



Low Voltage Equipment and Systems

Schneider Electric | Innovation at Every Level

www.schneider-electric.co.uk

Life Is On



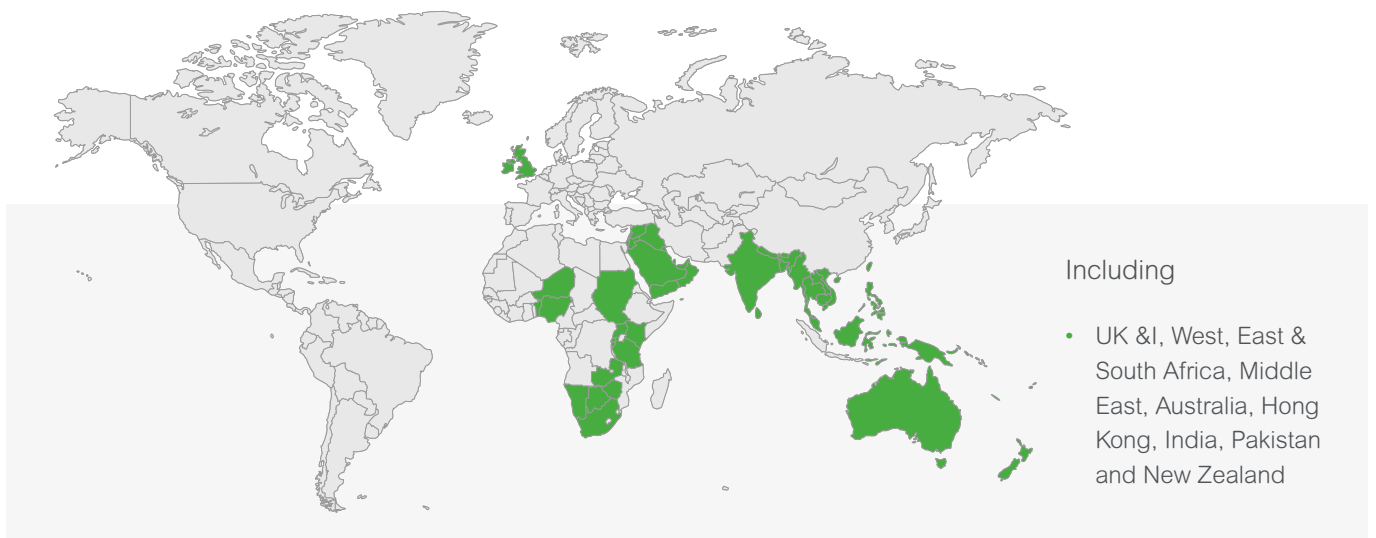
Welcome to Schneider Electric



Our UK LV manufacturing division was established to design, engineer and build world-class, state of the art low voltage solutions, utilising the very latest Schneider Electric equipment and systems.

We are Global

Our UK plants sell our solutions to over 40 countries where BS standards are either prominent or the preferred technology.



We Innovative

From devices to big data, we are focused on developing new technologies and services that will drive intelligence, efficiency, and connectivity through the following;

- **Design** – In-house team developing high quality, type tested solutions
- **Engineering** – Utilising the very latest standards and technology
- **Tendering** - specification analysis, solution development and bespoke tendering with a quick turnaround
- **Manufacturing** - skilled people taking pride in building products from raw materials
- **Testing & inspection** - ensuring a consistent high quality output everytime

Comprehensive product range

We have the most complete range of indoor and outdoor low voltage equipment of anyone supplying into this industry. Couple this with our medium voltage centre of excellence and you have the most comprehensive range of electrical distribution solutions in the UK.

	Functional Supply Point	Shielded Fusegear	Switched and Insulated Fusegear	Heavy Duty Cut-Out	NS Feeder Pillar	Compact PSP	Plug In Intelligent Power Supply	Isolated Power Supply	Acti9 Isobar	Powerpact 4	Prisma	Okken
SMART PANEL READY	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SMART PANEL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



We Digitise

With a base of best-in-class technology, we have developed compatibility and communication, allowing us to deliver integrated solutions such as Smart Panel, EcoStruxure™ architecture and StruxureWare™ software.

We're Green

In the top 10 most sustainable companies in the world, we ensure that we have the minimum impact on the environment, both with our company CO₂ footprint and with our products and solutions.

We're Reliable

We surpass the high quality engineering of Schneider Electric devices with the build quality of our systems.

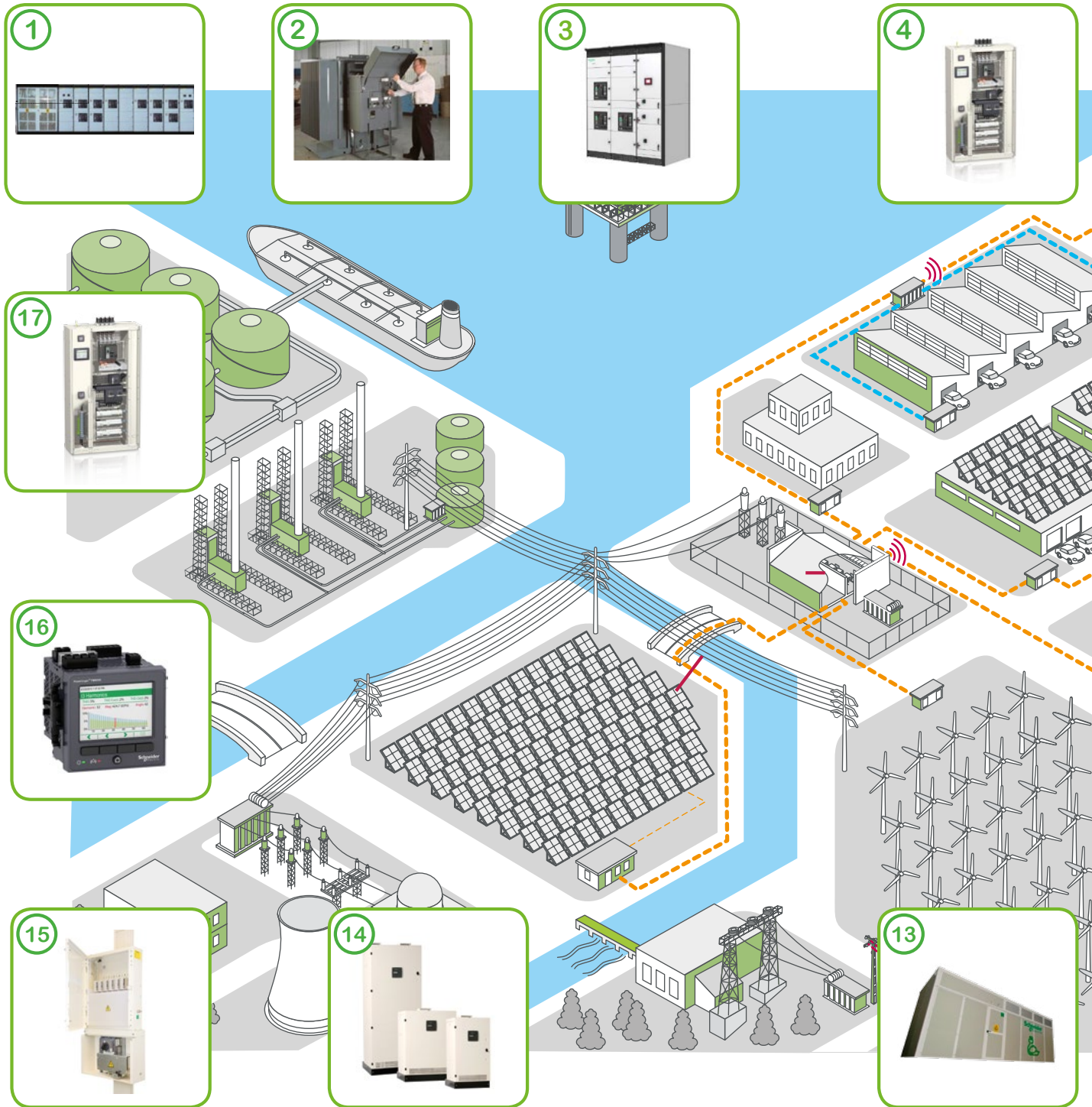
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Solution provider for Low Voltage equipment



