. All switches are supplied with factory installed line and load lugs.

Wire Ranges

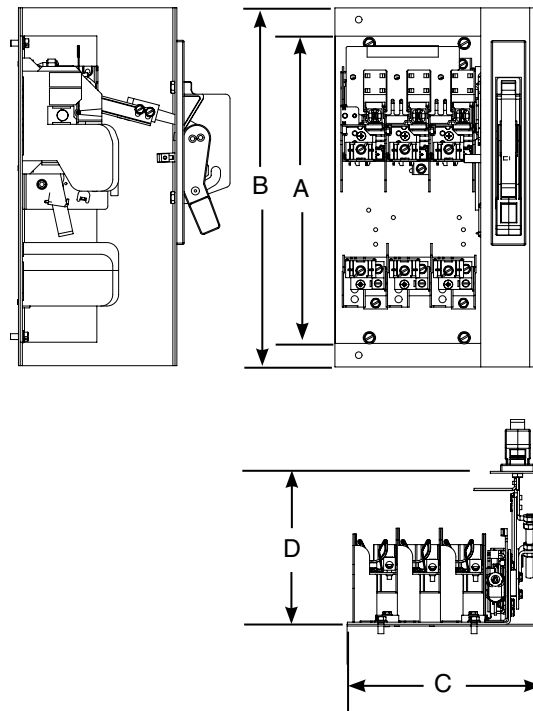
(Line, Load and Standard Neutral)

Switch Ampere Rating	Lug Wire Range
30	#14-2 AWG (Cu/Al)
60	#14-2 AWG (Cu/Al)
100	#14-1/0 AWG (Cu/Al)
200	#6 AWG-300 Kcmil (Cu/Al)
400	(1) 1/0 AWG-750 Kcmil (Cu/Al) or (2) 1/0 AWG-250 Kcmil (Cu/Al)
600	(2) 1/0 AWG-750 Kcmil (Cu/Al) or (4) 1/0 AWG-250 Kcmil (Cu/Al)

Approximate Dimensions

Mounting bracket shown with handle installed is supplied with Flange Mounted Switches only. All Panel Mounted Switches have a “L” shaped mounting pan with a line base, load base (if fusible) and mechanism installed.

Catalogue Number	Dimensions - Inches (mm)				
	A	B	C [ⓐ]	D (min)	D (max)
Fusible, Panel Mounted					
VBFS321	11.88 (302)	N/A	7.47 (189)	6.94 (176)	19 (483)
VBFS322	13.12 (333)	N/A	8.50 (216)	6.94 (176)	19 (483)
VBFS361	11.88 (302)	N/A	7.47 (189)	6.94 (176)	19 (483)
VBFS362	13.12 (333)	N/A	8.50 (216)	6.94 (176)	19 (483)
VBFS363	13.12 (333)	N/A	8.50 (216)	6.94 (176)	19 (483)
VBFS364	17 (432)	N/A	12.33 (313)	7.12 (181)	19 (483)
VBFS365	26.25 (667)	N/A	16.50 (419)	8.63 (219)	19 (483)
VBFS366	26.25 (667)	N/A	16.50 (419)	8.63 (219)	19 (483)
Non-fusible, Panel Mounted					
VBNFS361	9.79 (249)	N/A	7.47 (189)	6.94 (176)	19 (483)
VBNFS362	9.79 (249)	N/A	8.50 (216)	6.94 (176)	19 (483)
VBNFS363	9.79 (249)	N/A	8.50 (216)	6.94 (176)	19 (483)
VBNFS364	10.77 (274)	N/A	12.33 (313)	7.12 (181)	19 (483)
VBNFS365	13 (330)	N/A	16.50 (419)	8.63 (219)	19 (483)
VBNFS366	13 (330)	N/A	16.50 (419)	8.63 (219)	19 (483)
Fusible, Flange Mounted					
VBFS321F	11.88 (302)	14.08 (358)	7.47 (189)	7.27 (185)	N/A
VBFS322F	13.12 (333)	15.83 (402)	8.85 (225)	7.27 (185)	N/A
VBFS361F	11.88 (302)	14.08 (358)	7.47 (189)	7.27 (185)	N/A
VBFS362F	13.12 (333)	15.83 (402)	8.85 (225)	7.27 (185)	N/A
VBFS363F	13.12 (333)	15.83 (402)	8.85 (225)	7.27 (185)	N/A
VBFS364F	17 (432)	18.20 (462)	12.68 (322)	7.57 (192)	N/A
Non-fusible, Flange Mounted					
VBNFS361F	9.79 (249)	11.78 (299)	7.47 (189)	7.27 (185)	N/A
VBNFS362F	9.79 (249)	11.78 (299)	8.85 (225)	7.27 (185)	N/A
VBNFS363F	9.79 (249)	11.78 (299)	8.85 (225)	7.27 (185)	N/A
VBNFS364F	10.77 (274)	11.97 (304)	12.68 (322)	7.57 (192)	N/A



[ⓐ] Dimension C for panel mounted switches indicates the minimum width from the left hand edge of the switch mounting pan to the right hand inside surface of the enclosure.

