

Low Voltage Power Distribution

Acti9 Isobar P | PowerPact 4 | Metering

Catalogue 2025

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Life Is On Schneider Electric

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Acti9 Isobar P

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PowerPact 4 Panelboards

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Acti9 Isobar P

Innovation

Multi9 Isobar



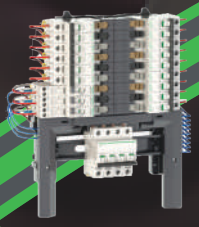
1990

Isobar 4C



2005

Acti9 Isobar



2013

Acti9 Isobar P



2018

Acti9 Isobar P



2022

Active Safety System

The new Acti9 Isobar P - Active distribution boards integrate Active AFDD and plug-on neutral RCBOs offering unparalleled reliability, safety and simplified installation solutions.

INNOVATION supporting five pillars:

- Efficiency
- Safety
- Remote everything
- Resilience
- Sustainability

Integrated Arc Fault protection devices help in complying to latest regulatory standards

BS7671 18th Edition Amendment 2
Applications for Arc Fault Detection Devices with regulation 421.1.7

- Higher Risk Residential Buildings (HRRB)
- Houses in Multiple Occupation (HMO)
- Purpose-built student accommodation
- Care homes

For all other locations, the use of AFDD is recommended.

An electrical arc fault occurs when there is a damage in the insulation of a wire due to gradual wear and tear. Electrical arcs get formed through these damaged surfaces which spread gradually damaging the insulation even further, eventually resulting in fire.

Such small arcs can not be detected by traditional protection devices and need specialized devices called “Arc Fault Protection Devices (AFDD)”. These devices trip and break the circuit open as soon as they detect arc. With inbuilt connectivity along with AFDD in all-in-one “Acti9 Active”, the protection is further reinforced as an alarm is triggered as soon as AFDD trips thereby alerting professionals to take suitable action.

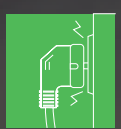
Situations that can damage cable insulation causing arcs

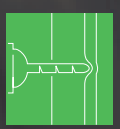

Power supply cord subjected to excessive forces (by furniture or a position)


Ageing of cables and protective devices


Power supply cord defective following inappropriate or excessively numerous operations


Cables weakened at connection


Power sockets in poor condition


Accidental damage to a cable


Loose connections


Cable damaged by the environment, UV, vibrations, moisture, rodents and power sockets in poor condition



Active Safety System

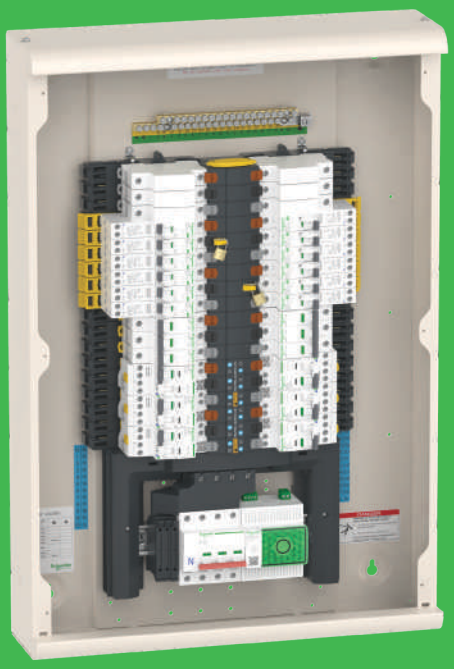
Make Active Safety Your New Standard

Acti9 Isobar P Distribution boards

The evolution of low voltage electrical distribution continues with the demands for reliability, enhanced safety, cost reduction and connectivity ever increasing.

Through market leading innovations for over a quarter of a century, Isobar distribution boards have enabled this evolution and offered new levels of performance.

- 1st outgoing way disconnect feature
- 1st integrated neutral switching function
- 1st integrated incoming metering functions
- 1st integrated innovative plug-on Neutral distribution system
- Integration of AFDD into the three phase distribution board
- Enhance safety with the Integration of an all-in-one Active AFDD into three phase distribution board



ACTIVE All-in-one device with connectivity

Active Safety System - with advanced notifications, diagnostics, analytics, and a compact integrated device.

An Active Safety System gives business owners and maintenance personnel greater control over their building's electrical health and, in turn, enhances service continuity.



10kA

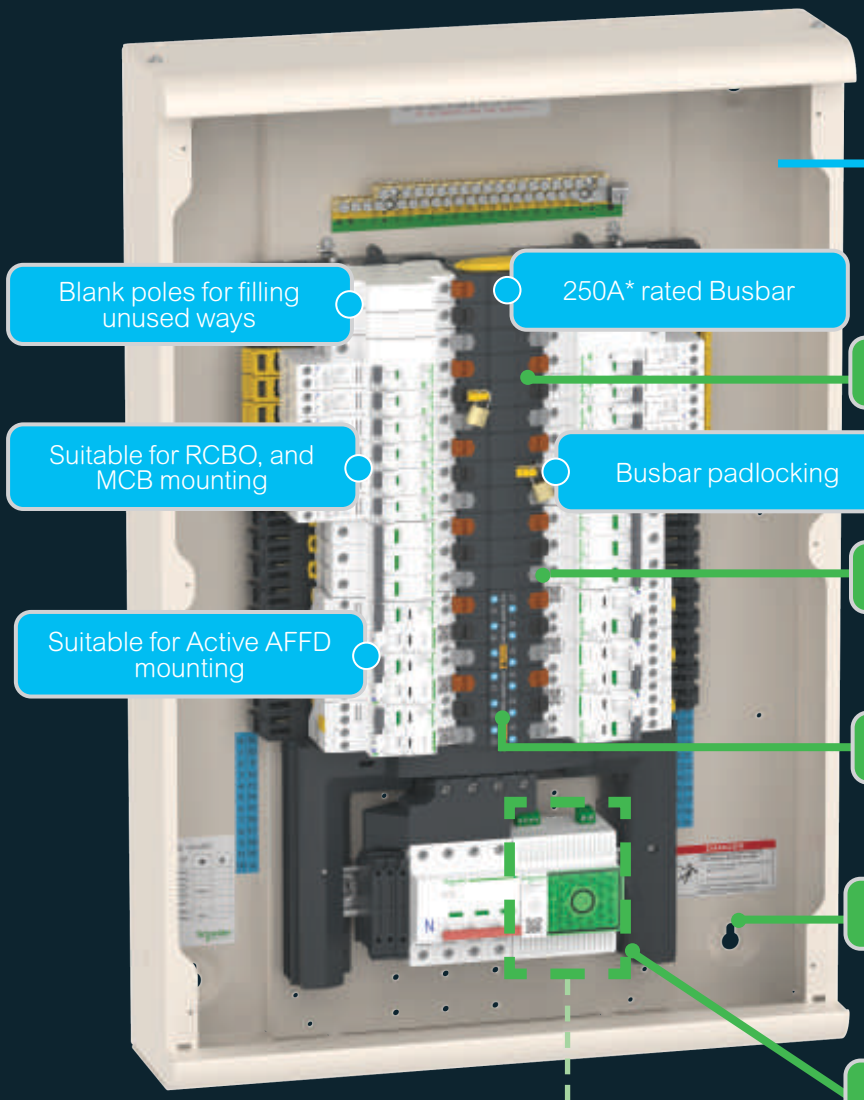
PoN Acti9 PoN RCBOs

The plug-on neutral & functional Earth RCBOs bring innovation for quick and easy installation, benefits include:

- Time saving due to the quick and simple plug-on technology
- Fast and efficient due to absence of functional Neutral and Earth wires to unravel and straighten
- No need to cut, dress or terminate any functional wires