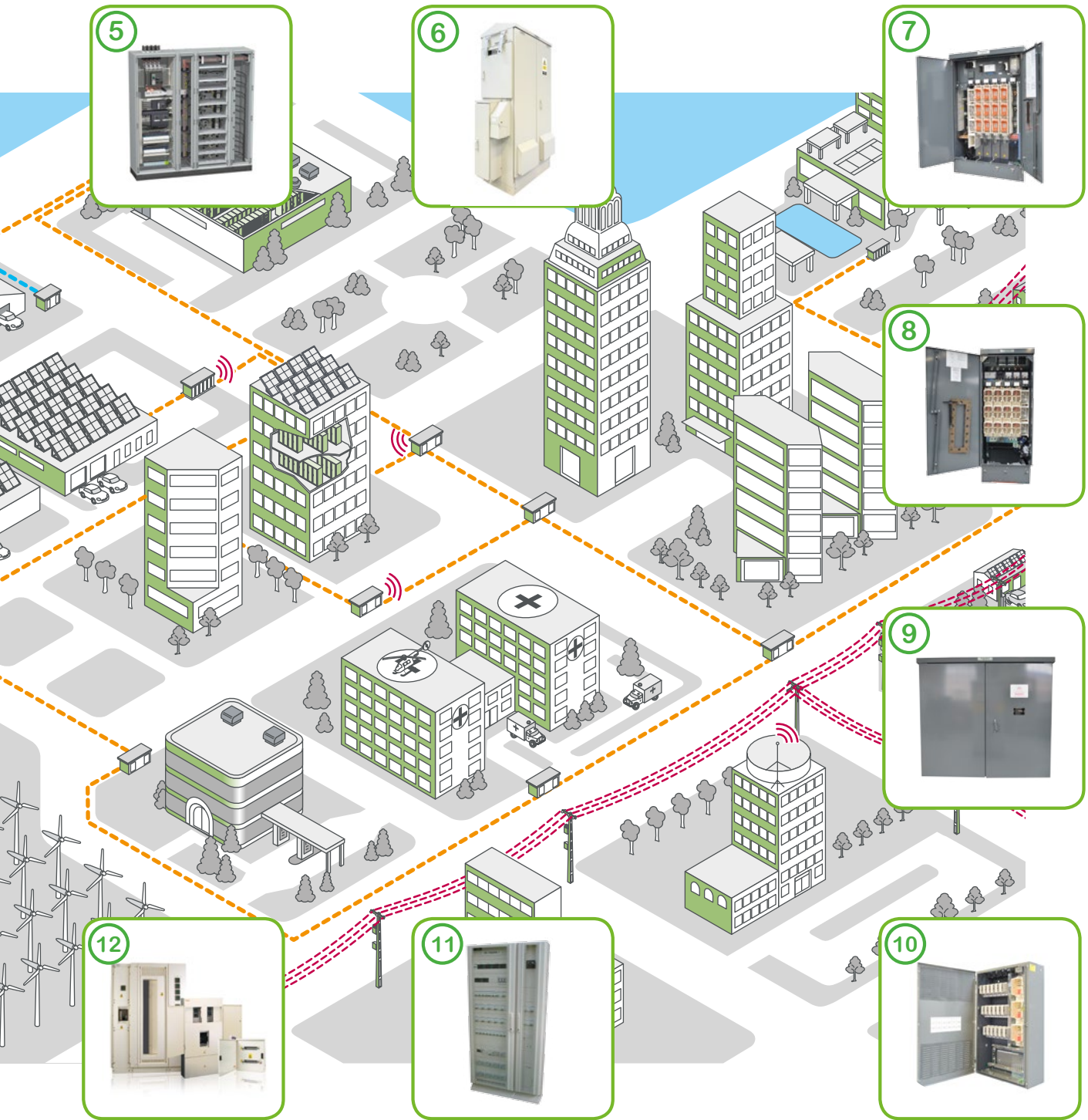
Indoor and Outdoor Low Voltage Systems and Equipment

- 1** MV/LV indoor packaged substation
- 2** Outdoor packaged substation
- 3** Okken, Distribution and motor control switchboards up to 7,300A
- 4** Prisma, LV switchboards up to 4,000A
- 5** Special SFM Compartmentalised enclosure.
- 6** Railway signalling
- 7** Switched and insulated fuse gear
- 8** Shielded fuse gear

Scan a product to find out more



Scan each product image
Using our SE Clicker app
to learn more!



- 9** Feeder pillar
- 10** Multi occupancy distribution equipment
- 11** Operating theatre panel+ Isolated power supply
- 12** Ready to install assemblies
- 13** Plug-in Intelligent Power System
- 14** Power quality
- 15** Canalis busbar trunking
- 16** Metering & monitoring
- 17** Smart panel

For further details please visit

schneider-electric.co.uk

Okken – More than just OK!

Low Voltage switchboard for electrical distribution and motor control

Low voltage equipment must comply with a whole set of requirements linked to increasingly sophisticated applications and to changing standards, while also offering increased productivity and a rapid return on investment.



Smart Ready

Okken strikes the right balance between:

- a high level of performance, both in electrical distribution and motor control,
- open-endedness to continually satisfy your specific needs but also follow major market trends,
- safety of people and installations, even in the most demanding conditions,
- reliability both short and long term, guaranteeing availability and a constantly high level of performance,
- ease and speed of implementation and maintenance

**Okken does all that...
And much more!**

Your installations evolve...

Your investments must satisfy a two-fold objective: meet your present needs and ensure you make the necessary upgrades so as not to be outdistanced by your competitors. In terms of electrical distribution and motor control, only installations made up of modular switchboards allow you to successfully meet these challenges.


Our solutions too!

For the past 15 years, thousands of Okken switchboards have been put into service worldwide. With their completely new modular design, they have never ceased to evolve to anticipate your needs.

The Okken distribution and motor control switchboards offer a quality solution with:

- Fixed, disconnectable, removable and withdrawable distribution and motor feeders
- Easy installation of variable speed drives, power factor correction and filtering equipment
- High incomer packing density
- Switchboards tested to IEC61439-2 certified type tests
- Excellent performance: Main busbar In (A) = up to 7300 - Main busbar Isc (kA) = up to 150 - Rated voltage (V) = 690 - Form 4b Type 6
- Compliant with the EdF nuclear seismic standard, high level of internal arc confinement and corrosive atmospheres

Book a visit to the CEC



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See **p.47** for more details

Benefits


- The most flexible and upgradeable switchboard on the market
- Quality, high performing, tested switchboards: Peace of mind
- Maximum upgradeability while live: Flexibility
- Compact footprint: Space saving
- Optimised maintenance and operation: Ease of use

Applications

- Large industrial sites
- Critical process sites
- Large infrastructure sites
- Commercial sites
- Marine applications



Related Documents



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OKKEN 2G 5G | DSWED105030_EN.pdf

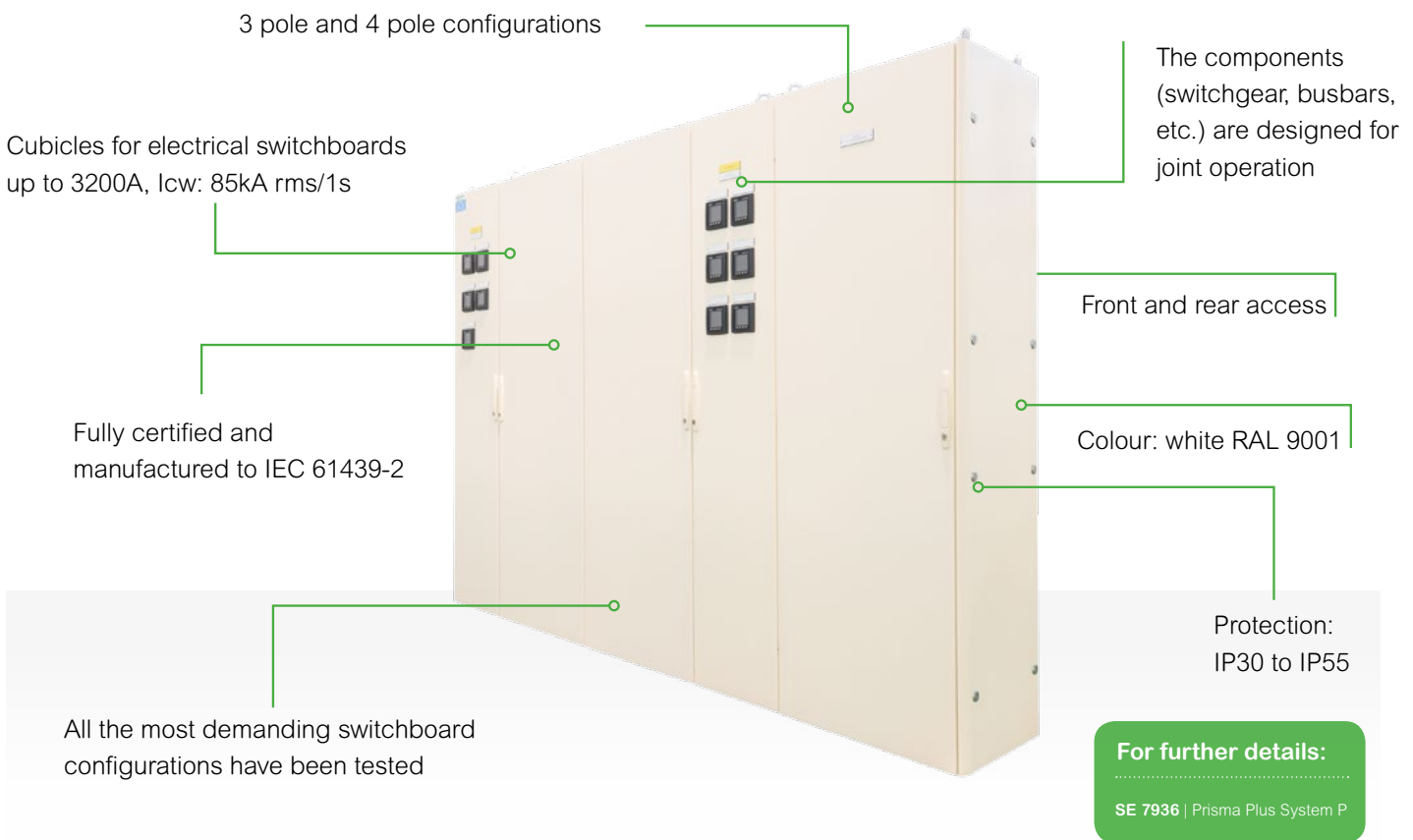
OKKEN SE7160 | Low Voltage Switchboard for electrical distribution and motor control

www.schneider-electric.co.uk/en/search

Prisma medium power, low voltage switchboards

Our Prisma switchboards bring innovation to the market using a modular steelwork design.