Disconnect Switches

Type MCS (30-200A) — Switches, Fuse and No Fuse Kits

Selection

DISCONNECT SWITCHES 1

Features

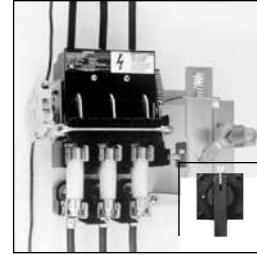
- 30, 60, 100 and 200 Ampere Switches
- CSA Certified under file #84625 and UL Recognized under file #E121152
- Simple Mounting — with an integral switch and over center mechanism
- Horsepower & load break rated
- Compact Size
- Visible Blade Contacts
- Rugged Construction — with a short circuit current rating of 10,000 amps with Class H or 200,000 amps at 600V maximum AC, when fused with Class R or Class J fuses
- Available with three operator handle options, allowing flexible placement of switch
- Field Installable Auxiliary Contacts
- Flexible Fuse Class Configurations
- Flange mounted handles meet NFPA79 requirements



Type MCS Disconnect Switch with Max-Flex™ handle operator



Type MCS Disconnect Switch with fixed-depth, flange-mounted handle



Type MCS Disconnect Switch with rotary handle

Ordering Information

- Select the basic switch size you need (30, 60, 100 or 200 ampere).
- Check the switch selected against the maximum horsepower rating required for our application. "L" or "R" suffix on switch catalogue numbers denotes left or right-handed mechanism drive.
- Choose either fuse or no fuse kit from chart below.
- Check "Minimum Dimensions" on page 1-47 for installation space requirements.
- Select from the list of handle operators, the type which best suits your application. Handle operators can be selected from the next page.

Basic Switches

Switch Ampere Rating	Maximum Voltage Rating	Catalogue Number Right Hand	Catalogue Number Left Hand	Maximum Horsepower Rating, 3 Phase ^④						250 Volts DC (max) ^⑤
				240 Volts AC		480 Volts AC		600 Volts AC		
				Standard Fuse	Time Delay Fuse	Standard Fuse	Time Delay Fuse	Standard Fuse	Time Delay Fuse	
30	600	MCS603R	MCS603L	3	7 ^{1/2}	5	15	7 ^{1/2}	20	5
60	600	MCS606R	MCS606L	7 ^{1/2}	15	15	30	15	50	10
100	600	MCS610R	MCS610L	15	30	25	60	30	75	20
200	600	MCS620R	MCS620L	25	60	50	125	60	150	40

Fuse and No Fuse Kits (Includes load base plus line and load fuse clips)^①

Basic Switch Ampere Rating	Switch Catalogue Number	Kit Description	No Fuse Kits		For Class H	For Class J	For Class R	Lug Wire Size
			Standard	Cu Only ^②	Catalogue Number ^①	Catalogue Number ^①	Catalogue Number ^①	
			Catalogue Number	Catalogue Number				
30	MCS603R or MCS603L	No Fuse 30A, 250V 30A, 600V 60A, 250V 60A, 600V	TMK606	—	—	—	—	#14 to #4 AWG Cu/Al
			—	—	FCK203	—	FCRK203	
			—	—	FCK206	FCJK603	FCRK206	
			—	—	FCK206	—	FCRK206	
			—	—	FCK606	FCJK606	FCRK606	
60	MCS606R or MCS606L	No Fuse 60A, 250V 60A, 600V 100A, 250V 100A, 600V	TMK606	—	—	—	—	#14 to #4 AWG Cu/Al
			—	—	FCK206	—	FCRK206	
			—	—	FCK606	FCJK606	FCRK606	
			—	—	OFCK661	—	③	
			—	—	OFCK661	OFCK661	③	
100	MCS610R or MCS610L	No Fuse 100A, 250V 100A, 600V 200A, 250V 200A, 600V	TMK610	TMK610C	—	—	—	#14 to #2/0 AWG Cu/Al
			—	—	FCK610	FCK610	③	
			—	—	FCK610	—	③	
			—	—	OFCK620	OFCK620	③	
			—	—	OFCK620	OFCK620	③	
200	MCS620R or MCS620L	No Fuse 200A, 250V 200A, 600V	TMK620	TMK620C	—	—	—	#6 to 300 kcmil Cu/Al
			—	—	FCK620	FCK620	③	
			—	—	FCK620	FCK620	③	

① For "copper only" connectors, order as follows:
Fusible—order standard switch, standard fuse kit and copper only no fuse kit.

Non-Fusible—order standard switch and copper only no fuse kit.
② Includes both line and load lugs.

③ For Class R fuses order Class H kit from this table and the Class R conversion kit from the next page.
④ HP ratings for time delay fuses and for 250V DC also apply to Non-fusible switches.

Disconnect Switches

Type MCS (30-200A)

Accessories

Auxiliary Switch Kits

Switch Catalogue Number	Contact Arrangement	
	1 NO/1 NC Catalogue Number	2 NO/2 NC Catalogue Number
MCS603R	MCSAKR136	MCSAKR236
MCS603L	MCSAKL136	MCSAKL236
MCS606R	MCSAKR136	MCSAKR236
MCS606L	MCSAKL136	MCSAKL236
MCS610R	MCSAK116	MCSAK216
MCS610L	MCSAK116	MCSAK216
MCS620R	MCSAK126	MCSAK226
MCS620L	MCSAK126	MCSAK226

Class R Fuse Conversion Kits

Fuse Clip Rating	Catalogue Number
100A, 600V	SSRK33
200A, 600V	SSRK34

Fuse Ejector Kits

Switch Catalogue Number	Fuse Ejector Kit Catalogue Number
MCS610	FE100
MCS620	FE200