Introducing Active distribution boards



10kA

Blank poles for filling unused ways

250A* rated Busbar

Fully insulated construction

Suitable for RCBO, and MCB mounting

Busbar padlocking

Off-load interlocked disconnect switch

Suitable for Active AFFD mounting

Clear labeling for circuit identification

Enhanced cabling space

Flexibility with advanced function



Surge Protection Device

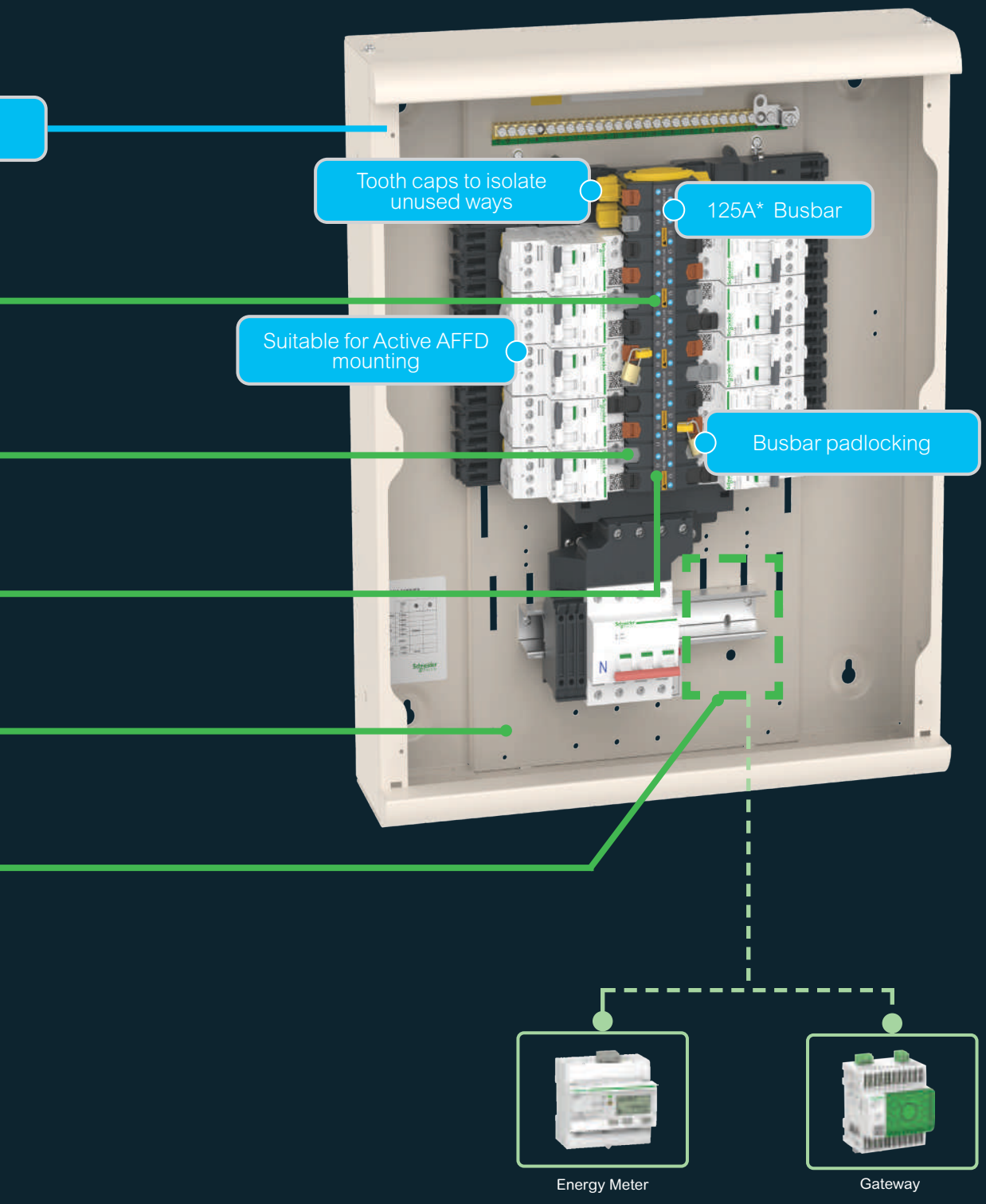


Energy Meter



Gateway

Active HYBRID
distribution board

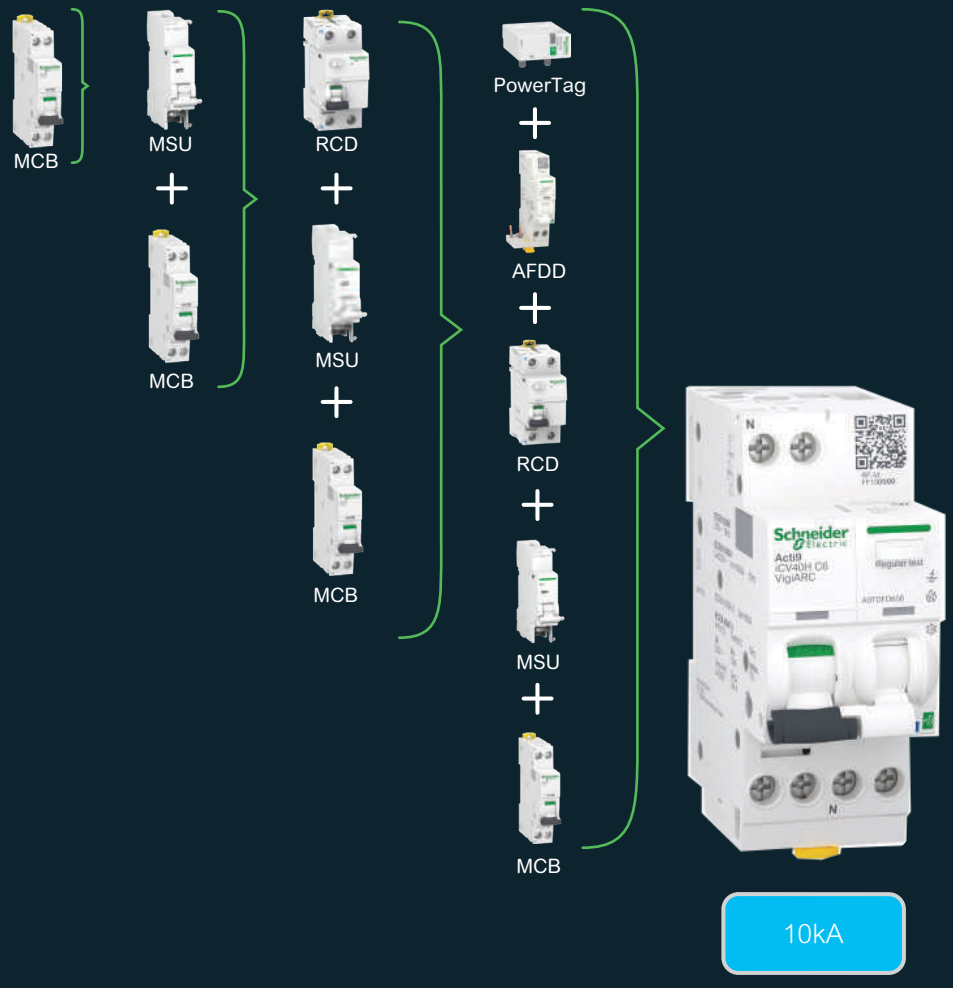


Active STANDALONE
distribution board

* For typical assembly configuration ratings (I_{nA}) with incomers fitted consult customer care

Introducing an All-in-One protection device

A core part of the Active Safety System, the Acti9 Active with integrated Residual Current Device (RCD), Miniature Circuit Breaker (MCB), AFDD, and over-voltage protection delivers an exceptional level of protection for people, appliances, circuits, from fire risks – enabled by a compact all-in-one device. Available in both connected and non-connected versions, Acti9 Active supports a variety of safety and connectivity requirements.



Integrated **AFDD** for greater protection from arc-fault related fires

Integrated **RCD** for greater protection of people

Integrated **MCB** for short circuit and overload protection

Integrated **MSU** circuit protection from transient network over-voltage
MSU: overvoltage release

Acti9 Active
All-in-one protection device

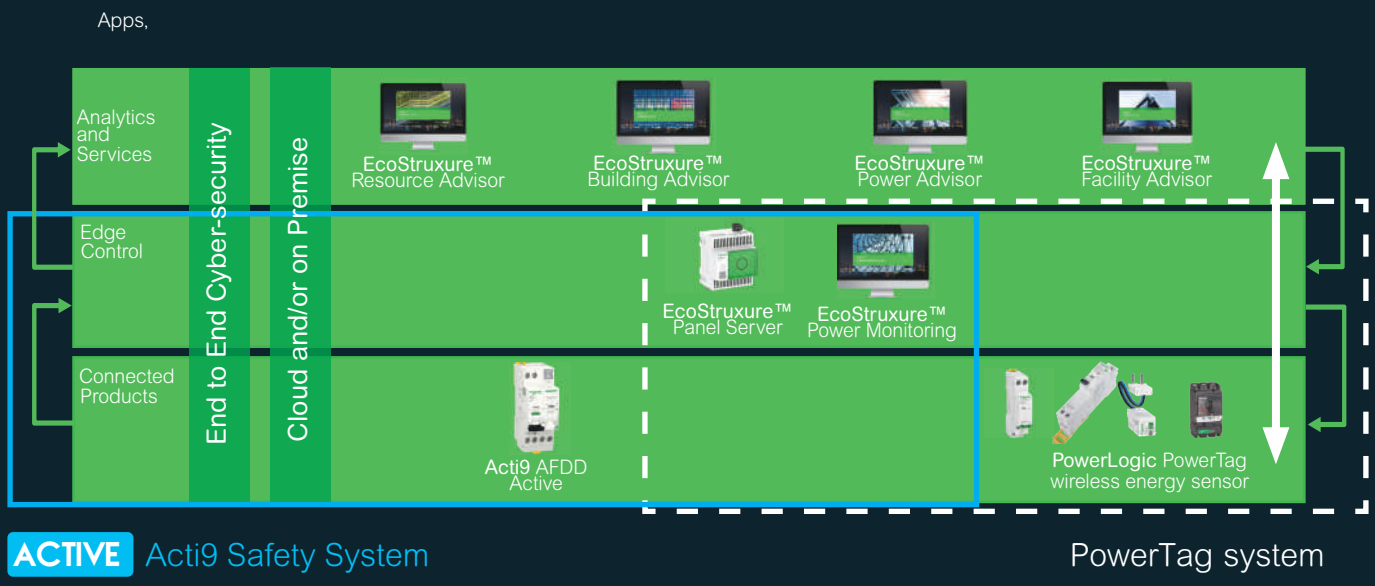
Achieving greater resiliency and reliability through Active Safety System

The system features Acti9 Active, an all-in-one device with integrated Miniature Circuit Breaker (MCB), Residual Current Device (RCD), and Arc Fault Detection Device (AFDD) that ensures comprehensive protection. The advanced protection is further enhanced by the inbuilt connectivity. With an **Active Safety System**, you're providing a solution that's future-ready, cost-efficient, and worry-reducing.



Integrate with EcoStruxure™ Energy Hub

Energy Hub simplifies the management of digitalised electrical and energy systems for facility owners and operators of mid-market commercial and industrial buildings. Designed with simplicity in mind, Energy Hub is easy to get started, easy to learn, and easy to achieve results. Simply connect the smart energy infrastructure for one or multiple buildings to automatically collect, store, visualise and report on their energy data.



Comply to building energy codes

Energy Hub supports common building energy code requirements.

Achieve up to 30% energy savings

Energy Hub enables you to analyse energy usage by load type, building, floor, zone, and time period so you can identify waste and take action.

Ensure business continuity

Energy Hub enables you to improve reliability and availability of building energy with a faster response time to electrical issues.

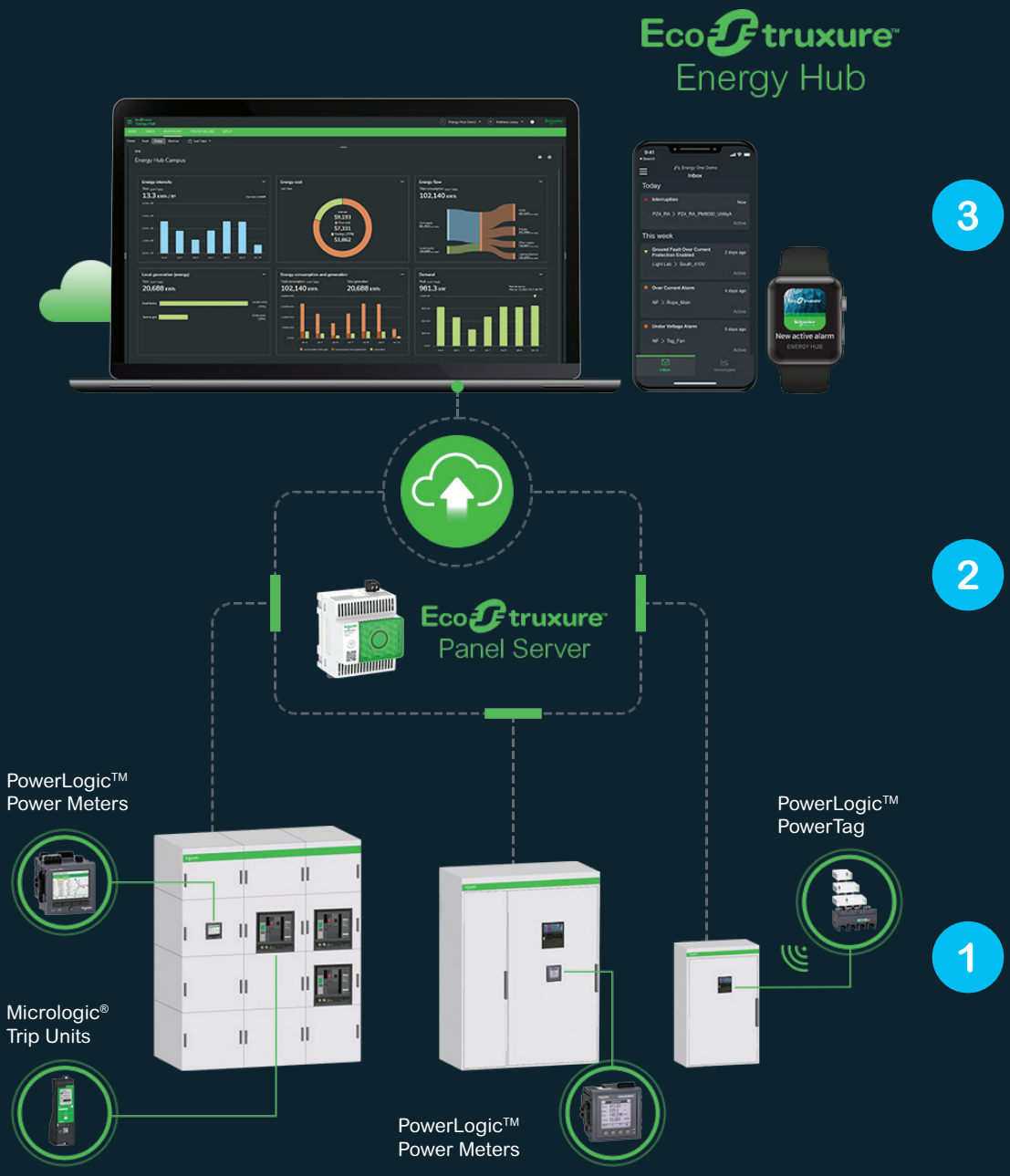
Reach your sustainability goals

Energy Hub helps to increase building value by differentiating your brand and making progress towards sustainability.

To learn more visit: https://www.se.com/uk/en/product-range/65404-ecostruxure-power-monitoring-expert-9-0/#overview

EcoStruxure™ Energy Hub

Subscription plans to support your specific energy efficiency, sustainability and business continuity needs.



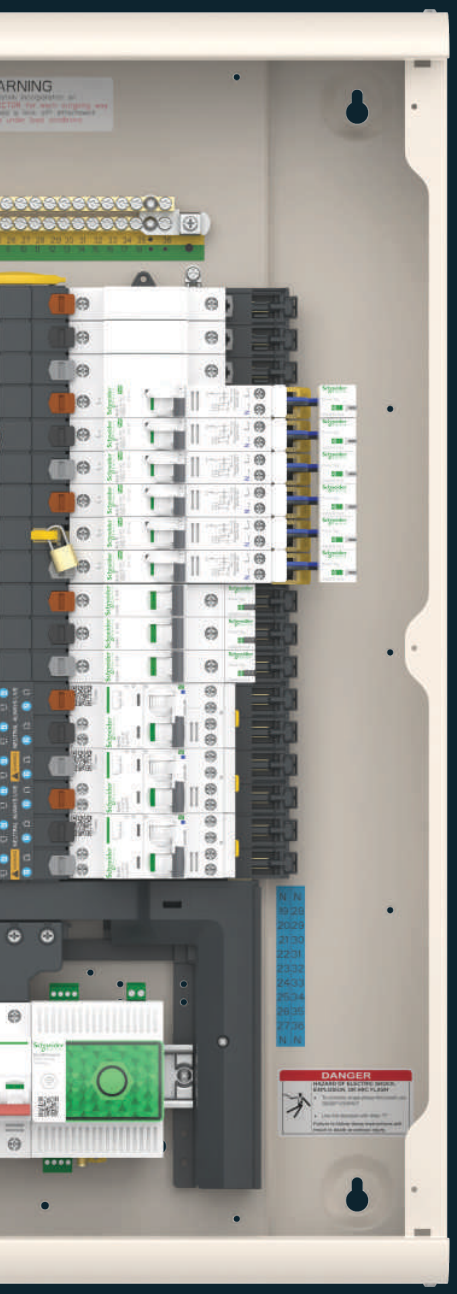
Energy insight at your fingertips

Getting started with EcoStruxure Energy Hub is simple and fast. It's as simple as 1-2-3.