Schneider Electric's Prisma functional system can be used for all types of low-voltage distribution switchboards (main, sub-distribution and final) up to 4000A, in commercial and industrial environments.



Benefits

- Ensures safety and reliability of electrical installations: Peace of mind
- Switchboard configurations tested: Compliant
- Optimised switchboards: Flexibility
- Can be upgraded easily at any time without its original performance being affected: Simplicity

Applications

- Industrial buildings
- Tertiary buildings, eg commercial properties, educational establishments and healthcare



Spacial SFM compartmentalised

Spacial SFM provides a modular system for switchgear with form separation up to 4b in motor control

A complete, robust solution

Our Spacial SFM enclosure combined with other Schneider Electric products is a comprehensive, reliable solution for fixed MCCs: switchgear (short circuit protection devices, limiters, contactors, and thermal relays for classic MCC coordination type 2), switchboards as well as distribution (Linergy busbar system).

This solution is fully compliant with IEC 61439-1&2, an international standard for low-voltage switchgear and control gear assemblies.

Related Documents 

Spacial S3HF |
UE16MK15EN_(web).pdf

More options, more possibilities:

- Spacial SFM enclosures now provide 9 different compartment dimensions (from 3M to 24M), allowing installation of up to 36 modules for greater flexibility.
- Spacial SFM compartmentalised is built using the same framework as Spacial SF, saving time during the assembly phases. These enclosures are: Versatile, modular, and robust
- Ready to install, thanks to the quick, easy, and simplified assembly system
- Equipped with built-in partial doors and panels to offer a high degree of protection (IP54) and mechanical impact resistance (IK10)
- Easily combined side-by-side or back-to-back
- Spacial SFM compartmentalised may be also connected with multi-purpose Spacial SF columns to mix Form 1 & 2 functional units and Spacial SFP columns for power distribution



Applications

- It is suitable for demanding industries, such as, Food & Beverages, Water and Wastewater or HVAC applications.



Canalis busbar trunking

Our Canalis range is the ultimate solution for power and lighting distribution.

Fast and easy to install, it is a cost effective alternative to traditional cable systems. Canalis is simply plugged together, eliminating the need for drilling and cutting, which reduces installation time, cost and the requirement for skilled labour.

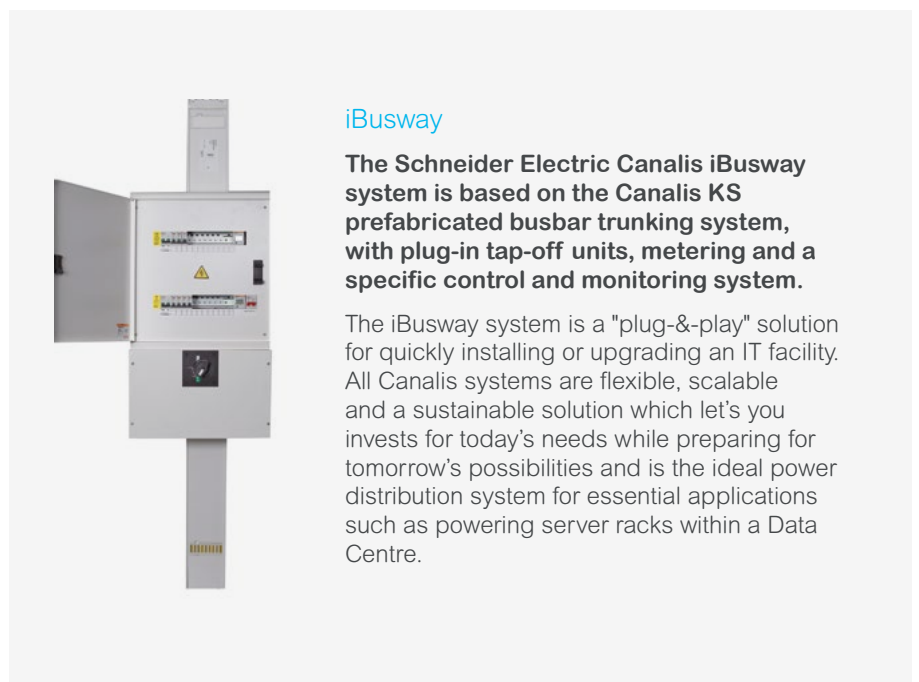
Canalis iBusway meets your requirements for improved electrical power availability, optimisation of energy savings and return on investment by reducing cabling, while still allowing you the flexibility to adapt to changing needs.



Canalis

Canalis is a highly reliable and safe distribution system, requiring no additional trays or trunking. With tap off points at regular intervals, power is accessible with the flexibility to adapt to a change of use.

Configured from straight lengths, corner pieces and flexible couplings, Canalis provides electrical distribution to meet any site's layout.



iBusway

The Schneider Electric Canalis iBusway system is based on the Canalis KS prefabricated busbar trunking system, with plug-in tap-off units, metering and a specific control and monitoring system.

The iBusway system is a "plug-&-play" solution for quickly installing or upgrading an IT facility. All Canalis systems are flexible, scalable and a sustainable solution which let's you invest for today's needs while preparing for tomorrow's possibilities and is the ideal power distribution system for essential applications such as powering server racks within a Data Centre.

Smart Ready

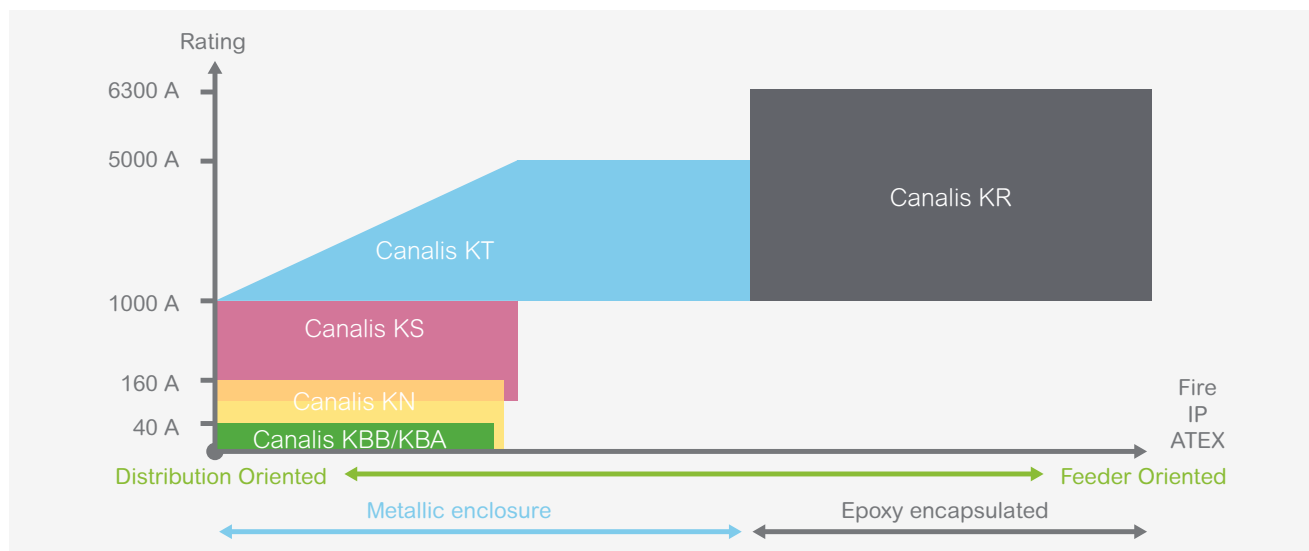
The most reliable and comprehensive busbar trunking system

A total coordination with the Schneider Electric's Systems and Equipment

100%
IEC61439-1&6

Benefits

- Canalis is part of a comprehensive offering of Schneider Electric products designed to operate together. Our circuit breakers ensure overload and short-circuit protection. Tap-off units ensure installation upgradeability without production downtime and continuity of service. Our protection switchgear optimise switchboard functions.
- It guarantees and enhances the safety of equipment and people, and provides installation continuity of service, upgradeability and simplicity.
- This concept covers all low and medium voltage electrical distribution components.
- The result is an optimised electrical installation with even higher performance through full electrical, mechanical and communication compatibility.
- It is perfectly suited to traditional applications (factories, warehouses, etc.) and to the distribution of electrical power from the incoming transformer on through to all types of loads in offices, commercial premises, industrial and logistics facilities and outdoor applications such as Oil refineries and Seaports.



A new path for achieving your electrical installations

Canalis is part of a comprehensive offer of products that are perfectly coordinated to meet all medium and low voltage electrical distribution requirements.

All of these products have been designed to work together: electrical, mechanical and communication compatibility. The electrical installation is thus both optimised and high-performance.

Canalis

Power and lighting Busways for all applications

	KBA/KBB	KN
Busbar length	2 or 3 Metres	1.5 or 3 Metres
Rated Service Current	25-40 Amps	40-160 Amps
Rated Tap-Off Current	10 - 16 Amps	16 -63 Amps
Protection	IP55	
Compliance	61439-1 & 6	
Applications	Small and medium-height buildings. i.e Supermarkets, workshops and logistics / warehouses.	Industrial buildings, small industrial sites, logistics centres & commercial / tertiary buildings, critical buildings and cruise liners.