Handle Operators

Fixed Depth, Flange Mounted, Types 1, 3, 3R, 12^{①②}

Switch Catalogue Number	Complete Handle Mechanism Catalogue Number	Handle Only Catalogue Number	Switch Operator Only Catalogue Number
MCS603R	FDFS06R	FDH10	FDS06R
MCS603L	FDFS06L	FDH10	FDS06L
MCS606R	FDFS06R	FDH10	FDS06R
MCS606L	FDFS06L	FDH10	FDS06L
MCS610R	FDFS06R	FDH10	FDS06R
MCS610L	FDFS06L	FDH10	FDS06L
MCS620R	FDFS20R	FDH20	FDS20R
MCS620L	FDFS20L	FDH20	FDS20L

Variable Depth, Flange Mounted Max-Flex™, Types 1, 3, 3R, 12^②

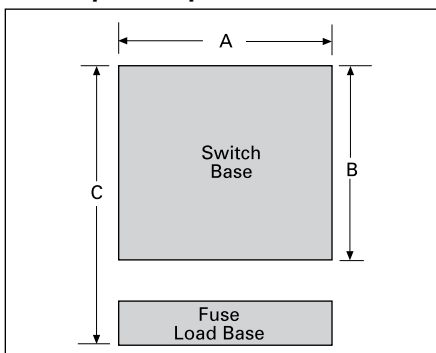
Switch Catalogue Number	Complete Handle Mechanism Catalogue Number	Handle Only Catalogue Number	Switch Operator Only Catalogue Number	Cable Only ^③ Catalogue Number
MCS603R	FHOS06036R	FHOHS	FHOS06R	FHOEC036
MCS603L	FHOS06036L	FHOHS	FHOS06L	FHOEC036
MCS606R	FHOS06036R	FHOHS	FHOS06R	FHOEC036
MCS606L	FHOS06036L	FHOHS	FHOS06L	FHOEC036
MCS610R	FHOS06036R	FHOHS	FHOS06R	FHOEC036
MCS610L	FHOS06036L	FHOHS	FHOS06L	FHOEC036
MCS620R	FHOS20036R	FHOHS	FHOS20R	FHOJC036
MCS620L	FHOS20036L	FHOHS	FHOS20L	FHOJC036

Variable Depth Rotary, Through-The-Door-Mounted, Types 1, 12^{④⑤}

Variable Depth				Shaft Only Variable Depth
MCS603R	CRHOS06VD	CRHOH	RHOS06	RHOSVD
MCS606R	CRHOS06VD	CRHOH	RHOS06	RHOSVD
MCS610R	CRHOS06VD	CRHOH	RHOS06	RHOSVD
MCS620R	CRHOS20VD	RHOH	RHOS20	RHOSVD

MCS Disconnect Switch Panel Space Requirements

Panel Space Requirements



Minimum Dimensions - Inches (mm)

Switch Catalogue Number	Size	"A"	"B"	"C"	Fuse Class
MCS603	30A/240V	6.13 (156)	5.52 (140)	8.11 (206)	H, K, R
	30A/600V	6.13 (156)	5.52 (140)	10.11 (257)	H, K, R
	30A/240V	6.13 (156)	5.52 (140)	8.48 (215)	J
MCS606	60A/240V	6.13 (156)	5.52 (140)	7.86 (200)	H, K, R
	60A/600V	6.13 (156)	5.52 (140)	10.38 (264)	H, K, R
	60A/240V	6.13 (156)	5.52 (140)	8.35 (212)	J
MCS610	100A/240V	7.38 (188)	7.59 (193)	11.85 (301)	H, K, R
	100A/600V	7.38 (188)	7.59 (193)	13.85 (352)	H, K, R
	100A/240V	7.38 (188)	7.59 (193)	10.6 (269)	J
MCS620	200A/240V	9.17 (233)	9.00 (229)	14.7 (273)	H, K, R
	200A/600V	9.17 (233)	9.00 (229)	17.2 (437)	H, K, R
	200A/240V	9.17 (233)	9.00 (229)	13.32 (338)	J

"A" – Dimension is measured from each cross bail pin.

"B" – Dimension is measured from line side barrier to load side barrier.

"C" – Dimension is measured from line side terminal of switch to load side terminal of fuse load base.

① For Type 4 and 4X applications, order handle only Catalogue Number 100A - FDH104 200A - FDH204

② For Type 4 and 4X applications, order handle only Catalogue Number FHOHS4

③ Standard cable length is 36 inches (914 mm). Alternate lengths are available as follows:

Length	Amps	Cat. No.
48" (1219mm)	30-100	FHOEC048
60" (1524mm)	30-100	FHOEC060
48" (1219mm)	200	FHOJC048
60" (1524mm)	200	FHOJC060

④ For Type 4 and 4X applications, order handle only Catalogue Number RHOH4

⑤ For Type 3 and 3R applications, order handle only Catalogue Number RHOH

⑥ Min. enclosure depth from mounting pan to handle mounting surfaces: 30-100A: 6.44" (164mm) 200A: 10.93" (278mm)