1. Install smart meters, intelligent circuit breakers such as **PowerLogic** or **MicroLogic** – even 3rd party devices.
2. Connect through our simple and secure cloud gateways such as **EcoStruxure Panel Server.**
3. Login and setup your **EcoStruxure Energy Hub** application in minutes with intuitive drag-and-drop configuration.

Best-in-class connectivity in 3 steps

Acti9 Isobar P harnesses the connectivity of the Acti9 range enabling distribution boards to become smart and connected.



1



Acti9 Active AFDD
A range of devices providing advanced safety functions and in-built connectivity. They connect wirelessly to the gateway and send data to enable monitoring, diagnostics, pre-alarming, and alarming.



Acti9 RCBO + PowerTag
Enable asset management through RCBO Powertag.

2



EcoStruxure™ Panel Server (Gateway)
One of the most advanced gateways for modern-day wireless systems. It's simple to commission and cost-efficient.

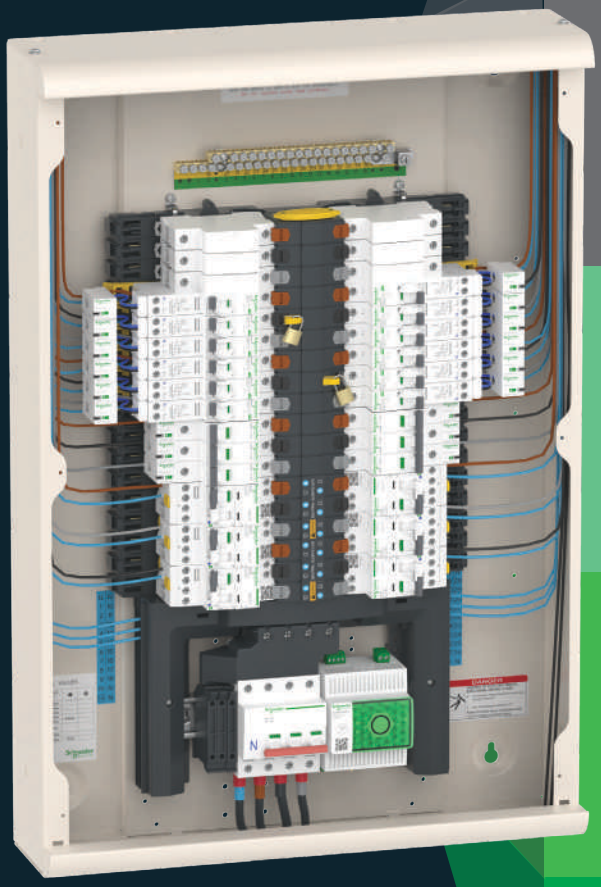
3



EcoStruxure™ Power Monitoring Expert or Energy Hub that notifies arc fault detection
Intuitive-to-use software that aggregates installation data for greater visibility and displays actionable insights. It alerts facility managers to problems as they occur as well as to predicted issues.

Innovation supporting five key pillars

Acti9 Isobar P - Active Safety System



Efficiency

- Optimised system with Active AFDD
- Simple, quick and easy-to-install with PoN RCBOs
- Modular – Ready-to-install distribution boards

Safety

- Safe and reliable connections
- Fully insulated construction
- Compliant with BS EN 61439-3, UKCA

Remote everything

- Simple wireless system
- Easy remote monitoring
- Detailed visibility at final circuits

Resilience

- Complete integration with circuit protection, Gateway and Power Monitoring
- Enhance operational resilience

Sustainable

- Meet sustainable energy targets
- Green Premium offer
- Sustainable packaging

Everything you need, now just a simple scan away!



The Acti**9** iC60 range now comes with a feature packed QR Code



- Product information
- Assistance for installation, operation, and maintenance
- Full traceability and unique product identification

A pioneer in digitisation of Schneider Electric's modular non-connected devices

Acti**9** iC60 is the first step to a future of possibilities



The range now comes with an embedded QR Code on the product. Scanning the code gives you instant access to information about the device like never before.

Information made easy

Scanning the QR Code from mySchneider App or any QR Code reader allows access to information directly in the App or in the Schneider Electric Website

- Product data sheet
- Certificates and declarations of conformity
- Product Environmental Profile

Tracking made easy

Unique serial number for easy identification and complete product life-cycle traceability.

- Quick and safe identification with customer care assistance for any request
- Easy and automated product declaration in a project with Ecostruxure™ Power Commission
- Easy product identification for re-ordering

Decisions made easy with EcoStruxure™ Facility Expert

- Access to free preventive maintenance templates in just a few clicks
- Timely maintenance reminders for a more reliable plant



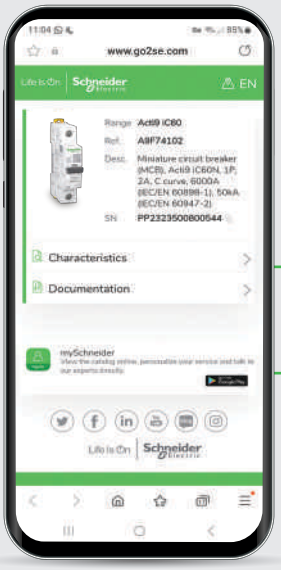
One small QR Code, a whole new world of information



1

Scan the QR Code

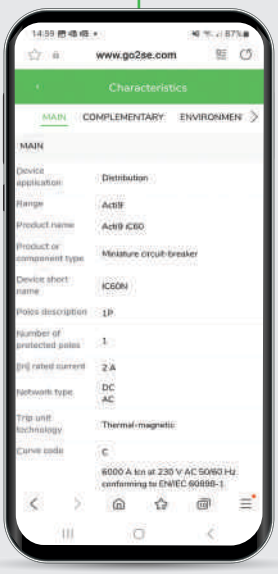
from mySchneider App or any QR Code reader

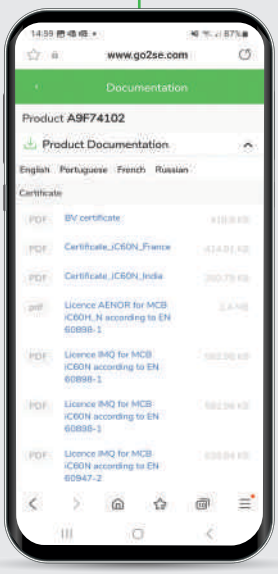


2

Access to product info

directly in the App or in the Schneider Electric Website





QR Code is a registered trademark of DENSO WAVE INCORPORATED in Japan and other countries.


230V~
50/60Hz
Ib: 10A
Imax: 63A
1VA
Schneider
Electric
PowerTag
A9 M63
A9MEM1520



Acti9 Isobar P

A type distribution boards



Single Phase Distribution

Definition

Single Phase distribution board – A single phase assembly containing switching or protective devices (e.g. circuit breakers and residual current devices) associated with one or more outgoing circuits fed from one or more incoming circuits, together with terminals for the neutral and circuit protective conductors. It may also include signalling and other control devices.

Key standards

BSEN 61439 – 3 Low Voltage Switchgear and Controlgear Assemblies

BSEN 60898 – 1 Electrical accessories - Circuit breakers for overcurrent protection for household and similar installations - Circuit-breakers for a.c. operation

BSEN 61009 – 1 Residual Current Circuit Breaker with Overcurrent Protection

BSEN 61008 – 1 Specification for residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs). General rules

BSEN 60947 - 2 Low-Voltage Switchgear and Controlgear. Circuit-breakers

BSEN 62606 General requirements for Arc Fault Detection Devices

Applications

Final circuit single phase or single phase and neutral low voltage distribution, typical loads serviced;

Lighting, Power, IT, HVAC, Critical Power.

Generally supplied by a panel board or three phase distribution board, systems are designed to ensure supply continuity “selectivity” and enhanced performance “cascading”.

Typical infrastructure layout



Acti9 Isobar single phase A type distribution boards (125 A)*

Standard Acti9 Isobar P 'A' type distribution board

The Acti9 Isobar P distribution boards are suitable for standard, commercial and industrial applications.

PoN



SEA9APN10

Part reference	No of single pole ways
SEA9APN2	2
SEA9APN6	6
SEA9APN10	10
SEA9APN14	14
SEA9APN18	18
SEA9APN27	27

Multi Service Acti9 Isobar P distribution boards

The Acti9 Isobar P Multi Service Board has the added benefit of the inclusion of DIN rail modular devices if required.

PoN



SEA9APN1016MS

Part reference	No of single pole ways	No of usable single pole DIN rails ways
SEA9APN108MS	10	4
SEA9APN1432MS	14	16
SEA9APN616MS	6	8
SEA9APN148MS	14	4
SEA9APN1016MS	10	8

- Provision to mount Active AFDD devices on the DIN rail

Split Metered Acti9 Isobar P distribution boards

Acti9 isobar split metered distribution board for use when the metering of final circuits may be required. (Including 125 A Incoming Switch Disconnector)

PoN



SEA9APN10S10

Part reference	No of single pole ways	No of single pole ways
SEA9APN6S6 (Inc Meter A9MEM2010)	6	6
SEA9APM10S10 (Inc Meter A9MEM2455)	10	10
SEA9APM14S14 (Inc Meter A9MEM2455)	14	14

- The split metered board has a busbar rating of 100amps.
- The total Load for 2 rows is 50 A per row. 1 row is 40 A per Split.

* For typical assembly configuration ratings (I_{nA}) with incomers fitted consult customer care

Acti9 Isobar and Isobar P single phase incoming devices

Switch Disconnectors


SEA91252

Part reference	Rating in amps	No of poles
SEA91252	125 A	2

- 50 mm² cable capacity
- Torque settings: Incomer 3.5nm

RCD incomers (Type A)

The Acti9 Isobar Type A RCD's can be incorporated directly within the distribution board as incoming devices.


SEA9R21291

Part reference	Rating in amps	Rating in milliamps (mA) sensitivity
SEA9R21240	40 A	30mA
A9R24240	40 A	300mA
SEA9R21263	63 A	30mA
A9R24263	63 A	300mA
SEA9R21291	100 A	30mA
A9R24291	100 A	300mA
A9R25291	100 A	300SmA

Connections - terminals

- Single terminal top or bottom 1...35mm² rigid
- Single terminal top or bottom 1...25mm² flexible
- Single terminal top or bottom 1...25mm² flexible with ferrule

Terminal Blocks - Suitable for direct connection


SEA9TB1252

Part reference	Ratings in amps	No of poles
SEA9TB1252	125 A	2

- 50 mm² cable capacity
- Torque setting 3.5nm

Acti9 Active Arc Fault Detection Device



Acti9 Active is an Arc Fault Detection Device with overload, short circuit and residual current protection, which aims to reduce the risk of electrical fire.

By continuously analysing a large number of electrical parameters, it detects the appearance of electric arcs that are responsible for starting fires. It isolates the circuit concerned which reduces flame appearance occurrence.

Regulation 421.1.7 of BS 7671: 2018 (IET Wiring Regulations 18th Edition) requires the use of AFDD to protect against arc fault in AC final circuits in the applications below
- Higher Risk Residential Buildings (HRRB)
- House in Multiple Occupation (HMO)
- Purpose-built student accommodation
- Care homes

For all other locations, the use of AFDD is recommended.

More specifically, the installation of Acti9 Active is highly recommended to protect circuits with highest risk of fire, such as:
- Protruding cables (risk of knocks)
- Outside cables (greater risk of deterioration)
- Unprotected cables in secluded areas (like Storage rooms)
- Ageing, deteriorating wiring or wiring for Which the connection boxes are inaccessible.

Acti9 Active must not be installed on circuits requiring a high level of continuity of service.

Acti9 Active is not compatible with ATEX regulations.

IEC/BS EN 62606
BS EN IEC 61009-2-1
BS EN IEC 60947-2
IEC/BS EN 60898-1

As per the above standards:
- The Acti9 Active provides a protection for final circuits against overcurrents and insulation faults (protection for people against electric shocks).
- In addition to these protections, the Acti9 Active monitors for electric arcs that occur in cables and connections, that may cause a fire.
- These arcs are the result of localised cable deterioration or loose connections.

It is used for three types of situations that can result in a fire:
- parallel arc detection: insulation problems between two live conductors that cause a resistive short-circuit, too weak to be detected by a circuit breaker and with no earth leakage to be detected by a residual current circuit breaker,
- series arc detection: a damaged conductor or connection will cause a local rise in temperature,
- overheating of electronic components in loads, when exposed to an overvoltage for several seconds.

It combines the following functions:
- circuit protection against overload and short-circuit currents (circuit breaker function),
- protection for people against electric shocks by direct contacts and indirect contacts (30 mA),
- protection against fire hazards by detection of abnormal electric arcs,
- protection against load fire hazards due to slow overvoltages (network overvoltage),
- fire hazard tripping indication via the front panel indicator,
- tripping faults diagnosis by LED blinking in front face.