KBA / KBB Trunking for lighting systems.

- Canalis KBA / KBB is a full and compatible range for lighting systems

Benefits:

- Modular and upgradeable system
- Quick and easy assembly
- Flexible: possibility to install a light right where it is needed
- Light and easy to handle
- Excellent contacts: a life time guarantee


KN Busbar trunking for low power distribution 160A

- Canalis KN is designed for low power distribution up to 160A. Canalis KNT is equipped with a transmission bus used to set up simple control/ monitoring systems (lighting or other loads)

Benefits

- Modular and upgradeable system
- Quick and easy assembly
- Flexible: possibility to install a new plug-in unit right where it is needed and without interruption
- Safety:
 - A fool-proofed system avoids a unit being installed or removed under load
 - Live parts are totally inaccessible
- Light and easy to handle
- Excellent contacts: a life time guarantee

Book a visit
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See **p.47** for more details

KS	KSR	KT	KR
3 or 5 Metres	2 or 2.5 Meters	0.3 to 3 Metres	
100-1000 Amps		800 - 5000 Amps	800 - 6300 Amps
25 - 400 Amps	25-400 Amps	N/A	N/A
IP55			IP68
61439-1 & 6			
Industrial buildings: Industrial sites, local small contractors, logistic centres; Commercial / Tertiary buildings: Critical buildings: Data centres, hospitals; Marine		Continuous processes, manufacturing and industrial facilities, commercial buildings and Infrastructures	High Power Electrical distribution, Mining, Oil & Gas, Food & Bev, Chemical Plants, harbours & ship yards



KS Busbar trunking for medium power distribution

- Canalis KS is designed for medium power distribution from 100A to 1000A with high tap-off densities in industrial and commercial buildings.

Benefits

- Modular and upgradeable system
- Quick and easy assembly
- Flexible: possibility to install a new plug-in unit right where it is needed and without power interruption
- Safety
- A fool-proofed system avoids a unit being installed or removed under load
- Live parts are totally inaccessible



KT High Power Distribution Busbar Trunking

- Canalis KT is designed for high power transport and distribution from 800A to 5000A. Its high degree of protection (IP55) protects it against water projections, sprinklers and dust.

Benefits:

- Modular and upgradeable system
- Quick and easy assembly
- Safety:
 - A fool-proofed system avoids a unit being installed or removed under load
- Live parts are totally inaccessible
- Tap-off units fully compatible with Canalis KS
- Excellent contacts: a life time guarantee
- Halogen free: not emission of any fumes or toxic gases in the event of fire
- High protection index IP 55 for all types of buildings
- Dismantled, re-used and entirely recyclable



KR Moulded high power busbar trunking

- Deliver power distribution in harsh environments and critical applications.

Benefits:

- Operating continuity and power uptime in harsh environments and critical applications.
- Maintenance free, easy to clean, and compact.
- Operating continuity and power uptime in harsh environments and critical applications.
- System Canalis consistency with Canalis KR and Canalis KT.
- Maintenance free, easy to clean, and compact

Mode

The MODE (Multiple Occupancy Distribution Equipment) range provides a point of distribution.

MODE (Multiple Occupancy Distribution Equipment) provides cost effective fused protection for the distribution of supplies around multiple occupancy buildings such as offices, apartments, hotels, universities, retail outlets

The MODE range provides a point of distribution, with or without fused incoming isolation, with fused distribution to tariff meters.



Reliability has been assured through both the one-piece combination busbar design of the MODE units and rigorous temperature rise testing. Staggered outgoing phase banks increase cabling access and make multiple cable termination easy though an optional range of outgoing predrilled gland plates, which include either conical plastic grommets or suffing glands, installation time is significantly reduced.

The MODE range use house service cut outs to BS 7657 for ratings of up to 100A and for larger supplies over 100A the mode range can accommodate several shielded fuseways for the outgoing distribution circuits. The incoming supply can be provided from an externally mounted heavy duty cut-out for requirements up to 200A, or via an integral Shielded fuseway for ratings up to 500A.

Just four unit types, in three ratings, provide the 13 variants covering from 200A 6-single pole 100A ways up to a 500A 60-single pole 100A ways. The 500A version is also available as standard with a dual incoming and outgoing shielded fuseway and up to 30-single poles 100A ways for distribution or incoming shielded fuseway and up to 12-single pole 200A ways and 3-single pole 100A ways for a landlord supply.

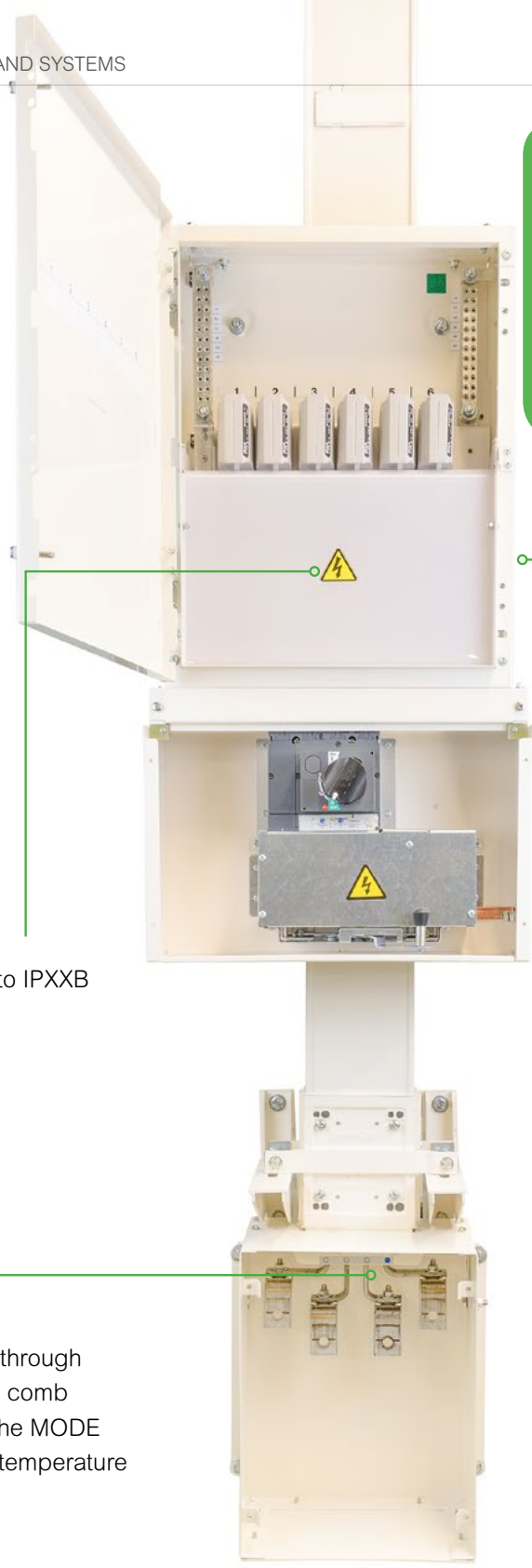
The MODE range includes accessories to accommodate different termination arrangements. As standard all incoming cables are supported with an adjustable cable cleat, with optional mechanical connectors to incoming fuseway removing the need for cable lugs also optional extension boxes for larger incoming waveform cables up to 4C 240mm².

Related Documents



SE9308 | Mode Brochure

www.schneider-electric.co.uk/en/search



Safety is a high priority – operators are protected to IPXXB with the door open

Reliability assured through both the one-piece comb busbar design of the MODE units and rigorous temperature rise testing

Staggered outgoing phase banks increase cabling access and make multiple cable termination easy though an optional range of outgoing pre-drilled gland plates, which include either conical plastic grommets or stuffing glands

Benefits

- Fully catalogued offer with drawings, technical details and price list for convenient order placing: Flexibility
- Fully temperature rise tested: Peace of mind
- Reduced installation time: Ease of installation

Applications

- Multiple occupancy residences
- Commercial buildings
- Mixed use buildings

Isolated Power Supply

Designed specifically for medical and surgical applications.

Book a visit
to the CEC



See p.47 for more details

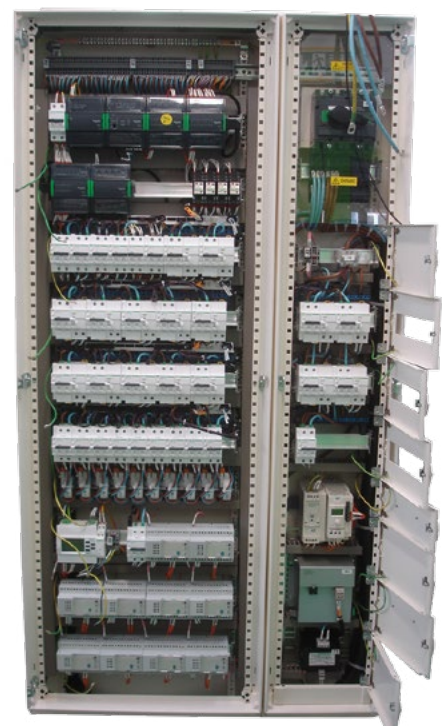
Schneider Electric's Isolated Power Supply's (IPS) sole purpose is to protect vulnerable patients in Group 2 medical locations from the risks associated with electrical leakage currents.