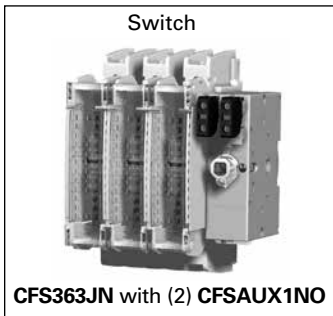
Disconnect Switches

Type CFS Compact Fusible Switches

Features and Ordering Information

Features

- 30–400A ratings
- CSA Certified under file #222227 and UL Listed under file #E121152 & E68312
- IEC 60 947-3 Certified & CE marked
- Door mounted rotary handles with defeatable cover interlock
- Meets CSA requirements for both main and branch circuit applications
- Compact size
- 100KA with Class CC fuses or up to 200KA with Class J fuses
- Load break and horsepower rated
- Quick make and break operation
- All handles are padlockable with up to (3) padlocks with 5/16" hasps in the OFF position
- Catalogue number **CFS361C5**, **CFS361J5** & **CNFS361** can be DIN-rail mounted and can be either front or side operated with standard rotary handles
- Handles are available in Type 1, 3R, 4/4X & 12 ratings
- NFPA 79 field installed kits are available



Ordering Information

1. Select the panel mounted switch required based on Ampere, HP and AIC requirements. Switches with a right hand mechanism are standard. 30-100A switches with a left hand mechanism are available.
2. Select handle based on environmental rating required.
3. Select operating shaft (200 or 400mm in length). For enclosure depths of 9.0" or less from panel mounting surface to inside of door use 200mm long shafts. For deeper enclosures use 400mm long shafts. 30A 65kA switches can be used in 10" deep enclosures (panel to inside of door) with 200mm shaft and **CFSH5N** handles.
4. Line & load lugs are provided as standard on 30–100A switches. Terminal kits are available for 200–800A switches if needed.
5. Auxiliary contacts are available if needed as follows:
 - A. 30A switch **CFS361C5** and non-fusible 30A switch **CNFS361** will accept up to (4) aux contacts.
 - B. 30A switch **CFS361J5** will accept up to (2) aux contacts without an aux contact holder. If more than (2) aux contacts are required order aux contacts PLUS aux contact holder kit **CFSAuxH1**. All other switches will accept up to (4) aux contacts.
6. If non-fusible switch is required order a shorting bar for 60-600A switches or catalogue number **CNFS361** for 30A.
7. 30–100A switches are designed to prevent inadvertent contact with live parts and shields are not required. 200–800A switches are supplied as standard with line shields and terminal shroud kits are available for the load side.

Note: Be sure to check shaft and handle compatibility with the switch selected by using the information provided in the selection tables.

Disconnect Switches

Type CFS Compact Fusible Switches

Fusible Switches, 3-Pole 600V AC Max, 250V DC Max^⑤

Switch Ampere Rating	Catalogue Number	Fuse Provisions Provided	Max Horsepower Ratings				AC Short Circuit Rating
			240V 3Ø AC	480V 3Ø AC	600V 3Ø AC	250V DC	

Standard—with Right Hand Mounted Mechanism

30 ^①	CFS361C5	Class CC	7.5	15	20	5 ^③	100kA
	CFS361J5	Class J	7.5	15	20	5 ^③	100kA
	CFS361JN	Class J	7.5	15	20	5 ^③	200kA
	CNFS361 ^⑥	None	7.5	15	20	5 ^③	100kA
60 ^①	CFS362JN1	Class J	15	30	50	10 ^③	100kA
	CFS362JN		15	30	50	10 ^③	200kA
100 ^①	CFS363JN	Class J	30	60	75	20 ^③	200kA
200 ^②	CFS364JN	Class J	60	125	150	40 ^③	200kA
400 ^②	CFS365J	Class J	125	250	350	50 ^③	200kA
	CFS365JN		125	250	350	50 ^③	200kA
600 ^②	CFS366J ^⑦	Class J	200	400	500	—	200kA
800 ^②	CFS367L ^⑧	Class J	200	400	500	—	200kA

Optional—with Left Hand Mounted Mechanism

30 ^①	⑫	Class J	7.5	15	20	5 ^③	200kA
60 ^①	⑫		15	30	50	10 ^③	
100 ^①	⑫		30	60	75	20 ^③	

Operating Shafts for 30–400A switches^⑤

Catalogue Number	Shaft Length In. (mm)	Switch & Handle Compatibility
CFSS5200N	7.9 (200)	5mm x 5mm for use with CFS361C5, CFS361J5 & CNFS361 switches & with "CFSH5" handles only
CFSS5400N	15.7 (400)	5mm x 5mm for use with all "CFSH5" handles only
CFSS5200HN	7.9 (200)	5mm x 5mm for use with all "CFSH10" handles & with CFS361C5, CFS361J5 & CNFS361 switches only
CFSS5400HN	15.7 (400)	5mm x 5mm for use with all "CFSH10" handles & with CFS361C5, CFS361J5 & CNFS361 switches only
CFSS10200HN	7.9 (200)	10mm x 10mm for use with all "CFSH10" handles & with all 30–400A switches except CFS361C5, CFS361J5 & CNFS361
CFSS10400HN	15.7 (400)	10mm x 10mm for use with all "CFSH10" handles & with all 30–400A switches except CFS361C5, CFS361J5 & CNFS361

Rotary Operating Handles—Door Mounted (for use with 65kA CFS361C5, CFS361J5 & CNFS361 switches only)^⑥