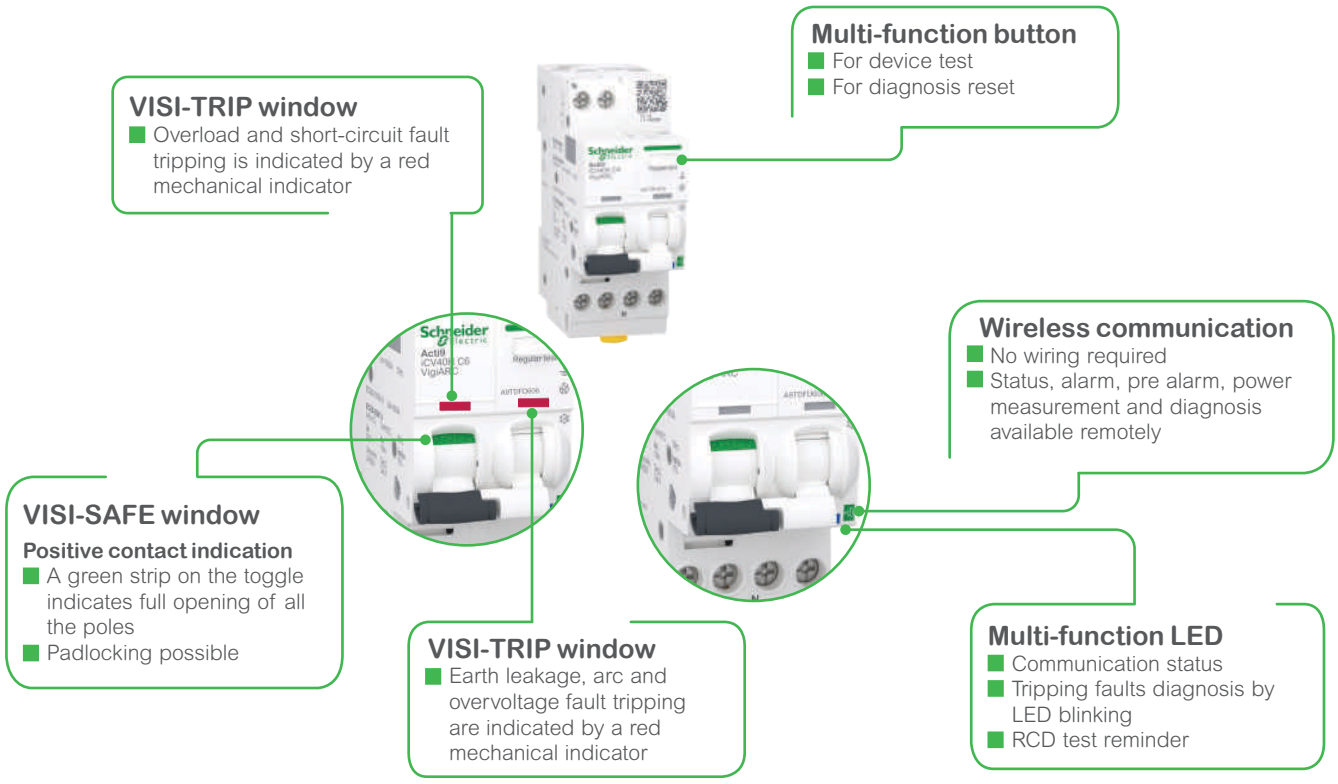
The Acti9 Active should be installed in the place of the circuit's final protection device.

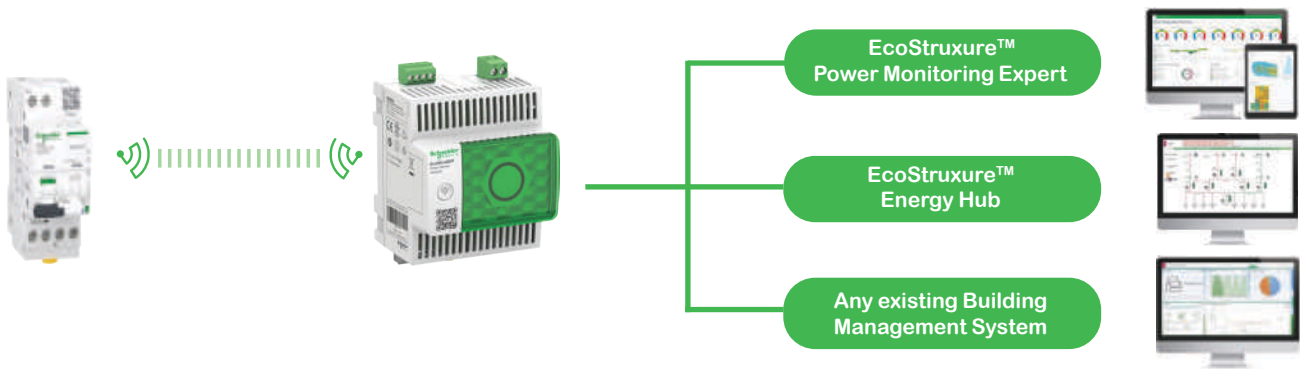
Product is reverse feeding: it can be supplied either by the top or the bottom.

RCD Type
The A-SI type provides increased immunity from electrical interference and polluted or corrosive environments.

Wireless-communication device
- Used together with a concentrator or a gateway to collect and process the data,
- Acti9 Active AFDD provides circuit monitoring and diagnosis down to load level.
- Wireless-communication technology simplifies switchboard wiring and commissioning operations: no wiring is required for the Acti9 Active AFDD to communicate with the concentrator or the gateway.

Acti9 Active Arc Fault Detection Device





Acti9 Active "All-in-One" overview of available data:

- Device status (open/close/trip)
- Diagnostics: Reason for tripping (short-circuit, overload, earth leakage fault, serial arc, parallel arc, overvoltage)
- Customisable Pre-alarming (overload, earth leakage fault, overvoltage)
- Measurement: U, I, P, Power Factor, earth leakage %, internal temperature, time of use
- Protection log (date of 1st operation ON, date of last push on test button, number and reasons for tripping)
- RCD test reminder

Advanced visibility for active safety

Alarms & pre-alarms:

- Customisable thresholds for pre-alarms
- Overload
- Earth leakage
- Overvoltage



Diagnostics & analytics:

- Indication for nature of electrical fault
- Historical data
- Protection logs

Measuring & remote monitoring:

- U, I & P measuring
- Load monitoring

Advanced protection:

- Protection for people, appliances,circuit, and against fire MCB+MSU+RCD+AFDD (MSU : Overvoltage Release)

C Curve



A9TDFD606

Acti9 Active, A-SI type		
C Curve	Rating in amps	Sensitivity rating in milliamps (mA)
A9TDFD606	6 A	30 mA
A9TDFD610	10 A	30 mA
A9TDFD616	16 A	30 mA
A9TDFD620	20 A	30 mA
A9TDFD625	25 A	30 mA
A9TDFD632	32 A	30 mA
Operating voltage	230 VAC	
Operating frequency	50 Hz	
Breaking capacity	10kA	
Width in 9 mm modules	4	
Pole configuration	1P+N	
Comb busbars	A9XPC624, A9X21096, A9XPCM04	

ACTIVE



Associated concentrators / gateways

EcoStruxure™ Panel Server		
Entry	100-227V AC/DC	PAS400
Universal	24V DC	PAS600L
	240V AC/DC	PAS600
Advanced	110-277V AC/DC	PAS800
	24V DC	PAS800L
	PoE	PAS800P

Acti9 Arc Fault Detection Device - iARC



Acti9 iARC is an arc fault detection switch which aims to reduce the risk of electrical fire. By continuously analysing a large number of electrical parameters, it detects the appearance of electric arcs that are responsible for starting fires. It isolates the circuit concerned which reduces flame appearance occurrence.

Regulation 421.1.7 of BS 7671: 2018 (IET Wiring Regulations 18th Edition) requires the use of AFDD to protect against arc fault in AC final circuits in the applications below

- Higher Risk Residential Buildings (HRRB)
- House in Multiple Occupation (HMO)
- Purpose-built student accommodation
- Care homes

For all other locations, the use of AFDD is recommended.

More specifically, the installation of Acti9 iARC is highly recommended to protect circuits with highest risk of fire, such as:

- Protruding cables (risk of knocks)
- Outside cables (greater risk of deterioration)
- Unprotected cables in secluded areas (like storage rooms)
- Ageing, deteriorating wiring or wiring for which the connection boxes are inaccessible.

Acti9 iARC must not be installed on circuits requiring a high level of continuity of service.

Acti9 iARC is not compatible with ATEX regulations.

IEC/BS EN 62606

As per the above standard:

- The arc fault detection switch Acti9 iARC monitors electric arcs that occur in cables and connections and may cause a fire.
- These arcs are the result of localised cable deterioration or loose connections.

It is used for three types of situations that can result in a fire:

- parallel arc detection: insulation problems between two live conductors that cause a resistive short-circuit, too weak to be detected by a circuit breaker and with no earth leakage that would be detected by an earth-leakage protection device,
- series arc detection: a damaged conductor or connection will cause a local rise in temperature, overheating of electronic components in loads, when exposed to an overvoltage for several seconds.

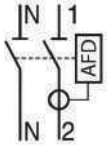
It combines the following functions:

- protection against fire hazards by detection of abnormal electric arcs,
- protection against load fire hazards due to slow overvoltages (network overvoltage),
- fire hazard tripping indication via the front panel indicator,
- positive contact indication (green strip),
- tripping faults diagnosis by LED blinking in front face.

- Coordinated with a MCB or a RCBO, max. 40 A, it protects Phase-Neutral circuits, in full coordination under short-circuit conditions up to a rated breaking capacity of 10,000 A

- Product is reverse feeding: it can be supplied either by the top or the bottom.

Catalogue numbers

Acti9 iARC		
	Rating 40 A (In)	**A9TSB3640**
Operating voltage	230 VAC	
Operating frequency	50 Hz	
Width in 9 mm modules	4	
Pole Configuration	1P+N	

Acti9 Isobar P and AFDD arrangements

A Type multi service distribution boards provide an additional DIN rail to accommodate devices such as Contactors, SPD and AFDD.

DIN rail enclosures can also be used in addition to standard A Type distribution boards to accommodate devices such as Contactors, SPD and AFDD.

Acti9 Multi service boards or DIN rail enclosure

Multi service boards

Acti9 Isobar P single phase A type multi service boards



+



ACTIVE AFDD

or



iARC AFDD

Part reference	No of single pole ways	No of usable single pole DIN	No of AFDD ways
SEA9APN108MS	10	4	2
SEA9APN1432MS	14	16	8
SEA9APN616MS	6	8	4
SEA9APN624MS	6	12	6
SEA9APN148MS	14	4	2
SEA9APN1016MS	10	8	4

Acti9 DIN rail enclosure

DIN rail enclosures



+



ACTIVE AFDD



iARC AFDD

Part reference	No of usable single pole DIN	Number of rows	Dimensions same as	No of AFDD ways
SEA9DE16	8	1	SEA9APN6	4
SEA9DE24	12	1	SEA9APN10	6
SEA9DE32	16	1	SEA9APN14	8
SEA9DE40	20	1	SEA9APN18	10
SEA9DE64	32	2	SEA9APN27	16

Acti9 iC60H PoN RCBO's 10, 30 and 100 mA

Acti9 iC60H plug-on residual current circuit breaker with overload

Compatible with Isobar P distribution boards only

B Curve



A9D56832

A Type

B Curve	Rating in amps	Sensitivity rating in milliamps (mA)
A9D56806	6 A	30 mA
A9D56810	10 A	30 mA
A9D56816	16 A	30 mA
A9D56820	20 A	30 mA
A9D56825	25 A	30 mA
A9D56832	32 A	30 mA
A9D56840	40 A	30 mA
A9D56845	45 A	30 mA

PoN

C Curve



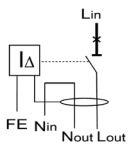
A9D01832

A Type

C Curve	Rating in amps	Sensitivity rating in milliamps (mA)
A9D01806	6 A	10 mA
A9D01810	10 A	10 mA
A9D01816	16 A	10 mA
A9D01820	20 A	10 mA
A9D01825	25 A	10 mA
A9D01832	32 A	10 mA
A9D01840	40 A	10 mA
A9D01845	45 A	10 mA
A9D05806	6 A	30 mA
A9D05810	10 A	30 mA
A9D05816	16 A	30 mA
A9D05820	20 A	30 mA
A9D05825	25 A	30 mA
A9D05832	32 A	30 mA
A9D05840	40 A	30 mA
A9D05845	45 A	30 mA
A9D06806	6 A	100 mA
A9D06810	10 A	100 mA
A9D06816	16 A	100 mA
A9D06820	20 A	100 mA
A9D06825	25 A	100 mA
A9D06832	32 A	100 mA
A9D06840	40 A	100 mA
A9D06845	45 A	100 mA