An adaptable solution tested in compliance with standards and regulations. Schneider Electric offers an innovative, secure power distribution and monitoring solution for operating theatres and other Group 2 medical locations such as intensive care units and recovery rooms, in compliance with the IEC 60364-7-710 standard and HTM 06-01

All Schneider IPS systems are supplied as complete factory tested systems, including incoming isolator, isolation transformer, insulation monitor, Earth Fault Detection System and all of the outgoing breakers built into a stand-alone enclosure. The IPS systems are fully tested and certified prior to delivery. Installation therefore is a simple matter of making the electrical connections in the plant room or electrical cupboard.

Features include;

- Comprehensive power and environmental monitoring system options are tailored to meet specific needs of different surgery environments and include:
 - Visual and audible alarms
 - Fault handling information
 - Time display, chronometer and timer
 - Display of operating room temperature, relative humidity and pressure
 - Temperature, pressure and relative humidity
 - UPDS remaining time
 - List of events
 - Medical gas states





Benefits

- Compact wall mtd indoor design
- IPXXB operator protection
- 13 standard solutions
- Wide range of accessories

Applications

- Healthcare



Related Documents



LV Panacea |
LV Panacea SE9196.pdf



Ready to install assemblies & engineered standard products


We offer both fully assembled and customised distribution boards.

What's the answer?

They are suitable for installation in all types of sub-distribution and final distribution applications.

Standard assemblies can be designed and customised to meet your specific requirements.

- Single phase distribution boards (up to 125A)
- 3 phase distribution boards (125A and 250A)
- Moulded case circuit breaker panelboards (up to 2000A)
- Fuse-switch panelboards
- Multiple distribution board assemblies
- Multiple panelboard assemblies
- Combined distribution and panelboard assemblies
- Metering to meet Part L of the building regulations
- Complete with incoming and outgoing devices, wiring and labelling
- Fully factory tested

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See **p.47** for more details

Engineered standard product (ESP)

What's the answer?

Larger and more complex installations may require standard products combined with additional equipment into one composite assembly.

- Smart panelboard
- Control and command equipment, contactors and timeclocks
- Distribution boards with contactor control or under-voltage release
- Power factor correction equipment
- Building Management System interface facilities
- Auto source change-over systems
- Protective functions including earth fault relays and surge protection
- Integrated Installation Systems
- Fully factory tested



Acti-9 Isobar single phase

The Acti9 Isobar Single Phase protects and distributes single phase supplies.



- Ratings up to 125 amp
- Features split metering to monitor energy consumption of lighting and heating circuits
- Any outgoing way can be re-configured for neutral switching
- All Command and Control devices may be fitted
- Dual incoming with switch disconnect or RCCB incomers
- Incorporates the unique busbar connection device, which allows for a quick connection and unused ways are isolate

Benefits

- Modular solution: which is Flexible and can cater for the biggest or most complex installations.
- Split metering boards: Manage energy

Acti-9 Isobar 3 phase

The Acti9 Isobar range of 3 phase distribution boards can cater for the biggest or most complex installations.



- The Acti9 Isobar range of 3 phase distribution boards can cater for the biggest or most complex installations.
- Split-load/multi-service/split metering configurations are available as part of the standard range and all units are compatible with incoming disconnectors, RCCBs and MCCBs
- Compatibility extends across the C60H ranges of MCBs and RCBOs for the protection and control of outgoing circuit
- Split metering boards using PowerLogic meters for Part L2 requirements and BREEAM assessments are part of the standard offer

Benefits

- Modular solution: which is Flexible and can cater for the biggest or most complex installations.
- Allows for hundreds of distribution board combinations, which can be joined at the top, bottom or sides
- Option of GRP enclosures and stainless steel: Durable
- Split metering boards: Manage energy


Powerpact 4 MCCB panel board

Schneider Electric’s market-leading, low voltage distribution offer provides many unique features in the field of electrical distribution

The Powerpact 4 MCCB panel board range and Powerboard are ideally suited to installations where space is restricted or few outgoing circuits are required.

Application on the railway

- Can be added to any incoming or outgoing installation should the need arise
- Ratings covered are from 250A up to 1600A
- Protection for incoming and outgoing devices is provided by the Compact NS or NSX range of MCCB’s specifically adapted for Powerpact
- May be used as a main switchboard or sub distribution board
- Form 3b type 2 as standard
- Use of outgoing neutral or 4 pole breakers can increase the form rating to form 4b types 2 and 6

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See **p.47** for more details

Benefits

- High current ratings: Effective
- Ready to install: Easy installation
- Robust steel work: Durable
- Uses compact breakers: Superior protection

Applications

- Industrial
- Commercial



Petrol Forecourt Incomer

Safe electrical distribution for petrol forecourts

The Petrol Forecourt Incomer has been specifically designed to provide safe electrical distribution in this hazardous environment. Our unit is a simple enclosure with all devices fitted and is easy to install.



The unit is assembled to the highest standards and meets requirements of the APEA & IP publication "Code of Practice for the Design, Construction, Modification, Maintenance and Decommissioning of Filling Stations (The Blue Book)." This specifies that the electrical supply to a petrol filling station should not have combined neutral and productive conductors (i.e. TN-C-S system) or protective multiple earthing. This prevents uncontrollable current to earthed metalwork from the supply system external to the petrol filling station which could lead to incendiary sparking.

This unit has been installed at many leading petroleum retail outlets across the United Kingdom.

The unit consists of a Form 1 IP43 Polyester enclosure fitted with:

- NSX compact moulded case circuit breaker (MCCB) for over current and short circuit protection and disconnection
- Adjustable residual current module (RCD) added to the MCCB for earth fault protection and test buttons for checking the operation of the RCD module. The adjustment settings and test buttons are protected by a sealed transparent cover to protect against unauthorised access.
- A 13 amp socket used for connecting an earth fault impedance tester. This socket is protected by a miniature circuit breaker and interlocked as required by paragraph 14.4.5 of the "Blue Book". The earth terminal from this socket is connected to a separate earth stud. This socket is
 - protected by a transparent lockable cover.
 - As an option three 'Phase Healthy' lamps can be provided.
 - A further option is for push buttons to initiate the time delay on the test socket stopping unauthorised use.
- Top or bottom cable entry versions are available.





The Compact Principal Supply Point (PSP)

High End signalling replacement for a Relocatable Equipment Building (REB)

The UK rail market is faced with increasing demand from passenger travel, the rail freight industry and the ongoing need for asset replacement of the network whilst ensuring safety, security and reliability. Rail operators need intelligent solutions to monitor, control and optimise the electrical assets on the rail network.



Sponsored by Network Rail,
Infra structure Projects
Signalling, Signalling
Innovations Group



Power supplies



UPS and remote monitoring



Signalling supplies

Features of the Compact PSP

- The Compact PSP is aimed at Islands of Signal assets where a conventional PSP would not be cost effective.
- Designed to use the standard Location Case foundation, each principal supply point will provide up to five outgoing signal power supplies from a Single DNO feeder. Provision has been made for a generator to be connected via a socket. If the DNO supply is lost a 10/16 kVA UPS will provide power for up to 15 minutes.
- As required by the regulations the IT earthed signal supplies are monitored for earth faults.
- Manufactured in the UK this Compact PSP complements the Schneider Functional Supply Points already in service with Network Rail.

**Compact in size,
expansive in ability**

Benefits of the Compact PSP:

- Signalling supplies up to 20kVA at a fraction of the cost of a conventional PSP in a REB type building or ISO container
- Flexibility in positioning is increased and costs significantly reduced
- Alternatives of single phase and three phase incoming and outgoing signalling supplies.
- Provides one, two or three secure signalling power supplies up to 650V a.c..
- Power supply; DNO with changeover to standby/mobile generator UPS with integral bypass switching, automatic UPS bypass and signalling transformer(s).
- Standard 10 minutes reserve supply; longer autonomy with additional batteries in a second location case.
- Internal environment of Compact PSP managed to ensure normal operation under extreme climatic conditions
- Local display and remote monitoring via an integral RTU of essential aspects including, alarms, faults and power consumption and quality, provides opportunity for continuous surveillance and early indication changes.
- Schneider Electric offers an innovative, integrated offer to the rail industry. The Principal Supply Point offers signalling supplies of up to 20kVA at a fraction of the cost of a conventional principle supply point in a REB type building or ISO container.

Related Documents



SE8976 | Rail Brochure

www.schneider-electric.co.uk/en/search



Functional Supply Points (FSP)

The FSP has been developed in line with Network Rail Specification NR/L2/27409 to increase flexibility in the provision of signalling supplies and significantly reduce costs.

The FSP is available in three types FSP01, 02 and 03. All with 3 phase and neutral or single phase and neutral arrangements



FSP01 - single end feeder radial.

- single end feeder radial, suitable for co located within a signalling housing provided by others.

FSP02 - dual end feeder manual.

- dual end feeder with manual reconfigurable dual radials able to act as an open point, suitable for co located within a signalling housing provided by others.

FSP03 - dual end feeder automatic.

- - dual end feeder with automatic reconfigurable dual radials able to act as an open point, housed within an enclosure case suitable for installation on a standard location case base.