Catalogue Number	Colour	Type	Operating Shaft Compatibility
CFSH5B12N	Blue & Black	1, 3R & 12	CFSS5200N or CFSS5400N
CFSH5R12N	Yellow & Red		
CFSH5B4N	Blue & Black	1, 3R, 12 & 4/4X	CFSS5200N or CFSS5400N
CFSH5R4N	Yellow & Red		

Rotary Operating Handles—Door Mounted (for use with CFSS5200HN, CFSS5400HN, CFSS10200HN & CFSS10400HN)

Catalogue Number	Colour	Description
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Type 1, 3R & 12^⑦

CFSH10B12N	Blue & Black	Heavy duty pistol grip
CFSH10R12N	Yellow & Red	(2.75" (70mm) long for use with 30A switches & CFS362JN1)
CFSH10BL12N	Blue & Black	Heavy duty pistol grip (4.92" (125mm) long for 30–400A switches)
CFSH10RL12N	Yellow & Red	

Type 1, 3R, 4/4X & 12^⑦

CFSH10B4N	Blue & Black	Heavy duty pistol grip
CFSH10R4N	Yellow & Red	(2.75" (70mm) long for use with 30A switches & CFS362JN1)
CFSH10BL4N	Blue & Black	Heavy duty pistol grip (4.92" (125mm) long for 30–400A switches)
CFSH10RL4N	Yellow & Red	

① Line and load lugs included.

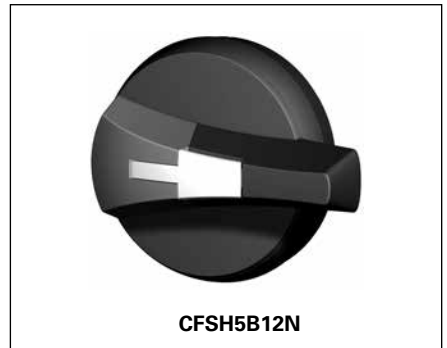
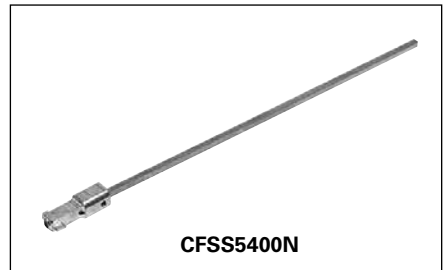
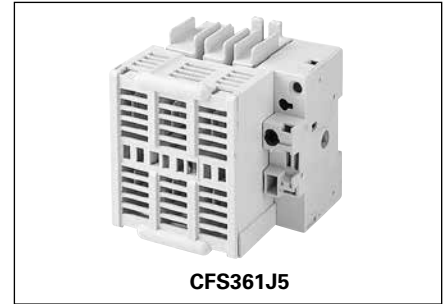
② Line and load lugs are not included. Order from table on next page if required.

③ DC HP rating shown requires (2) poles to be connected in series.

④ DC HP rating shown requires (3) poles to be connected in series.

⑤ Catalogue numbers CFS361C5, CFS361J5 & CNFS361 accept 5mm x 5mm operating shafts. All other 30–400A switches accept 10mm x 10mm operating shafts.

Switch and Handle Selection



1
DISCONNECT
SWITCHES

⑥ Compact pistol grip design (2.75" long) with defeatable cover interlock. Cover can be opened when handle is padlocked in the OFF position.

⑦ Defeatable cover interlock provided. Cover cannot be opened when handle is padlocked in the OFF position.

⑧ Catalogue number CNFS361 is a non-fusible switch.

⑨ 4-Pole 600 & 800A switches, CFS466J & CFS467L are also available.

⑩ CFS366J and CFS367L are rated 250 & 600V DC when (2) poles are connected in series.

⑪ CNFS361 is rated 65kA when protected by Class J or CC 30A max. fuses.

⑫ Contact sales office for ordering information

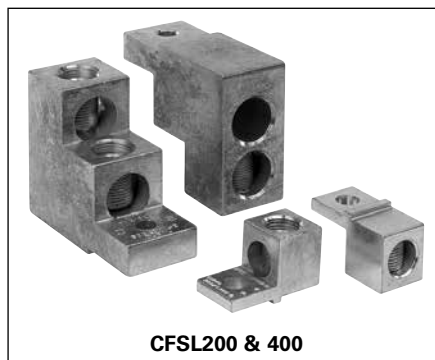
Disconnect Switches

Type CFS Compact Fusible Switches

Selection and Accessories

600 & 800A Rotary Operating Handles—Door Mounted 8.27" (210 mm) long[Ⓞ]

Catalogue Number	Colour	CSA Type
CFSH12BL12	Blue & Black	1, 3R & 12
CFSH12RL12	Yellow & Red	1, 3R & 12
CFSH12BL4	Blue & Black	1, 3R, 12 & 4/4X
CFSH12RL4	Yellow & Red	1, 3R, 12 & 4/4X



CFSL200 & 400

600 & 800A Operating Shafts (Cross section 12X12 mm)

Catalogue Number	Shaft Length In. (mm)	Enclosure Depth (switch mounting surface to door OD)
CFSS12200H	12.59 (320)	10.43 – 16.68 inches (265-424 mm)
CFSS12400H	15.75 (400)	10.43 – 19.84 inches (265-504 mm)



CFS AUX 1NC

Type CFS Fusible Switch Accessories

Catalogue Number	Description
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Terminals^①