PoN

PoN



Alternating current (AC) 50/60 Hz		
Breaking capacity (Icn) according to IEC/EN 61009-1		
Current rating (In)	Voltage (Ue)	(Icn)
6 to 45 A	Ph/N 240 V	10000 A

Acti9 iC60H RCBO 10,30 and 100 mA

Acti9 iC60H residual current circuit breaker with overload (wired RCBO)

Compatible with Isobar P and Isobar distribution boards

B Curve



A9D31832

A Type

B Curve	Rating in amps	Sensitivity rating in milliamps (mA)
A9D31806	6 A	30 mA
A9D31810	10 A	30 mA
A9D31816	16 A	30 mA
A9D31820	20 A	30 mA
A9D31825	25 A	30 mA
A9D31832	32 A	30 mA
A9D31840	40 A	30 mA
A9D31845	45 A	30 mA

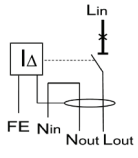
C Curve



A9D10832

A Type

C Curve	Rating in amps	Sensitivity rating in milliamps (mA)
A9D10806	6 A	10 mA
A9D10810	10 A	10 mA
A9D10816	16 A	10 mA
A9D10820	20 A	10 mA
A9D10825	25 A	10 mA
A9D10832	32 A	10mA
A9D10845	45 A	10 mA
A9D11806	6 A	30 mA
A9D11810	10 A	30 mA
A9D11816	16 A	30 mA
A9D11820	20 A	30 mA
A9D11825	25 A	30 mA
A9D11832	32 A	30 mA
A9D11840	40 A	30 mA
A9D11845	45 A	30 mA
A9D12806	6 A	100 mA
A9D12810	10 A	100 mA
A9D12816	16 A	100 mA
A9D12820	20 A	100 mA
A9D12825	25 A	100 mA
A9D12832	32 A	100 mA
A9D12840	40 A	100 mA
A9D12845	45 A	100 mA



Alternating current (AC) 50/60 Hz		
Breaking capacity (Icn) according to IEC/EN 61009-1		
Current Rating (In)	Voltage (Ue)	(Icn)
6 to 45 A	Ph/N 240 V	10000 A

Acti9 iC60H RCBO 110V (Ph/N) 30mA

Acti9 iC60H residual current circuit breaker with overload (wired RCBO)

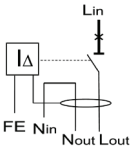
C Curve



A9D19832

A Type

C Curve	Rating in amps	Sensitivity rating in milliamps (mA)	Rating in volts
A9D19810	10 A	30 mA	110 V
A9D19816	16 A	30 mA	110 V
A9D19820	20 A	30 mA	110 V
A9D19825	25 A	30 mA	110 V
A9D19832	32 A	30 mA	110 V

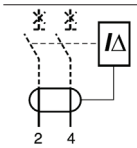


Alternating current (AC) 50/60 Hz		
Breaking capacity (Icn) according to IEC/EN 61009-1		
Current Rating (In)	Voltage (Ue)	(Icn)
10 to 32 A	Ph/N 110 V	10000 A

Vigi iC60 add-on residual current devices

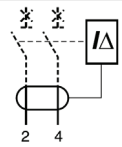


A9V02663

Vigi iC60 add-on residual current devices						
Type Product			A Vigi iC60			Width in 9 mm modules
Auxiliaries			Without auxiliaries			
1P+N	Sensitivity		30 mA	100 mA	300 mA	
	Rating	25 A				3
		63 A	A9V02663 A9V01663*	A9V03663	A9V06663	4
Voltage rating (Ue)			230 - 240 V, 400 - 415 V Except * 110 V			
Operating frequency			50/60 Hz			

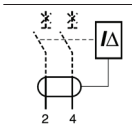


A9V51225

Vigi iC60 add-on residual current devices								
Type Product			A Vigi iC60					Width in 9 mm modules
Auxiliaries			Without auxiliaries					
2P	Sensitivity		30 mA	100 mA	300 mA	500 mA	300 mA S	1000 mA S	
	Rating	25 A	A9V51225	A9V22225	A9V54225	A9V26225	-	-	3
		63 A	A9V51263	A9V22263	A9V54263	A9V26263	A9V25263	A9V29263	4
Voltage rating (Ue)			230 - 240 V, 400 - 415 V						
Operating frequency			50/60 Hz						



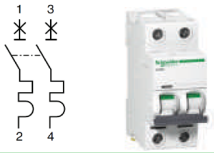
A9V61240

Vigi iC60 add-on residual current devices							
Type Product			SI Vigi iC60				Width in 9 mm modules
Auxiliaries			Without auxiliaries				
2P	Sensitivity		10 mA	30 mA	300 mA S	1000 mA S	
	Rating	25 A	A9V30225	A9V61225	-	-	3
		40 A	-	A9V61240	-	-	4
		63 A	-	A9V61263	A9V65263	A9V39263	4
Voltage rating (Ue)			230 - 240 V, 400 - 415 V				
Operating frequency			50/60 Hz				

*s : Selective

Acti9 iC60H Circuit Breaker

Acti9 iC60H circuit breaker

Type	1P			2P		
						
Current Rating (In)	Curve			Curve		
	B	C	D	B	C	D
1 A	A9F53101	A9F54101	A9F55101	A9F53201	A9F54201	A9F55201
2 A	A9F53102	A9F54102	A9F55102	A9F53202	A9F54202	A9F55202
3 A	A9F53103	-	-	-	-	-
4 A	A9F53104	A9F54104	A9F55104	A9F53204	A9F54204	A9F55204
6 A	A9F53106	A9F54106	A9F55106	A9F53206	A9F54206	A9F55206
10 A	A9F53110	A9F54110	A9F55110	A9F53210	A9F54210	A9F55210
16 A	A9F53116	A9F54116	A9F55116	A9F53216	A9F54216	A9F55216
20 A	A9F53120	A9F54120	A9F55120	A9F53220	A9F54220	A9F55220
25 A	A9F53125	A9F54125	A9F55125	A9F53225	A9F54225	A9F55225
32 A	A9F53132	A9F54132	A9F55132	A9F53232	A9F54232	A9F55232
40 A	A9F53140	A9F54140	A9F55140	A9F53240	A9F54240	A9F55240
50 A	A9F53150	A9F54150	A9F55150	A9F53250	A9F54250	A9F55250
63 A	A9F53163	A9F54163	A9F55163	A9F53263	A9F54263	A9F55263
Width in 9-mm modules	2			4		

Alternating current (AC) 50/60 Hz					
Breaking capacity (Icu) according to IEC/EN 60947-2					
		Voltage (Ue)			
Ph/Ph (2P, 3P, 4P)		12 to 133 V	220 to 240 V	380 to 415 V	440 V
Ph/N (1P)		12 to 60 V	100 to 133 V	220 to 240 V	-
Rating (In)	1 to 4 A	70 kA	70 kA	70 kA	50 kA
	6 to 40 A	42 kA	30 kA	15 kA	10 kA
	50/63 A	42 kA	-	15 kA	10 kA
Breaking capacity (Icn) according to IEC/EN 60898-1					
Current Rating (In)		Voltage (Ue)	(Icn)		
	1 to 63 A	Ph/Ph 400 V	10000 A		
	1 to 63 A	Ph/N 230 V	10000 A		
Direct current (DC)					
Breaking capacity (Icu) according to IEC/EN 60947-2					
	Voltage (Ue)				
Between +/-	12 to 48 V	72 V	100 to 133 V		220 to 250 V
Number of poles	1P		2P (in series)	3P (in series)	4P (in series)
Rating (In) 1 to 63 A	20 kA	10 kA	10 kA	20 kA	10 kA

Complementary Devices (DIN rail mounted)

Acti9 iID 2P B EV RCCB


A9Z51240

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9Z51225	ACTI9 iID 2P 25A 30MA B EV RCCB	EV RCCB	25 A	30 mA	8
A9Z51240	ACTI9 iID 2P 40A 30MA B EV RCCB	EV RCCB	40 A	30 mA	8

Acti9 iID 2P B-SI RCCB


A9Z61225

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9Z61225	ACTI9 iID 2P 25A 30MA B-SI RCCB	Standard	25 A	30 mA	8
A9Z61240	ACTI9 iID 2P 40A 30MA B-SI RCCB	Standard	40 A	30 mA	8
A9Z61263	ACTI9 iID 2P 63A 30MA B-SI RCCB	Standard	63 A	30 mA	8
A9Z64225	ACTI9 iID 2P 25A 300MA B-SI RCCB	Standard	25 A	300 mA	8
A9Z64240	ACTI9 iID 2P 40A 300MA B-SI RCCB	Standard	40 A	300 mA	8
A9Z64263	ACTI9 iID 2P 63A 300MA B-SI RCCB	Standard	63 A	300 mA	8

Acti9 iID 2P A-SI RCCB


A9R61225

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9R61225	Acti9 iID 2P 25A 30MA A-SI RCCB	Standard	25 A	30mA	4
A9R61240	Acti9 iID 2P 40A 30MA A-SI RCCB	Standard	40 A	30mA	4
A9R61263	Acti9 iID 2P 63A 30MA A-SI RCCB	Standard	63 A	30mA	4

Acti9 iID 2P A RCCB


A9R21225

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9R21225	Acti9 iID 2P 25A 30MA A RCCB	Standard	25 A	30mA	4
A9R21240	Acti9 iID 2P 40A 30MA A RCCB	Standard	40 A	30mA	4
A9R21263	Acti9 iID 2P 63A 30MA A RCCB	Standard	63 A	30mA	4
A9R21291	Acti9 iID 2P 100A 30MA A RCCB	Standard	100 A	30mA	4
A9R24225	Acti9 iID 2P 25A 300MA A RCCB	Standard	25 A	300mA	4
A9R24240	Acti9 iID 2P 40A 300MA A RCCB	Standard	40 A	300mA	4
A9R24263	Acti9 iID 2P 63A 300MA A RCCB	Standard	63 A	300mA	4
A9R24291	Acti9 iID 2P 100A 300MA A RCCB	Standard	100 A	300mA	4

Acti9 A-Type iDPN N Vigi (6kA)


A9D06610

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9D06610	Acti9 A iDPN N Vigi 10A B-Cur 30MA	B-Curve	10 A	30mA	4
A9D06616	Acti9 A iDPN N Vigi 16A B-Cur 30MA	B-Curve	16 A	30mA	4
A9D06620	Acti9 A iDPN N Vigi 20A B-Cur 30MA	B-Curve	20 A	30mA	4
A9D01610	Acti9 A iDPN N Vigi 10A C-Cur 30MA	C-Curve	10 A	30mA	4
A9D01616	Acti9 A iDPN N Vigi 16A C-Cur 30MA	C-Curve	16 A	30mA	4
A9D01620	Acti9 A iDPN N Vigi 20A C-Cur 30MA	C-Curve	20 A	30mA	4

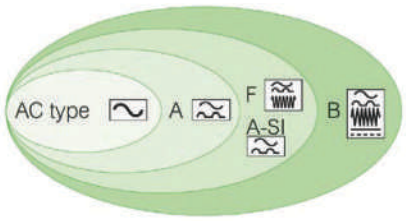
Acti9 iC60H2 2P RCBO (10kA)



A9D19210

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9D19210	Acti9 iC60H2 2P RCBO 10A 110V	110V	10 A	30mA	4
A9D19216	Acti9 iC60H2 2P RCBO 16A 110V	110V	16 A	30mA	4
A9D19220	Acti9 iC60H2 2P RCBO 20A 110V	110V	20 A	30mA	4
A9D19225	Acti9 iC60H2 2P RCBO 25A 110V	110V	25 A	30mA	4
A9D19232	Acti9 iC60H2 2P RCBO 32A 110V	110V	32 A	30mA	4
A9D11210	Acti9 iC60H2 2P RCBO 10A 240V	240V	10 A	30mA	4
A9D11216	Acti9 iC60H2 2P RCBO 16A 240V	240V	16 A	30mA	4
A9D11220	Acti9 iC60H2 2P RCBO 20A 240V	240V	20 A	30mA	4
A9D11225	Acti9 iC60H2 2P RCBO 25A 240V	240V	25 A	30mA	4
A9D11232	Acti9 iC60H2 2P RCBO 32A 240V	240V	32 A	30mA	4

RCD types



iCT Contactor

Provides an optimised solution with desynchronised and reinforced contacts for head of group lighting applications