Application on the railway

Provision of 230V/400V/650V supplies for signalling applications in Class I and Class II environments

- The FSP03 is a stand alone unit with space to accommodate an auto-reconfiguration unit. Other types of unit can supplied:
 - as separate assemblies to be installed in enclosures by third parties,
 - in 'location cases' for co-location with signalling apparatus provided by others, and
 - in separate weatherproof housings.
- FSP01 and FSP02 fit within the designated space signalling location cases
- All FSP enclosures are suitable for installation on a standard location case bases, reducing:
 - difficulties in finding suitable sites
 - line side civil engineering costs
 - installation times
- All FSPs are composite low-voltage switchgear assemblies complying with BS EN 61439-2.



Benefits

- Suitable for installation in TN (Class I and IT (Class II) networks
- FSP01 and FSP02 fits within the designated space in a signalling location case.
- Functional Supply Point (FSP03) housed in a standard location case.
- Civil costs and installation times greatly reduced
- Ease of maintenance

Applications

- Rail – Provision of 230V/400V/650V supplies for signalling applications in Class I and Class II environments



Related Documents 

SE8976 | Rail Brochure

www.schneider-electric.co.uk/en/search



Plug-in Intelligent Power System (PIPS)

Low voltage power supply system from Schneider Electric for 32/64/125A applications.

The purpose behind PIPS is to supply LV power to vehicles or vessels via a standard IP54 pillar. Each connection point is designed to be simple, safe and have facilities for remote monitoring of the energy consumed by each vehicle or vessel, for electricity billing and energy management.

Noise, vibration and CO², NO_x, SO_x and particulate emissions have a massive impact on the local and global environment.

As a result of regulations such as MARPOL VI from the International Maritime Organization and even more stringent regulations from the EU, mean that ports and ship owners need to take action now.



- Robust design to work in harsh / onerous / outdoor environments
- Secure access
- IP 65 environmental protection (Stainless steel casing)
- Multiple power outlets for 32 /64/125 amp (230/440) volt
- SMART metering (allowing office based meter reading for billing and energy management).
- Upgradeable (any number of Plug-in Intelligent Power Systems can be daisy chained together).
- Compliant with the latest IEC BS EN61439 standards.
- Safe (user interlocks , moulded case circuit breakers).
- WiFi / GPRS access for remote locations.
- Power management software options for re billing users and recording power supply status and Carbon efficiency

Schneider Combines Energy, Automation, and Software In One Architecture



Book a visit
to the CEC



See p.47 for more details

Benefits

- Wide variety of options for power monitoring and control
- Our system is interoperable and complementary
- Share data between platforms and benefits between users
- Our hardware offers comprehensive protocol, form factor, and standards support for easy integration and expansion into existing systems and multivendor environments
- Our systems are scalable in size, performance, and functionality via flexible system customisation
- You determine how, where, and when to expand
- Schneider Combines Energy, Automation, and Software In One Architecture

Applications

- Transportation – Airports (Baggage vehicles) Seaports (Ships / commercial boats) Rail (Rail Car Movers)
- Leisure (Golf buggies)
- Public sector (Wheelie bin, Laundry pullers)
- Logistics / Industry (Forklift Trucks)



Shielded Fusegear

Indoor/outdoor LV distribution up to 3200A

The Shielded range from Schneider Electric, comprises of fuse cabinets, fuseboards and feeder pillars and goes one step further than traditional exposed live copperwork by screening all live conductors during normal service conditions.

Thus Shielded fusegear ensures safety for all entering a substation from accidental contact with live parts and greatly reducing the risk of an electric shock.

The fuseway design fully segregates the main busbars and each outgoing circuit. Individual moulded phase shrouds provide easy access to cable terminations whilst ensuring protection from the adjacent live circuits.

Ease of operation, Shielded fusegear holds the solution Fuse carriers accept gU type fuselinks with wedge tightening contact whilst the patented through-grip handle ensures easy manual making and breaking of contacts.

The fuse carrier design also requires no tools to change the fuse link and the ergonomic design of the thumbscrew lozenge ensures tight fuse link contacts in order to prevent overheating and potential interruptions of the supply.

The shielded fuseway contacts and removable shrouds allow easy 'hinge in' and 'snatch out' manual switching actions. Solid plastic busbar contact shrouds are provided to maintain operator protection to IPXXB once the fuse handle has been removed.

Outgoing cables up to 300mm² terminate directly to the fixed fuse link contacts with a four position terminal arrangement eliminates phase cable core cross-overs.



Smart Ready

Features and benefits

- Fuseway ratings of 400A, 630 and 800A
- Fuse carrier accepts type gU fuselinks with wedge tightening contacts 82mm or 92mm centres
- Operator protection to IPXXB in normal service conditions
- Through grip fuse handle for ease of manual switching
- Fuse carrier requires no tools to change a fuselink
- Fully segregated busbars and circuits with removable solid phase shrouds
- Test probe access to busbar and outgoing circuit whilst maintaining IPXXB
- Segregated circuits allows for safe cabling with adjacent fuseway live*
- Four position terminals ensure no phase core cross-overs
- Freestanding or TX mounted solutions




Applications

Schneider Electric LV distribution units can be customised to form part of a total package solution in conjunction with the wider range of switchgear products for residential, commercial and retail developments.

For example, package or unit sub stations comprising of a LV distribution feeder pillar, fuse cabinet or board, MV switches, circuit breakers, ring main units and a transformer.

Related Documents



SE8771 | Shielded Fusegear

www.schneider-electric.co.uk/en/search



Housing | Fuse cabinet

- The cabinet comprises up to seven outgoing fuseways and incoming disconnector or a combination of fuseways and mccb's up to 1600A. The outdoor enclosure is rated to IP33, is transformer mounted and can be used side by side with MV switchgear on a unit sub station package.



Retail | Feedar pillars

- Indoor or outdoor application to IP33 as standard or to IP54 with the addition of filtered ventilation and door gaskets. The feeder pillar can be transformer mounted with up to 15 outgoing fuseways or free-standing with 14 fuseways and cable connected. Shielded fuseways are rated to 800A and have the flexibility to combine with, air circuit breakers or moulded case circuit breakers and disconnectors dependant on customer requirement.
- For easy access, feeder pillars and fuse cabinets have removable front cross member and individually supported gland plates, are vermin proof and can accommodate larger cables by mounting the enclosure on fabricated roots and plinths.



Commercial | Fuseboards

- Providing IPXXB operator protection with all fuse handles in place, these can be either transformer or floor mounted with the option for top or bottom cable entry. The fuseboards are for indoor application only whilst offering the same versatility as the feeder pillar for instrumentation and outgoing and incoming circuit requirements.

SAIF – Switch and Insulated Fusegear

Feeder Pillars, Fuseboards and Fuse Cabinets up to 3200 amps

SAIF is the world's safest feeder pillar range and offers a unique range of switchable fusegear, providing low voltage distribution up to 3200A.

- Fully tested to BS EN 60947-3 it provides IPXXB operator protection in all operating conditions, even when fuse links are being replaced with the pillar remaining live
- SAIF is increasingly being used with circuit breakers to provide greater flexibility for LV distribution
- For indoor or outdoor use or as part of a package substation, SAIF is factory assembled in a choice of solutions.
- Fully compliant with Defence Estates Specification 039 feeder pillars with load shedding option
- A worldwide solution that can be used in all climates
- The ideal fusegear distribution solution for safety and cost conscious users

Benefits

- Assured safety and operation: Reliable
- A portable switching mechanism allows operation by less experienced personnel: Safe
- High durability for minimum maintenance: Robust
- Plug-on fuseways for easy upgrades: Cost effective

Applications

- Defence Estates MoD
- Airports
- Hospitals
- Retail Parks
- Educational establishments
- Sports facilities

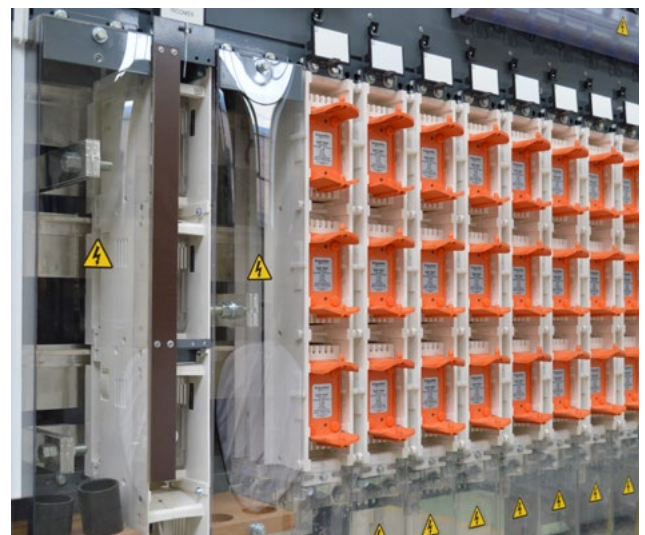
Related Documents



SE9037 | SAIF Brochure

www.schneider-electric.co.uk/en/search

Smart Ready



Heavy Duty (HD) Cut-Out

Indoor LV protection and isolation up to 630A. HD cut-outs provide circuit protection and a certified switching capability

The innovative range of Heavy duty cut-outs provide circuit protection and a certified switching capability with inherent safety features normally associated with fuse switches – yet retains the complete flexibility of a traditional cut out.