CFSL200	200A Lug Kit (6 lugs per kit) (1)#6-3/0
CFSL400N	400A Lug Kit (6 lugs per kit) (1)#2-600kcmil (for CFS365JN only)
CFSL400	CFS365J & 600-800A Lug Kit (6 lugs per kit) (2)#2-600kcmil

Shorting Bars (no fuse kits)

CFSSB60	60A Shorting Bar Kit (3 links per kit)
CFSSB100	100A Shorting Bar Kit (3 links per kit)
CFSSB200	200A Shorting Bar Kit (3 links per kit)
CFSSB400	400A Shorting Bar Kit (3 links per kit)
CFSSB680	600 & 800A Shorting Bar Kit (1 link per kit)

Auxiliary Contacts (NEMA ratings AC A600 DC N600)

CFS AUX H1 [Ⓞ]	Aux Contact Holder (CFS361J5, CFS361C5 & CNFS361)
CFS AUX H2	Aux contact holder required for CFS365J
CFS AUX 1NO	Aux Contact 1 NO (30-800A Sws)
CFS AUX 1NC	Aux Contact 1 NC (30-800A Sws)
CFS11AUX	1NO, 1NC Aux Contact Kit for use with CFSNFPA2N & 3N (side mount)
CFS22AUX	2NO, 2NC Aux Contact Kit for use with CFSNFPA2N & 3N (side mount)



CFS5B100 - 400

Terminal Shrouds (line or load)

CFSTS200N [Ⓞ]	200A Shroud Kit (Line or load 3-Pole kit)
CFSTS400N [Ⓞ]	400A Shroud Kit (Line or load 3-Pole kit)
CFSTS680 [Ⓞ]	600/800A 3-Pole Shroud Kit
CFSTS6804 [Ⓞ]	600/800A 4-Pole Shroud Kit

30A Compact Switch Kits

CFSPLK	Shaft Padlocking Kit for 30A Compact Switch when door is open [Ⓞ]
CFSH5CDM	Direct Mount Handle Kit for CFS361C5
CFSH5JDM	Direct Mount Handle Kit for CFS361J5

NFPA 79 Kits

Kits provide an operating shaft suitable for use with all heavy duty handles (not for use with CFSH5 handles). Kits also provide an internal operating handle & an internal OFF padlocking provision.

CFSNFPA1 [Ⓞ]	For use with CFS361C5, CFS361J5 & CNFS361
CFSNFPA2N [Ⓞ]	For use with CFS361JN, CFS361CN, CFS362JN & CFS363JN
CFSNFPA2	For use with CFS365J only (requires previous handle design)
CFSNFPA3N	For use with CFS364JN & CFS365JN

Note: CFSNFPA2N & CFSNFPA3N cannot be used in combination with CFS AUX 1NO or CFS AUX 1NC auxiliary contacts.

^① Supplied as standard on 30-100A switches.

[Ⓞ] CFS361C5 and CNFS361 will accept (4) aux contacts without an aux contact holder. CFS361J5 will accept (2) aux contacts without an aux contact holder.

[Ⓞ] Supplied as standard on all but 30A compact switches.

[Ⓞ] 12.6 inch (320 mm) long operating shaft included.

[Ⓞ] 11.3 inch (288 mm) long operating shaft included.

[Ⓞ] Line side terminal shrouds supplied with switch.

[Ⓞ] Defeatable cover interlock provided. Cover cannot be opened when the handle is padlocked in the OFF position.

Disconnect Switches

Type CFS Compact Fusible Switches

Dimensions and Technical Characteristics

CSA & UL Technical Characteristics and Panel Space Requirements

Catalogue Number	Amps	Fuse Class	AC Short Circuit Rating	Electrical Endurance	Mechanical Endurance	Panel Space Requirements – Inches (mm)		
						Height	Width	Depth ^①
CFS361C5	30	CC	100kA	6000	10000	4.56 (116)	3.78 (96)	6.00 (152)
CFS361J5	30	J	100kA	6000	10000	4.56 (116)	4.15 (96)	6.00 (152)
CFS361JN	30	J	200kA	6000	10000	5.35 (136)	5.89 (150)	6.00 (152)
CFS361JL	30	J	200kA	6000	10000	5.88 (149)	6.75 (171)	7.00 (178)
CNFS361	30	None	100kA ^②	6000	10000	4.56 (116)	3.78 (96)	6.00 (152)
CFS362JN1	60	J	100kA	6000	10000	5.35 (136)	5.89 (150)	6.00 (152)
CFS362JN	60	J	200kA	6000	10000	7.32 (186)	5.89 (150)	6.00 (152)
CFS362JL	60	J	200kA	6000	10000	5.88 (149)	6.75 (171)	7.00 (178)
CFS363JN	100	J	200kA	6000	10000	7.32 (186)	5.89 (150)	6.00 (152)
CFS363JL	100	J	200kA	6000	10000	7.19 (183)	8.25 (210)	7.00 (178)
CFS364JN	200	J	200kA	6000	8000	11.46 (291)	7.72 (196)	6.00 (152)
CFS365J	400	J	200kA	1000	6000	14.94 (363)	11.94 (303)	8.00 (203)
CFS365JN	400	J	200kA	1000	6000	15.35 (390)	10.19 (259)	8.00 (203)
CFS366J	600	J	200kA	1000	5000	11.81 (300)	14.33 (364)	11 (280)
CFS466J	600	J	200kA	1000	5000	11.81 (300)	18.03 (458)	11 (280)
CFS367L	800	L	200kA	500	3500	11.81 (300)	14.33 (364)	11 (280)
CFS467L	800	L	200kA	500	3500	11.81 (300)	18.03 (458)	11 (280)