A9C22711



A9C24740

Reference	Description	No. of Poles	Control Voltage (VAC)	Contact	Rating (In) AC7a	Rating (In) AC7b
A9C22711	iCT 16A 1P 1NO 230...240VAC Contactor	1 Pole	230…240 VAC	1NO	16 A	6 A
A9C20731	iCT 25A 1P 1NO 230...240VAC Contactor	1 Pole	230…240 VAC	1NO	25 A	8.5 A
A9C22712	ICT 16A 2P 2NO 230...240VAC Contactor	2 Pole	230…240 VAC	2NO	16 A	6 A
A9C22715	iCT 16A 2P 1NO+1NC 230...240VAC Contactor	2 Pole	230…240 VAC	1NO+1NC	16 A	6 A
A9C22722	iCT 20A 2P 2NO 230...240VAC Contactor	2 Pole	230…240 VAC	2NO	20 A	-
A9C20732	iCT 25A 2P 2NO 230...240VAC Contactor	2 Pole	230…240 VAC	2NO	25 A	8.5 A
A9C20736	iCT 25A 2P 2NC 230...240VAC Contactor	2 Pole	230…240 VAC	2NC	25 A	8.5 A
A9C20842	iCT 40A 2P 2NO 220...240VAC Contactor	2 Pole	220…240 VAC	2NO	40 A	15 A
A9C20862	iCT 63A 2P 2NO 220...240VAC Contactor	2 Pole	220…240 VAC	2NO	63 A	20 A
A9C20882	iCT 100A 2P 2NO 220...240VAC Contactor	2 Pole	220…240 VAC	2NO	100 A	-
A9C22813	iCT 16A 3P 3NO 220...240VAC Contactor	3 Pole	220…240 VAC	3NO	16 A	6 A
A9C20833	iCT 25A 3P 3NO 220...240VAC Contactor	3 Pole	220…240 VAC	3NO	25 A	8.5 A
A9C20843	iCT 40A 3P 3NO 220...240VAC Contactor	3 Pole	220…240 VAC	3NO	40 A	15 A
A9C20863	iCT 63A 3P 3NO 220...240VAC Contactor	3 Pole	220…240 VAC	3NO	63 A	20 A
A9C22814	iCT 16A 4P 4NO 220...240VAC Contactor	4 Pole	220…240 VAC	4NO	16 A	6 A
A9C22818	iCT 16A 4P 2NO+2NC 220...240VAC Contactor	4 Pole	220…240 VAC	2NO+2NC	16 A	6 A
A9C22824	iCT 20A 4P 4NO 220...240VAC Contactor	4 Pole	220…240 VAC	4NO	20 A	-
A9C20834	iCT 25A 4P 4NO 220...240VAC Contactor	4 Pole	220…240 VAC	4NO	25 A	8.5 A
A9C20837	iCT 25A 4P 4NC 220...240VAC Contactor	4 Pole	220…240 VAC	4NC	25 A	8.5 A
A9C20838	iCT 25A 4P 2NO+2NC 220...240VAC Contactor	4 Pole	220…240 VAC	2NO+2NC	25 A	8.5 A
A9C20844	iCT 40A 4P 4NO 220...240VAC Contactor	4 Pole	220…240 VAC	4NO	40 A	15 A
A9C20847	iCT 40A 4P 4NC 220...240VAC Contactor	4 Pole	220…240 VAC	4NC	40 A	15 A
A9C20864	iCT 63A 4P 4NO 220...240VAC Contactor	4 Pole	220…240 VAC	4NO	63 A	20 A
A9C20867	iCT 63A 4P 4NC 220...240VAC Contactor	4 Pole	220…240 VAC	4NC	63 A	20 A
A9C20868	iCT 63A 4P 2NO+2NC 220...240VAC Contactor	4 Pole	220…240 VAC	2NO+2NC	63 A	20 A
A9C20869	iCT 63A 4P 3NO+1NC 220...240VAC Contactor	4 Pole	220…240 VAC	3NO+1NC	63 A	20 A
A9C24740	iCT 40A 3P+N 4NO 230...240VAC Contactor	3P+N	230…240 VAC	4NO	40 A	15 A
A9C22740	iCT 40A 3P+N 4NC 230...240VAC Contactor	3P+N	230…240 VAC	4NC	40 A	15 A
A9C24763	iCT 63A 3P+N 4NO 230...240VAC Contactor	3P+N	230…240 VAC	4NO	63 A	20 A
A9C22763	iCT 63A 3P+N 4NC 230...240VAC Contactor	3P+N	230…240 VAC	4NC	63 A	20 A

Single-phase DIN rail mounted energy meters



A9MEM2000



A9MEM2055



Reference	Description
A9MEM2000T	iEM2000T basic energy meter, no display
A9MEM2000	iEM2000 basic energy meter
A9MEM2010	iEM2010 energy meter, kWh pulse output
A9MEM2100	iEM2100 basic energy meter
A9MEM2050	iEM2050 modular single phase power meter 230 V - 45 A with Modbus
A9MEM2055	iEM2055 modular single phase power meter 230 V - 45 A with Modbus, MID
A9MEM2435	iEM2435 power and energy meter, Class 1, 230 V, 100 A, M-Bus, MID, 2 tariffs, 2 pulse outputs, 4 quadrants, LCD display
A9MEM2455	iEM2455 power and energy meter, Class 1, 230 V, 100 A, RS-485, MID, 2 tariffs, 2 pulse outputs, 4 quadrants, LCD display

iPRD surge arresters

iPRD withdrawable surge arresters allow quick replacement of damaged cartridges.
- Type 1 surge arresters meet the normative withstand capability of current wave type 10/350 µs.
- Type 2 surge arresters meet the normative withstand capability of current wave type 8/20 µs.
- Type 3 surge arresters meet the normative withstand capability of combined wave type 1.2/50 µs and 8/20 µs.



A9L65501



A9L40501



A9L20501



A9L08501

Reference	Pole configuration	Rated discharge current (Imax)	Nominal discharge current (In)	Earthing system
iPRD65				
A9L65501	1P+N	65 kA Very high risk level (strongly exposed site)	20 kA	TT & TN-S
iPRD40				
A9L40501	1P+N	40 kA High risk level	15 kA	TT & TN-S
A9L40500	1P+N			TT & TN-S
iPRD20				
A9L20501	1P+N	20 kA Medium risk level	5 kA	TT & TN-S
A9L20500	1P+N			TT & TN-S
iPRD8				
A9L08501	1P+N	8 kA Secondary protection: placed near the loads to be protected when they are at a distance of more than 10 m from the incoming surge arrester	2.5 kA	TT & TN-S
A9L08500	1P+N			TT & TN-S

Surge arrester/circuit breaker association			
Surge arrester	Associated circuit breaker		
	iPRD		iPRD IT
	Isc ≤ 25 kA	Isc ≤ 50 kA	Isc (IT 400 V AC) ≤ 5 kA
iPRD65	Curve C 50 A	Curve C 63 A	Curve C 25 A
iPRD40	Curve C 40 A	Curve C 63 A	Curve C 20 A
iPRD20	Curve C 20 A	Curve C 63 A	Curve C 10 A
iPRD8	Curve C 10 A	Curve C 63 A	Curve C 10 A



A9L16182

Reference	Pole configuration	Rated discharge current (Imax)	Nominal discharge current (In)	Earthing system
iPRD1 12.5r				
A9L16182	1P	50 kA	20 kA	TN-C
A9L16282	1P+N			TT & TN-S

Surge protection kits for separate installation



PRD1PN20R

Each kit is supplied with:
- iPRD surge arrester
- Correctly rated 2 pole iC60H disconnection miniature circuit breaker
- Distributed neutral bar and SEA9NKIT connection
- Insulated high IP rated enclosure with transparent cover
- L1, N, E connecting cables

Surge protection kits (with enclosure)		
Catalogue number	Type	Number of poles
PRD1PN20R	Type 2	Surge Arrester 20 kA 1P+N
PRD1PN40	Type 2	Surge Arrester 40 kA 1P+N
PRD1PN8	Type 2	Surge Arrester 8 kA 1P+N

Acti9 Isobar P single phase accessories

General accessories



SEA9BL

Part reference	Description
SEA9BL	Door Lock
SEA9PD	Padlock Kit for Door
SEA9BP	Blank Pole
SEA9BP3	Single 3 Pole filler
SEA9TB1001	100amp 1 Pole terminal block
SEA9ANWL	SP&N Labels
SEA9FCF	Pack of 24 fixing screws
SEK33	Spare keys
SESDC	Door catch

Distributed neutral kits



SEA9APN2

Part reference	Description	No of ways
SEA9NA10	Distributed neutral kit for 10 way SP&N	10
SEA9NA14	Distributed neutral kit for 14 way SP&N	14
SEA9NA18	Distributed neutral kit for 18 way SP&N	18
SEA9NKIT	Phase to neutral coversion kit (pack of 4, distributed neutral kit also required)	

- This kit allows the switching of upto 4 circuits per board and isolation of the neutral and phase poles for 2 pole devices.

DIN rail enclosures



SEA9DE40

Part reference	Description	Number of rows	Dimensions same as
SEA9DE16	8 SP way module enclosure	1	SEA9APN6
SEA9DE24	12 SP way module enclosure	1	SEA9APN10
SEA9DE32	16 SP way module enclosure	1	SEA9APN14
SEA9DE40	20 SP way module enclosure	1	SEA9APN18
SEA9DE64	32 SP way module enclosure	2	SEA9APN27

Horizontal comb busbar for 18mm pitch for Acti9



Reference	Description	No. of Poles	Rated Voltage (V)	Rating in amps (A)	Modules of 18mm
A9XPH106	Acti9 Comb Busbar 1P 6 MOD.	1 Pole	415V	100A	6 Modules
A9XPH112	Acti9 Comb Busbar 1P 12 MOD.	1 Pole	415V	100A	12 Modules
A9XPH124	Acti9 Comb Busbar 1P 24 MOD.	1 Pole	415V	100A	24 Modules
A9XPH157	Acti9 Comb Busbar 1P 57 MOD.	1 Pole	415V	100A	57 Modules
A9XPH212	Acti9 Comb Busbar 2P 12 MOD.	2 Pole	415V	100A	12 Modules
A9XPH224	Acti9 Comb Busbar 2P 24 MOD.	2 Pole	415V	100A	24 Modules
A9XPH257	Acti9 Comb Busbar 2P 57 MOD.	2 Pole	415V	100A	57 Modules
A9XPH306	Acti9 Comb Busbar 3P 6 MOD.	3 Pole	415V	100A	6 Modules
A9XPH312	Acti9 Comb Busbar 3P 12 MOD.	3 Pole	415V	100A	12 Modules
A9XPH324	Acti9 Comb Busbar 3P 24 MOD.	3 Pole	415V	100A	24 Modules
A9XPH357	Acti9 Comb Busbar 3P 57 MOD.	3 Pole	415V	100A	57 Modules
A9XPH412	Acti9 Comb Busbar 4P 12 MOD.	4 Pole	415V	100A	12 Modules
A9XPH424	Acti9 Comb Busbar 4P 24 MOD.	4 Pole	415V	100A	24 Modules
A9XPH457	Acti9 Comb Busbar 4P 57 MOD.	4 Pole	415V	100A	57 Modules
A9XPH512	Acti9 Comb Busbar 3P+N 12 MOD.	3P+N	415V	100A	12 Modules
A9XPH518	Acti9 Comb Busbar 3P+N 18 MOD.	3P+N	415V	100A	18 Modules
A9XPH524	Acti9 Comb Busbar 3P+N 24 MOD.	3P+N	415V	100A	24 Modules
A9XPH557	Acti9 Comb Busbar 3P+N 57 MOD.	3P+N	415V	100A	57 Modules



Acti9 Isobar

B type distribution boards

Three Phase Distribution

Definition

Three Phase distribution board – A three phase assembly containing switching or protective devices (e.g. circuit breakers, Arc Fault Detection Devices, and residual current devices) associated with one or more outgoing circuits fed from one or more incoming circuits, together with terminals for the neutral and circuit protective conductors. It may also include signalling and other control devices.

Key standards

BSEN 61439 – 3 Low Voltage Switchgear and Controlgear Assemblies

BSEN 60898 – 1 Electrical accessories - Circuit breakers for overcurrent protection for household and similar installations - Circuit-breakers for a.c. operation

BSEN 61009 – 1 Residual Current Circuit Breaker with Overcurrent Protection

BSEN 61008 – 1 Specification for residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs). General rules

BSEN 60947 - 2 Low-Voltage Switchgear and Controlgear. Circuit-breakers

BSEN 62606 - General requirements for Arc Fault Detection Devices

Applications

Final circuit single phase or three phase and neutral low voltage distribution, typical loads serviced;

Motors, General Power, HVAC, Critical Power.

Generally supplied by a panel board or switchboard, systems are designed to ensure supply continuity “selectivity” and enhanced performance “cascading”.