- Fully insulated design removes need for direct earthing
- Individual fully insulated phase and neutral modules in a horizontal TP&N arrangement which, should a fault occur, prevent failure across adjacent units
- Assembled together on two individual plattens, the complete unit can be easily installed through four external bolt fixings that also allow for the simple installation of the fully insulated cable box
- Independent manual switching mechanism - certified fault make, load break switching
- Full segregation between phases and neutrals

Benefits

- No need for direct earthing while IP41 enables countless installation location options: Flexibility
- IPXXB operator protection from live conductors, even when changing fuse links: Peace of mind
- Fully interlocked design for correct operation: Reliability

Applications

- Commercial buildings
- Light industrial property



NS Feeder Pillars

Outdoor switchboard solution with ratings up to 3200A

The NS range of outdoor switchboards incorporates technically advanced moulded case and air circuit breakers up to 3200A, with the option for remote monitoring and operation.

Weatherproof for outdoor installation, the NS feeder pillar can be either transformer mounted to form part of a compact substation, or free standing. Maximum flexibility is achieved by its stacked busbar system up to 3200A and range of Compact NS moulded case and Masterpact NW air circuit breakers.

For maximum flexibility up to 630A the NS breaker utilises a 'plug-on' cassette factory fitted to the top of the MCCB. The cassette allows the NS breaker to be positioned anywhere on the busbar system whilst ensuring the correct torque for the connection is achieved.



Smart Ready

Benefits

- The outdoor switchboard solution comes fully assembled to customer specification for easy installation reducing costly site time, with bottom entry cable connection via individual gland plates. The cable space is protected by an earthed metal screen, whilst each breaker's cable terminations are protected with cable shrouds for maximum safety.

Applications

- The NS Feeder Pillar is particularly suited to commercial and light industrial applications where there is a need for outdoor, low voltage supply. Providing a safe, flexible solution with individual monitoring and protection, ensuring efficient management of the LV electrical distribution network.

Related Documents



NS Feeder Pillar Sales Brochure.pdf

www.schneider-electric.co.uk/en/search



Service termination cubicles, service pillars and outdoor enclosures

Service termination cubicles, service pillars and outdoor enclosures



Outdoor Mini service pillar

A compact fuse service pillar mounted on its own cable root, provides easy access to outgoing fuse cut outs mounted to a staggered busbar system, providing operator protection to IPXXB during normal service conditions. These outdoor IP33 mini service pillars are freestanding and bottom entry cable connected with a padlockable door handle. The outgoing circuits provide up to 6 x three phase supplies or 18 x single pole supplies with house service cut outs to BS 1361 providing flexible fuse ratings from 5A up to 80A and 100A.

Note fuselinks not included



Outdoor enclosures

The padlockable enclosure with IP33 protection to the internal equipment is offered as standard or IP54 as an option. Available in six sizes from 710mm to 2110mm each is fitted with a 12mm plywood backboard to allow for easy installation of discrete components.

Manufactured in 3mm hot dipped galvanised steel a primary coat of zinc rich epoxy powder paint is applied and oven cured followed by a final top coat of polyester powder paint that is also oven cured. These three layers of corrosion protection and the strong steel assembly ensure that the enclosure will provide many years of reliable service.

Standard colour finish is dark grey to BS 381C although other colours are available as an option.



Service termination cubicle range

Utilising the latest range of Masterpact air or Compact NS moulded circuit breakers the indoor service termination cubicles provides a point of metering, isolation and protection to customers requiring large supplies up to 3200A.

The cubicles floor mounted and for indoor use only with the optional kit for a fault free busbar connection to the Schneider Electric Prisma range of indoor switchboard. The circuit breaker use the micrologic control units common across all ratings above 800A for protection and also includes a local external trip button and padlock facilities to prevent the breaker from being reset and switched 'On'.

The arrangement provides separate door access to the incoming section and CT metering section. The incoming section provides a gland plate and support for up to 7 x 740mm² incoming cables. Provision is included in the upper section for the installation of 3 metering CT's on removable links. The current transformers can be factory fitted from our wide range of CT's to BS 3938 / 7626 for metering applications or fitted by others.

The potential fuses and optional test terminal block are accessible from the front without exposing the operator to live conductors.

Outdoor packaged substations

This provides customers with a convenient single source of package substation with minimum time and costs.

Ease of specification is guaranteed by one point of contact, from initial enquiry through to manufacture, delivery, commissioning and aftersales service.

Package substations are delivered as one complete unit, minimising logistic costs. Cost savings on installation are achieved by reducing the foundation area due to direct mounting of MV and LV switchgear.

Our comprehensive range includes:

- Metalclad distribution substations
- In-line package substations
- Unit substations
- Padmount substations
- One-stop engineered package substation
- Fast-Trans substations

An extensive range of equipment to fulfill your specification

Flexibility is assured through tailored configurations from the wide range of Schneider Electric products that include:

- 11 kV to 433V
- Transformers from 200kVA to 2500kVA
- Hermetically sealed
- Free breathing with or without conservator
- Extensible and non extensible Ringmaster MV switchgear
- LV SAIF and Shielded fusegear
- LV ACB cabinets and NS feeder pillars
- Automation and monitoring systems

Benefits

- Directly mounted MV switchgear and LV fusegear: Smaller foundations
- Costly cabling eliminated: Reduces overheads
- Can be delivered as a single unit: Improved logistics
- Direct and controlled factory assembly of switchgear onto the transformer: Safe
- One point of contact: Easy specification