1
DISCONNECT
SWITCHES

Wire Ranges Line & Load Lugs

Switch Ampere Rating	Mechanical Wire Range of Lug (75°C)
30	#14–10 Cu
60	#10–3 Cu
100	#12–1 Cu
200	#6–3/0 Cu/Al
400 CFS365J	(2) #2–600 kcmil Cu/Al
400	(1)#2–600 kcmil Cu/Al
600	(2)#2–600 kcmil Cu/Al
800	(2)#2–600 kcmil Cu/Al

① Minimum dimension from mounting surface to inside of cover. Dimensions shown can be decreased if aux contacts are not required.

② CNFS361 is rated 100kA when protected by 30A max. Class J or CC fuses.

Disconnect Switches

Type HCP Switchboard Units, Accessories

Selection

DISCONNECT SWITCHES 1

Features

- CSA certified under file #24563 and UL Listed under file #E6849 Vol 1, Sect. 8
- 400-1200A ratings
- Visible contacts
- Field installable shunt trip and auxiliary switch accessory kits
- Installs in existing Siemens switchboards
- Suitable for use on systems with up to 200,000A available fault current, RMS symmetrical when equipped with Class J or Class L fuses
- Group mounts with other 30A through 600A switches, and 100 through 1200 amp frame breakers
- Allows 800A and 1200A switches in standard 38" wide distribution sections in either main or branch configurations
- 16 1/4" mounting height is the smallest 1200A design in the industry, allowing up to 4 units in one vertical section
- Field reversible horizontal mounting design for left or right hand cabling
- Handle can be padlocked in the OFF position with up to three padlocks with 5/16" hasps. A cover padlocking provision is also supplied



3-Pole, Horizontal Mount ①

Catalogue Number	Maximum Ampere Rating	Maximum AC Voltage Rating ^②	Fuse Class	Dimensions (inches*)			Horsepower Rating						
							240V		480V		600V		250V DC
				H	W	D	Std	Max	Std	Max	Std	Max	
HCP367HJ400	400	600	J	16.25	17.22	7.38	50	125	100	250	125	350	40
HCP367HJ600	600	600	J	16.25	17.22	7.38	75	200	150	400	200	400	40
HCP327HT	800	240	T	16.25	17.22	7.38	100	250	—	—	—	—	50
HCP367H	800	600	L	16.25	17.22	7.38	100	250	200	500	250	500	50
HCP328HT	1200	240	T	16.25	17.22	7.38	100	250	—	—	—	—	50
HCP368H	1200	600	L	16.25	17.22	7.38	100	250	200	500	250	500	50

3-Pole, Vertical Mount

HCP367VJ400	400	600	J	17.00	16.25	7.38	50	125	100	250	125	350	40
HCP367VJ600▲	600	600	J	17.00	16.25	7.38	75	200	150	400	200	400	40
HCP327VT	800	240	T	17.00	16.25	7.38	100	250	—	—	—	—	50
HCP367V	800	600	L	17.00	16.25	7.38	100	250	200	500	250	500	50
HCP328VT	1200	240	T	17.00	16.25	7.38	100	250	—	—	—	—	50
HCP368V	1200	600	L	17.00	16.25	7.38	100	250	200	500	250	500	50

Accessories

Terminal Connectors (one lug per kit)

Ampere Rating	Catalogue Number	Connector Wire Range
400-600A	TA2K500	(2) #1 AWG-500 kcmil (Cu or Al)
400-600A	TC2K500	(2) #1 AWG-500 kcmil (Cu only)
400-800A	TA3K500	(3) #1 AWG-500 kcmil (Cu or Al)
400-800A	TC3K350	(3) #1 AWG-350 kcmil (Cu only)
800-1200A	TA4H500	(4) #2 AWG-500 kcmil (Cu or Al)
800-1200A	TA3H750	(3) 250-750 kcmil (Cu or Al)

Auxiliary Switch Kits

Contact Ampere Rating	Maximum Voltage		Switch Mounting	Contacts	Catalogue Number
	AC	DC			
15A	480	125	Left Pole	1NO/1NC	A01HCPL4▲
15A	480	125	Right Pole	1NO/1NC	A01HCPR4

Shunt Trip Kit

Control Voltage		Catalogue Number
AC	DC	
120	—	HCPST120
240	—	HCPST240▲
277	—	HCPST277
480	—	HCPST480▲

*For inches / millimeters conversion, multiply inches by 25.4.

Switchboard Connection Strap Kit ①

Switch Ampere Rating	Catalogue Number
400-1200A	F6162DCAN

▲ Built to order. Allow 6-8 weeks for delivery.
① For horizontal mounting only in either 38" wide min switchboards or S5/F2 power panelboards.

T Fuse Adapter Kits (one per pole)

Catalogue Number	Description
TFAK72	800A, 300V AC
TFAK75	800A, 600V AC
TFAK82	1200A, 300V AC

HCP Replacement Handle Kit

(For use on all HCP switches)

SW Ampere Rating	Catalogue Number
400-1200A	HCPHK

Compression Lug Adapter Kit

The use of this kit provides for the mounting of up to four lugs per phase. Each kit accepts lugs with (2) 3/8" diameter mounting holes on 1" centers. One kit per pole line or load is required. Lugs are not provided.