Typical infrastructure layout



Isobar P distribution boards – selection guide



Main characteristics		Hybrid Boards	Standalone Boards	Standard Boards	Meter Ready Boards	Split Metered		Heavy Duty
Outgoing Ways		8TPN+ 6 AFDD devices 14TPN+ 6 AFDD devices 10TPN+ 12 AFDD devices	12, 24, 36 AFDD devices	4-24 TPN Ways	6-24 TPN Ways	8+8 TPN Ways 14+8 TPN Ways 16+8 TPN Ways 18+4 TPN Ways	6 AFDD & 8+4+4 TPN Ways 6 AFDD & 4+8+4 TPN Ways 4+6+10 TPN Ways	6-16 TPN Ways TPN Ways
Main Busbar Current Rating upto		250 A	125 A	250 A	125 A	250 A	250 A	125 A
Degree of protection		IP3X	IP3X	IP3X	IP3X	IP3X	IP3X	IP55
Incomer options	Switch disconnectors 125 A	√	√	√	√	√	√	√
	Switch disconnectors 160A to 250 A	√	X	√	X	√	√	X
	Moulded Circuit Breakers 100 A to 250 A	√	X	√	X	√	√	X
	Residual Current Circuit Breakers upto 160 A	√	X	√	X	√	-	X
	Contactor Incomer - (270 mm extension box included)	√	√	√	X	√	-	X
	Terminal blocks - suitable for direct connection (250 A includes extension box)	√	X	√	X	√	-	X
	Dual metered extension enclosure including switch disconnector and MID meters	√	√	√	√	√	X	X
	Dual metered extension enclosure including circuit breakers and MID meters	√	√	√	√	√	X	X
	Triple metered extension enclosure including MID meters	-	-	-	-	-	√	-
Outgoers options	Active AFDD	√	√	Active AFDD can be installed using modular extension board			√*	X
	iC60H PoN RCBO	√	X	√	√	√	√	√
	iC60H MCB	√	X	√	√	√	√	√
	Distributed neutral	X	X	√	√	√	√	√

* Only boards with hybrid capacity.

Isobar P distribution boards – selection guide



Range	Type of board	Architecture	Rating	No of triple Poles	Options
SEA9 (Schneider Electric Acti9)	B - Three Phase	PN - plug-on neutral	Blank – Standard boards upto 250 A 125 – Split metered board upto 125 A 250 – Split metered board upto 250 A	**Standard Boards – TPN ways** 4 6 8 12 16 18 24 **Split Metered Boards – TPN ways** 8S8 = 8 + 8 14S8 = 14 + 8 16S8 = 16 + 8 18S4 = 18 + 4 10S6S4 = 10+6+4 **Hybrid Active AFDD Boards** 6T8S4S4 = 6 Active AFDD & 8 + 4 + 4 6T4S8S4 = 6 Active AFDD & 4 + 8 + 4 8AFD6 = 8TPN+ 6 Active AFDD devices 14AFD6 = 14TPN+ 6 Active AFDD devices 10AFD12 = 10TPN+ 12 Active AFDD devices **Standalone Active AFDD Boards** 12AFD = 12 Active AFDD devices 24AFD = 24 Active AFDD devices 36AFD = 36 Active AFDD devices	M – Meter Ready HDGR – heavy duty steel HDGK – heavy duty transparent

Acti9 Isobar P three phase B type distribution board*

Hybrid Active distribution boards

The Acti9 Isobar P Hybrid Active AFDD distribution boards are suitable for standard, commercial and industrial applications. It has provision to mount Active AFDDs, RCBO, MCB outgoing circuits. Option to connect incomer up to 250 A.



SEA9BPN8AFD6

Reference No	AFDD ways	Triple pole ways
SEA9BPN8AFD6	6	8
SEA9BPN14AFD6	6	14
SEA9BPN10AFD12	12	10

PoN + ACTIVE

* Metering Kit and SPD kit cannot be used with Hybrid AFDD Boards

Standalone Active distribution boards

The Acti9 Isobar P Standalone Active AFDD distribution boards are suitable for standard, commercial and industrial applications. It has provision to mount only Active AFDDs in outgoing circuits. Maximum incomer rating 125A.



SEA9BPNAFD12

Reference No	AFDD ways
SEA9BPNAFD12	12
SEA9BPNAFD24	24
SEA9BPNAFD36	36

ACTIVE

* Metering Kit and SPD kit cannot be used with Hybrid AFDD Boards

Active pan assembly

The Acti9 Isobar P Active AFDD pan assembly are suitable for standard, commercial and industrial applications. It has provision to mount only Active AFDDs in outgoing circuits. Maximum incomer rating 125A.



SEA9BPNAFD24TN

Reference No	AFDD ways
SEA9BPNAFD24TN	24
SEA9BPNAFD36TN	36

ACTIVE

• Note: Pan assemblies are for panel building only.

Standard Acti9 Isobar P ‘B’ type distribution boards

The Acti9 Isobar P Distribution boards are suitable for standard, commercial and industrial applications.



SEA9BPN12

Part reference	No of triple pole ways
SEA9BPN4	4
SEA9BPN6	6
SEA9BPN8	8
SEA9BPN12	12
SEA9BPN16	16
SEA9BPN18	18
SEA9BPN24	24

PoN

Meter ready Acti9 Isobar P ‘B’ type distribution boards

(Incoming 125A TP&N switch disconnector included)

The Acti9 Isobar P Meter ready distribution boards are suitable for standard, commercial and industrial applications and enabled for an incoming meter connection (see 'Metering Kits' section for options).



SEA9BPN12M

Part reference	No of triple pole ways
SEA9BPN6M	6
SEA9BPN8M	8
SEA9BPN12M	12
SEA9BPN16M	16
SEA9BPN18M	18
SEA9BPN24M	24

PoN

* For typical assembly configuration ratings (I_{nA}) with incomers fitted consult Customer Care

Acti9 Isobar three phase B type distribution board*

Split metered Acti9 Isobar P 'B' type distribution boards (busbar rating 125 A) 125 A switch disconnector fitted

The Acti9 Isobar P Split meter distribution boards are suitable for standard, commercial and Industrial applications and include a 125 A switch disconnector incomer and MID meters with communications (Meters included are 2 A9MEM3255).



SEA9BPN12514S8

Part reference	No of Triple Pole Ways	Upper pan assembly - No of Triple Pole Ways
SEA9BPN1258S8	8	8
SEA9BPN12514S8	14	8
SEA9BPN12516S6	16	6
SEA9BPN12518S4	18	4

PoN

Split metered Acti9 Isobar P 'B' type distribution boards (busbar rating 250 A) incomer supplied separately

The Acti9 Isobar P Split meter distribution boards are suitable for standard, commercial and Industrial applications and include MID meters with communications (incomer supplied separately). Refer to 'Incomer Selection' section (Meters included are 2 A9MEM3255).



SEA9BPN25012S8

Part reference	No of triple pole ways	Upper pan assembly - No of Triple Pole Ways
SEA9BPN2508S8	8	8
SEA9BPN25014S8	14	8
SEA9BPN25016S6	16	6
SEA9BPN25018S4	18	4

PoN

3W Split & Hybrid metered Acti9 Isobar P 'B' type distribution boards (busbar rating 250A) incomer supplied separately.

The Acti9 Isobar P 3W Split metered distribution boards are suitable for standard, commercial and Industrial applications and include MID meters with communications (incomer supplied separately). Refer to 'Incomer Selection' (Meters included are 3 A9MEM3255).

NEW for 2025

Part Reference	AFDD Ways	Lower pan assembly No of Triple Pole Ways	Middle pan assembly No of Triple Pole Ways	Upper pan assembly No of Triple Pole Ways	No of Triple Pole Ways
SEA9BPN2506T8S4S4	6	8	4	4	16 PoN+ACTIVE
SEA9BPN2506T4S8S4	6	4	8	4	16 PoN+ACTIVE
SEA9BPN25010S6S4	N/A	10	6	4	20

Heavy duty Acti9 Isobar P 'B' type distribution boards (White RAL9003)

The Acti9 Isobar P heavy duty distribution board is 125 A rated and has IP55 external protection and includes a steel door (No metering options available).



SEA9BPW12HDGR

Part reference	No of triple pole ways
SEA9BPW6HDGR	6
SEA9BPW8HDGR	8
SEA9BPW12HDGR	12
SEA9BPW16HDGR	16

PoN

Heavy duty Acti9 Isobar P 'B' type distribution boards (White RAL9003)

The Acti9 Isobar P heavy duty distribution board is 125A rated and has IP55 external protection with transparent door (no metering options available).



SEA9BPW8HDGK

Part reference	No of triple pole ways
SEA9BPW6HDGK	6
SEA9BPW8HDGK	8
SEA9BPW12HDGK	12
SEA9BPW16HDGK	16

PoN

* For typical assembly configuration ratings (I_{nA}) with incomers fitted consult Customer Care

Metering Kits

Metering kits are for the addition of incoming metering to an Acti9 Standard Isobar / Isobar P or meter ready / meter ready Isobar P distribution board.

The kit includes a meter / extension box and the type of connection.

SEA9BNKWH

Part reference	Description	Rating in amps	Connection
Metering Kit for a standard board			
SEA9BNKWH	MID 3 Phase kWh kit modbus communications and Pulsed output (Includes A9MEM3255)	250 A	Via CT (Included)
SEA9BNKWHP	MID 3 Phase kWh kit Pulsed output (Includes A9MEM3210)	250 A	Via CT (Included)
SEA9BNMETE	Metering Enclosure for Standard Acti9 Isobar Boards for PM Meters (Meter not included)	250 A	Via CT (Included)
Metering Kit for a meter ready board and hybrid/standalone active distribution boards			
SEA9BN3155	MID 3 Phase kWh kit Modbus communications (Includes A9MEM3155)	63 A	Direct
SEA9BN3110	MID 3 phase kWh kit pulsed output (Includes A9MEM3110)	63 A	Direct
SEA9BN3255	MID 3 phase kWh kit modbus communications (Includes A9MEM3255)	125 A	Via CT (Included)
SEA9BN3210	MID 3 phase kWh kit pulsed output (Includes A9MEM3210)	125 A	Via CT (Included)

Isobar P – pan assembly with neutral distribution

Pan assemblies - for switchboard mounting supplied with earths and neutral, phase coloured Isobar switch disconnectors



SEA9BPN4E

Reference No	No of triple pole ways
SEA9BPN4E	4
SEA9BPN6E	6
SEA9BPN8E	8
SEA9BPN12E	12
SEA9BPN16E	16
SEA9BPN18E	18
SEA9BPN24E	24

PoN

- Max rating of pan assembly: 250A (dependent upon incomer and enclosure)
- With incomer neutral connection option and Earth bars
- Note: Pan assemblies are for panel building only

Isobar P – pan assembly without neutral distribution

Pan assemblies - 3 phase without distributed neutral, supplied fitted on a mounting plate



SEA9BPN4TN

Reference No	No of triple pole ways
SEA9BPN4TN	4
SEA9BPN6TN	6
SEA9BPN8TN	8
SEA9BPN12TN	12
SEA9BPN16TN	16
SEA9BPN18TN	18
SEA9BPN24TN	24

PoN

- Max rating of pan assembly: 250A (dependent upon incomer and enclosure)
- With incomer neutral connection option and Earth bars
- Note: Pan assemblies are for panel building only

Incoming devices for Acti9 Isobar P distribution boards

Switch Disconnectors 125 A

The Acti9 Isobar 125 A incoming switch disconnectors can be incorporated directly within the distribution board.



SEA91253N

Part reference	Rating in amps	No of poles
SEA91253N	125 A	3P+N
SEA91254	125 A	4P

- 50 mm² cable capacity

RCD incomers (Type A)

The Acti9 Isobar Type A RCD's can be incorporated directly within the distribution board as incoming devices.

Part reference	Rating in amps
SEA9R21440	Acti9 iID 4P 40A 30mA RCCB
SEA9R21463	Acti9 iID 4P 63A 30mA RCCB
SEA9R22463	Acti9 iID 4P 63A 100mA RCCB
SEA9R24463	Acti9 iID 4P 63A 300mA RCCB
SEA9R21491	Acti9 iID 4P 100A 30mA RCCB
SEA9R24491	Acti9 iID 4P 100A 300mA RCCB
SEA9R25491	Acti9 iID 4P 100A 300SmA RCCB

Switch Disconnectors 160 A to 250 A

The Acti9 Isobar P 160 A to 250 A incoming switch disconnectors include an extension box (400 mm height enclosure included) and are not compatible with heavy duty distribution boards.



SEA9PNI2504

Part reference	Rating in amps	No of poles
SEA9PNI1603	160 A	3P+N
SEA9PNI1604	160 A	4P
SEA9PNI2003	200 A	3P+N
SEA9PNI2004	200 A	4P
SEA9PQ2254	225 A	4P
SEA9PNI2503	250 A	3P+N
SEA9PNI2504	250 A	4P

Moulded Circuit Breakers 100 A to 250 A

The Acti9 Isobar P 100 A to 250 A incoming circuit breakers include an extension box (400 mm height enclosure included) and are not compatible with heavy duty distribution boards.