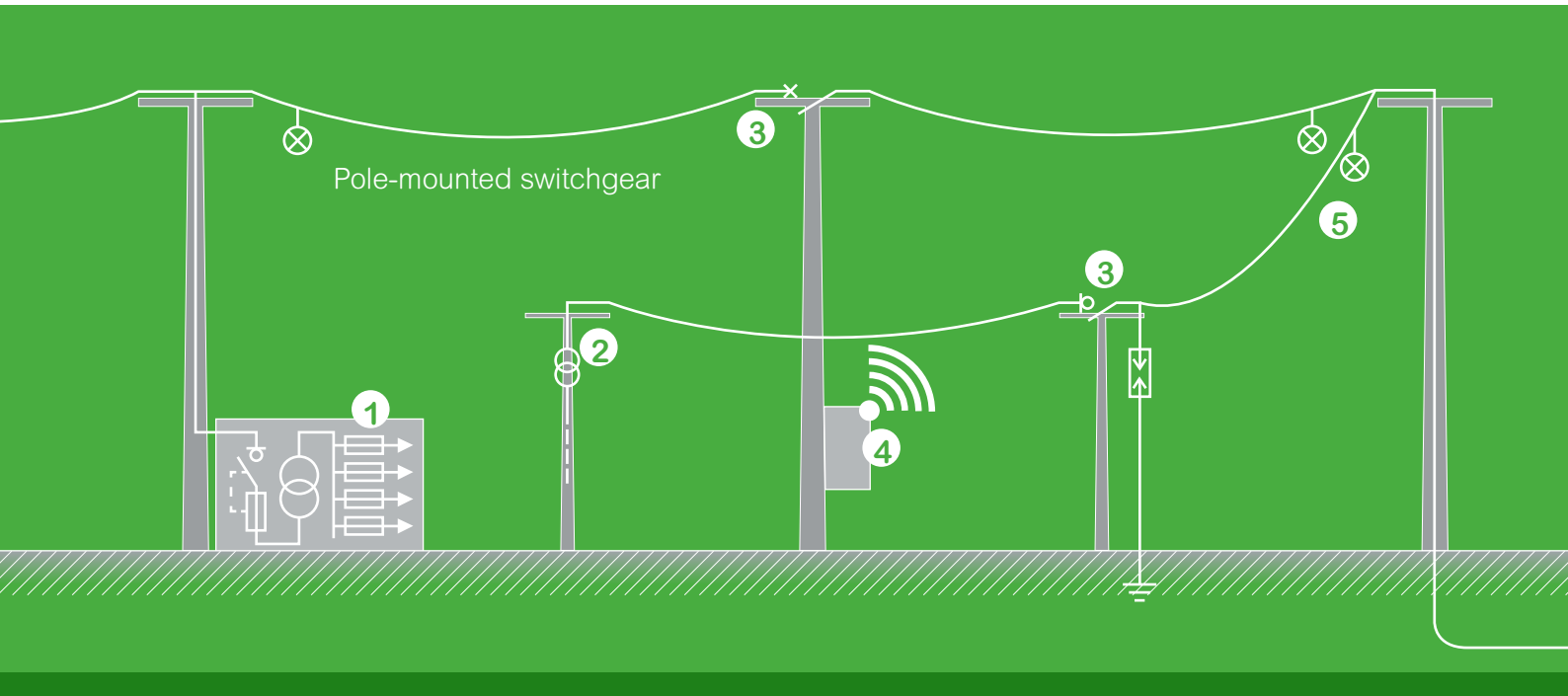
Applications

- Energy
- Infrastructure
- Commercial



Medium Voltage

Complete offer ranging from 3 kV to 170 kV



Prefabricated MV/LV substation/E-House



Pole-mounted transformers



N Series / RL Series / U Series
Pole-mounted switchgear

and



ADVC Controller
Overhead network control and monitoring



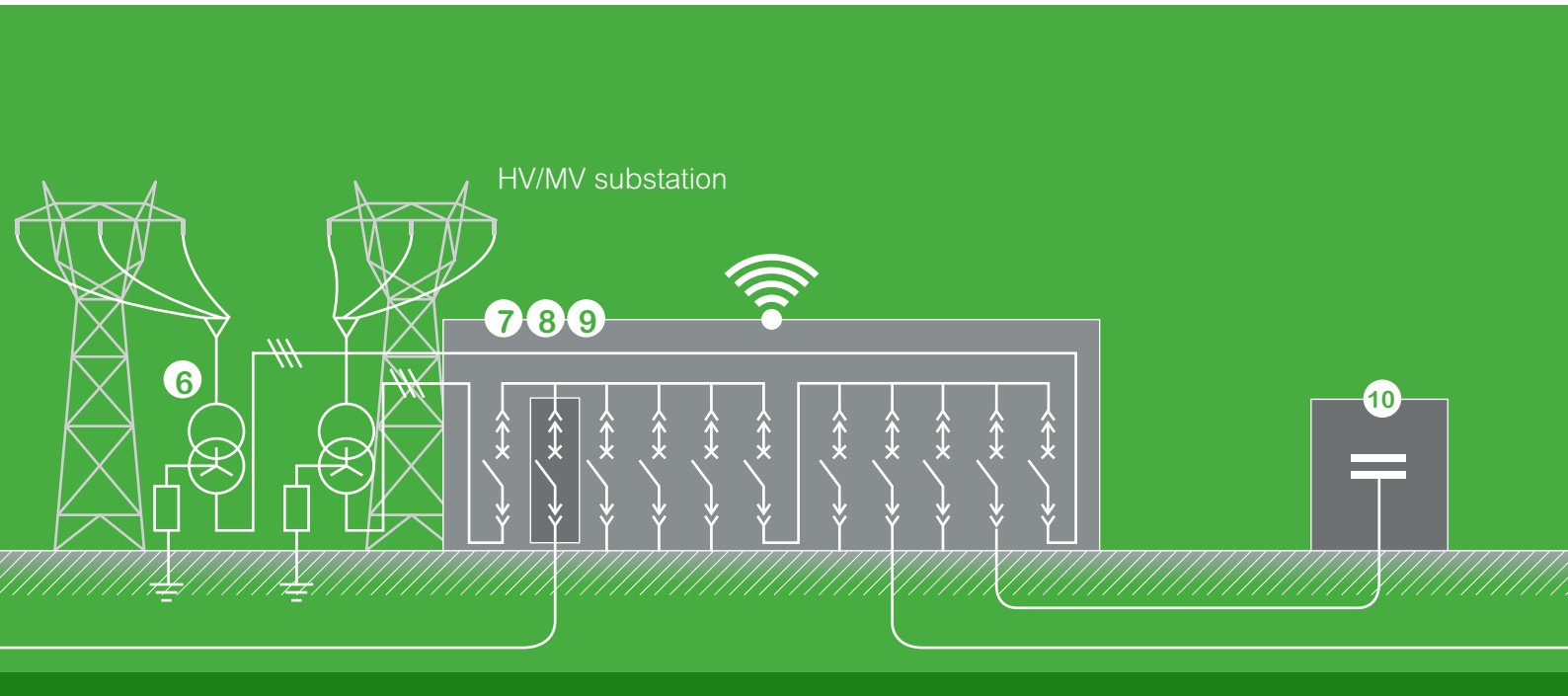
Easergy Flite, G200

Related Documents



SE9304 | MV Panacea

www.schneider-electric.co.uk/en/search



6



Power transformer

7



Primary switchgear (AIS & GIS)

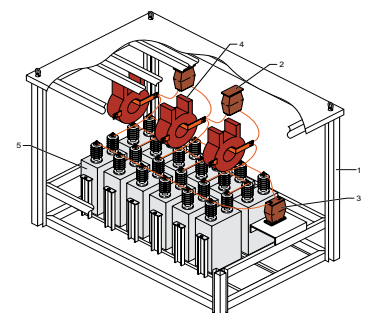
To know more about key components - see page 11

8 9



Digital protection relays and power metering

10

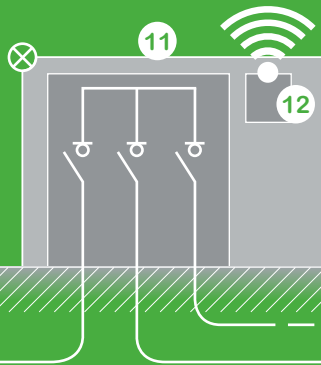


Automatic capacitor bank - CP range

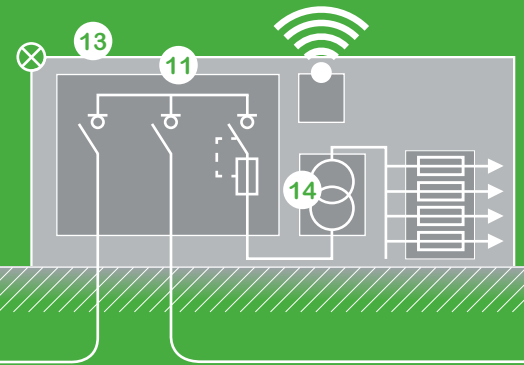
Medium Voltage

Complete offer ranging from 3 kV to 170 kV

Switching substation



Distribution substation



11



Premset



Flusarc



Ringmaster RN2d



RM6

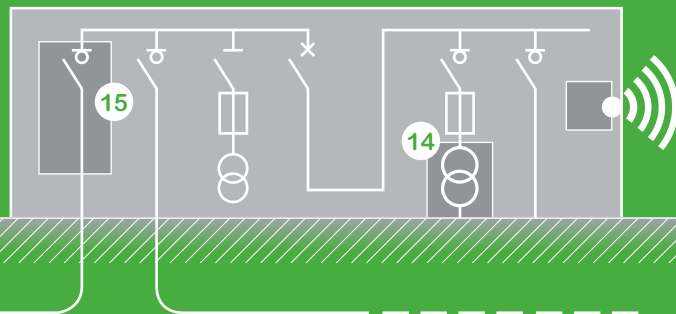
12



Remote control and fault tracking

Air and Gas Insulated Switchgear

Customer substation



Prefabricated MV/LV substation



Distribution transformer



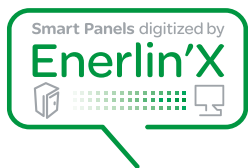
Premset
Modular
switchboard



Smart Panels

Data acquisition for switched and insulated fusegear

SAIF pillars can accommodate a multitude of monitoring and remote operating facilities, particularly with circuit breakers. Examples of this include smart panel, which can be fully connected directly to the company IT network, to help your customers improve their energy performance.



1 Measure

Embedded and stand-alone metering & control capabilities

2 Connect

- > Integrated communication interfaces
- > Ready to connect to energy management platforms

3 Save

- > Data-driven energy efficiency actions
- > Real time monitoring and control
- > Access to energy and site information through on-line services



5 types of information

To determine the equipment required according to the information which will be useful to your customer, we can classify this information by making an analogy with a car.



Metering

This is the car's odometer. Here, the circuit breakers indicate the electricity consumption.



Measurement

This is the speed indicator. Your customer has a real-time indication of their electricity consumption and can track its rise or fall.



Quality

This is the rev counter. For the same electricity consumption, the installation may be over-used or under-used just like an engine over-revving or under-revving.



Availability

These are the warning lights for the battery, tyre wear, or even the fuel gauge. If one of these lights up, a maintenance operation is required.



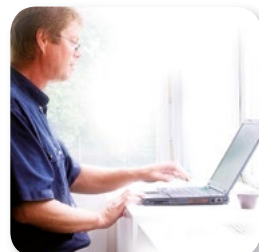
Controls

These are the steering wheel levers. Just like the lights, horn, indicators, etc., signals from this control will switch the loads on or off.

Two ways of accessing information








- Directly via the front panel



- Remotely via the company IT network.

Acti 9






Data acquisition

 Metering	 Measurement	 Quality	 Availability (states/statuses)	 Control
			■	■
■				



Compact NSX 100-630






Data acquisition

 Metering	 Measurement	 Quality	 Availability (states/statuses)	 Control
	■		■	
	■		■	■
	■		■	■



Compact NS Masterpact NT/NW/MTZ

Data acquisition

 Metering	 Measurement	 Quality	 Availability (states/statuses)	 Control
		■		
		■		■
		■		■



Customer Experience Centre - Telford



Interact with low voltage technology – first hand

Join us for a strategic conversation about where your organisation is heading and how we can support you on your low voltage journey

Our leading-edge Customer Experience Centre for low voltage equipment is a thought provoking environment ideal for examining the part energy management plays in a successful organisation. It's about getting to grips with your situation and challenges; looking at where you are and where you'd like to be on your technology journey; then showing practical ways we could work together to get there.

The Customer Experience Centre – Telford, has been designed to take the complexity out of power and energy management. It's a relaxed set-up where you can explore the possibilities and draw on our expertise to get to the heart of the issues facing your organisation.

To book a visit or to learn more about the CEC visit:
www.schneider-electric.co.uk/cec

Loadcentre KQ A type

125A Distribution

- Extensive range of bolt on incomers & plug-on outgoers
- All manufactured to BS EN 61439-3
- Cable knockouts on all sides for speed of installation

About Schneider Electric

Schneider Electric is the global specialist in energy management and automation. With revenues of €25 billion in FY2014, our 170,000 employees serve customers in over 100 countries, helping them to manage their energy and process in ways that are safe, reliable, efficient and sustainable. From the simplest of switches to complex operational systems, our technology, software and services improve the way our customers manage and automate their operations. Our connected technologies reshape industries, transform cities and enrich lives.

At Schneider Electric, we call this Life Is On.

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