Ampere Rating	Catalog Number
400-1200A	HCPCLP

② Both 240 and 600V AC switches are also rated 250V DC max.

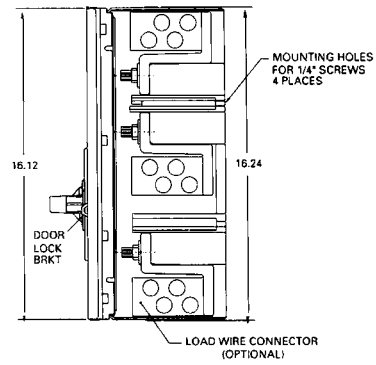
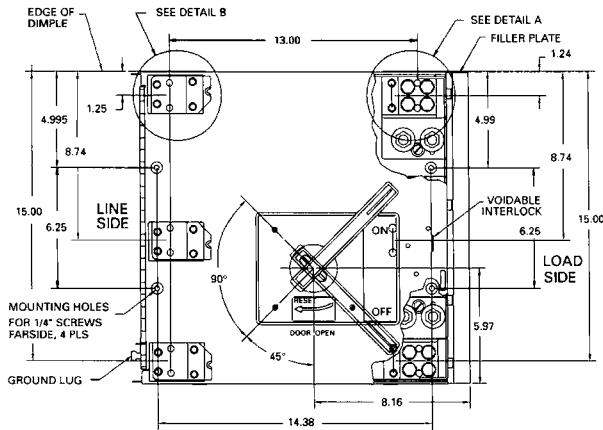
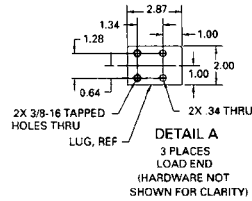
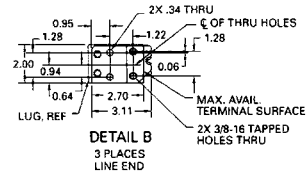
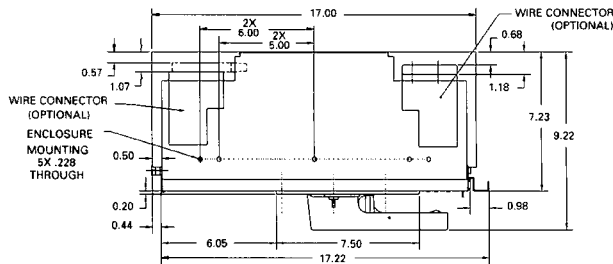
Disconnect Switches

Type HCP Switchboard Units

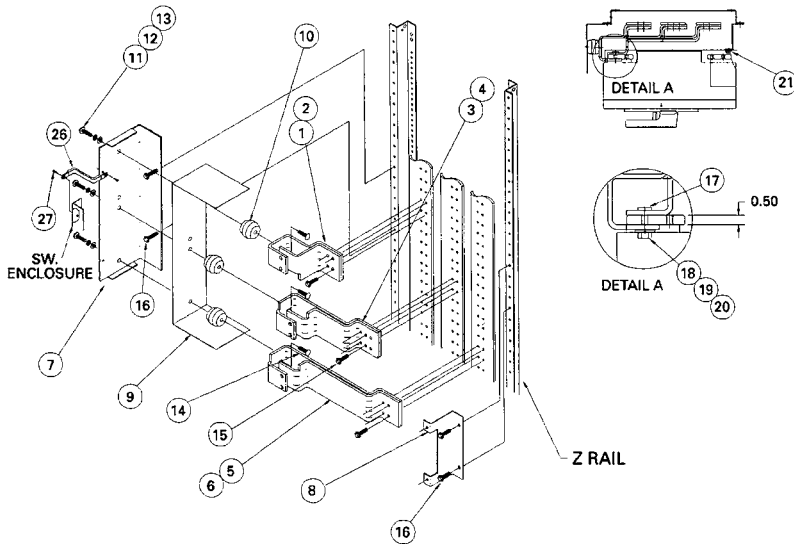
Dimensions

1
DISCONNECT
SWITCHES

Horizontal Mount Drawing



Group Mounting Assembly (Horizontal Mount Only)



Note: Right exit shown, rotate 180° for left exit
Note: Items 26 & 27 are used to ground the switch enclosure (Route bonding wire along flange)

Item	Parts Supplied in Connection Strap Kit Cat. No. F6162D	Qty.
1-2	A/C Ø Strap (Short)	1ea.
3-4	B Ø Strap	1ea.
5-6	A/C Ø Strap (Long)	1ea.
7-8	Switch Mounting Bracket	1ea.
9	Insulation	1
10	1-3/8" Insulator	3
11	3/8-16 X 3/4" HHMS	3
12	3/8" Lock Washer	3
13	3/8" Flat Washer	3
14	3/8-16 X 3/4" RHSNB	3
15	Strap Bus Hardware Kit	2
16	1/4-28 X 3/8" SHWHSW	4
17	5/16-18 Insert	6
18	5/16-18 X 1" SRHMS	6
19	5/16 Flat Washer	6
20	5/16 Lock Washer	6
21	1/4-20 X 1" SRHMS	2
26	Ground Bracket	1
27	10-32 X 1/4" SHWHSW	2

Notes