Part reference	Rating in amps	No of poles
SEA9PQCB1004	100 A	3P+N
SEA9PQCB1604	160 A	4P
SEA9PQCB2004	200 A	3P+N
SEA9PQCB2504	250 A	4P

- M6 pad terminal connection

Residual Current Circuit Breakers up to 160 A

The Acti9 Isobar P 160 A incoming RCDs include an extension box (400 mm height enclosure included) and are not compatible with heavy duty distribution boards.



SEA9PNI160RCCB

Part reference	Rating in amps	Rating in milliamps (mA) sensitivity	No of poles
SEA9PQ160RCCB	160 A	Adjustable - 30 mA, 300 mA, 1 A, 3 A, and 10 A	4

- M6 pad terminal connection

Terminal Blocks - suitable for direct connection (250 A includes extension box)

The Acti9 Isobar and Isobar P 250 A incoming terminal blocks require an extension box and are not compatible with heavy duty distribution boards.



SEA9PNTB2504

Part reference	Rating in amps	No of poles
SEA9TB1254	125 A	4
SEA9PNTB2504	250 A	4

- M6 pad terminal connection

Dual Source Incomer - (270 mm extension box included)

The Acti9 Isobar Dual Source Incomer is not compatible with heavy duty distribution boards.



SEA9PNDI

Part reference	Rating in amps	No of poles
SEA9PNDI	125 A	4

Contactor Incomer - (270 mm extension box included)

The Acti9 Isobar Contactor Incomer is not compatible with heavy duty distribution boards .



SEA9BN100CCI

Part reference	Rating in amps	No of poles
SEA9BN100CCI	100 A	4

Note: not suitable for safety circuits and lighting circuits

- Includes, 1 x 100 A 4 pole contactor, 4 pole terminal block and 4 pole 125 A switch disconnecter

Dual Metered Extension Enclosure including switch disconnectors and MID meters

The Acti9 Isobar and Isobar P Dual Metered Extension Enclosure for use with standard 125A distribution boards and is not compatible with heavy duty distribution boards (meters included 2 x A9MEM3255).



SEA9BNDM250SD

Part reference	Rating in amps	No of poles
SEA9BNDM160SD	160 A	4
SEA9BNDM200SD	200 A	4
SEA9BNDM250SD	250 A	4

- Requires, 2 x 4P incomers, 2 x distribution boards and 2 x door locks

Dual Metered Extension Enclosure including circuit breakers and MID meters

The Acti9 Isobar Dual Metered Extension Enclosure for use with standard distribution boards and is not compatible with heavy duty distribution boards (meters included: 2 x A9MEM3255).



SEA9BNDM250SD

Part reference	Rating in amps	No of poles
SEA9BQDM160M	160 A	4
SEA9BQDM250M	250 A	4

Incomers for 250 amp split metered boards

MCCB device only.



SEA9QCB2504SM

Part reference	Description	Rating in amps	No of poles
SEA9QCB1604SM	160 A 4p MCCB for 250 amp Split metered board	160 A	4
SEA9QCB2004SM	200 A 4p MCCB for 250 amp Split metered board	200 A	4
SEA9QCB2504SM	250 A 4p MCCB for 250 amp Split metered board	250 A	4
SEA9NI1604SM	160 A 4p Switch for 250 amp Split metered board	160 A	4
SEA9NI2004SM	200 A 4p Switch for 250 amp Split metered board	200 A	4
SEA9NI2504SM	250 A 4p Switch for 250 amp Split metered board	250 A	4

- Incoming device only
- M6 pad terminal connection

Automatic Transfer Switching Equipment kit for Acti9 Isobar P distribution boards 125 A incoming device

Self-acting transfer switching equipment, which includes all necessary sensing inputs, monitoring, and control logic for source change-over operations.

Acti9 Isobar P Automatic Transfer Switching Equipment kit, equipped with TransferPacT automatic transfer switching equipment (ATSE), is a Class PC ATSE specially designed in accordance with IEC 60947-6-1 requirements for power transfer. Mounted to the bottom of the distribution board and bolted on to form a single unit. It has great withstand capabilities to short circuits and reliable making, carrying, and breaking capabilities. It is an all-in-one, non-derived ATSE that keeps reliable connectivity of circuit.





SEA9BP1254TA

Part reference	Description	Rating in amps	No of poles
SEA9BP1254TA	Automatic Transfer Switching Equipment kit for B type Distribution Board in 125 A*	125 A	4

*Launching in 2025

Key features:

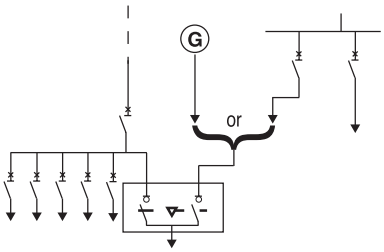
- Source change-over equipment locally to the distribution board
- A completed ready-to-install solution with one commercial part reference
- Compact and space-saving for change-over operation on final distribution transition
- Bolt-on kit with retrofit capabilities

TransferPacT Automatic Transfer Switching Equipment (ATSE)

TransferPacT Automatic Transfer Switching Equipment (ATSE) is a high speed, compact, intelligent, automatic transfer switch with a modular design, which provides maximum scalability and robust performance.

- It provides a quick setting and easy view interface
- It provides comprehensive function with a built-in controller and display
- It contains one or more switching devices for disconnecting the load circuits from one supply and connecting to another supply
- It is a PC class ATSE designed switch conforming to IEC 60947-6-1 standard and British Life Safety Standard with BS8519-2020





Power availability

Maximised uptime:

- Innovative technology ensuring transfer in less than 500 ms

Vast application:

- Utilisation category AC-33B without derating, fits the most complicated load types

Reliable under extreme conditions:

- Short circuit capabilities including short time withstand current for your power continuity

Robust design:

- Extreme environment proof
- Best-in-class electromagnetic protection, exceeding industry standards on class B
- Designed to perform in harsh environments with operating temperature -25 to 70 °C
- Successfully passed testing in compliance with IEC 60068-2-6 and IEC 60068-2-27

Efficiency

Easy installation:

- Built-in DPS and sensing wire, 30% of commissioning time saving
- Multiple installation adapted

Enhanced scalability:

- 10 optional function modules plug and play, non-disruption upgrading

Connectivity

Natively connected – integrated in EcoStruxureTM Power

- 24/7 precise power monitoring on voltage, frequency, voltage unbalance, phase rotation
- Predictive maintenance with hands-on approach and cloud-based monitoring software that synthesises and analyses performance and alert data into proactive recommendations.
- TransferPacT enables wherever-you-go visibility

Standard and certification

- IEC 60947-1 General rules
- IEC 60947-6-1 Transfer switching equipment
- GB 14048.1 General rules
- GB/T 14048.11 Transfer switching equipment
- CB certification
- CE certification
- CCC certification
- UKCA declaration

Acti9 Active Arc Fault Detection Device



Acti9 Active is an Arc Fault Detection Device with overload, short circuit and residual current protection, which aims to reduce the risk of electrical fire.

By continuously analysing a large number of electrical parameters, it detects the appearance of electric arcs that are responsible for starting fires. It isolates the circuit concerned which reduces flame appearance occurrence.

Regulation 421.1.7 of BS 7671: 2018 (IET Wiring Regulations 18th Edition) requires the use of AFDD to protect against arc fault in AC final circuits in the applications below

- Higher Risk Residential Buildings (HRRB)
- House in Multiple Occupation (HMO)
- Purpose-built student accommodation
- Care homes

For all other locations, the use of AFDD is recommended.

More specifically, the installation of Acti9 Active is highly recommended to protect circuits with highest risk of fire, such as:

- Protruding cables (risk of knocks)
- Outside cables (greater risk of deterioration)
- Unprotected cables in secluded areas (like storage rooms)
- Ageing, deteriorating wiring or wiring for which the connection boxes are inaccessible.

Acti9 Active must not be installed on circuits requiring a high level of continuity of service.

Acti9 Active is not compatible with ATEX regulations.

IEC/BS EN 62606
BS EN IEC 61009-2-1
BS EN IEC 60947-2
IEC/BS EN 60898-1

As per the above standards:

- The Acti9 Active provides a protection for final circuits against overcurrents and insulation faults (protection for people against electric shocks).
- In addition to these protections, the Acti9 Active monitors for electric arcs that occur in cables and connections, that may cause a fire. These arcs are the result of localised cable deterioration or loose connections.

It is used for three types of situations that can result in a fire:

- parallel arc detection: insulation problems between two live conductors that cause a resistive short-circuit, too weak to be detected by a circuit breaker and with no earth leakage to be detected by a residual current circuit breaker,
- series arc detection: a damaged conductor or connection will cause a local rise in temperature,
- overheating of electronic components in loads, when exposed to an overvoltage for several seconds.

It combines the following functions:

- circuit protection against overload and short-circuit currents (circuit breaker function),
- protection for people against electric shocks by direct contacts and indirect contacts (30 mA),
- protection against fire hazards by detection of abnormal electric arcs,
- protection against load fire hazards due to slow overvoltages (network overvoltage),
- fire hazard tripping indication via the front panel indicator,
- tripping faults diagnosis by LED blinking in front face.

- The Acti9 Active should be installed in the place of the circuit's final protection device.

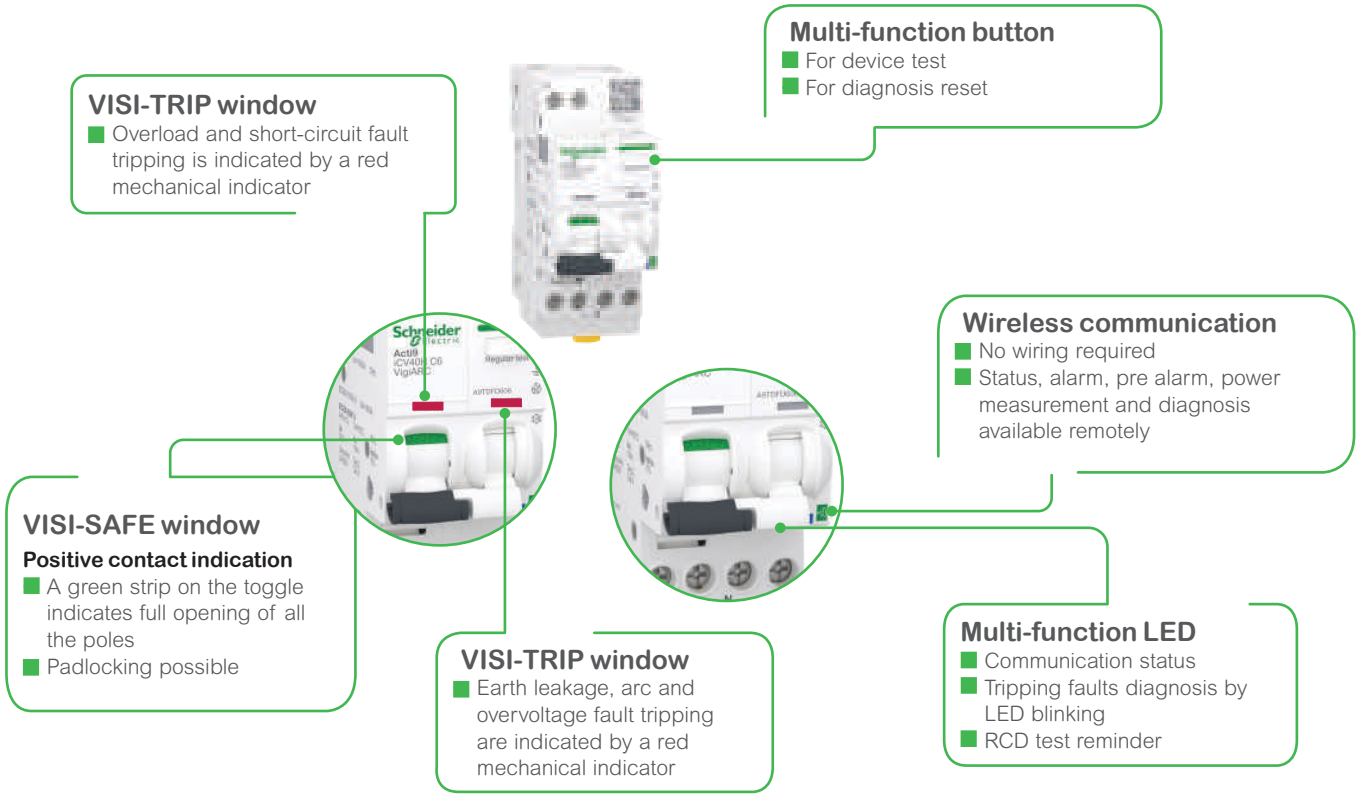
- Product is reverse feeding: it can be supplied either by the top or the bottom.

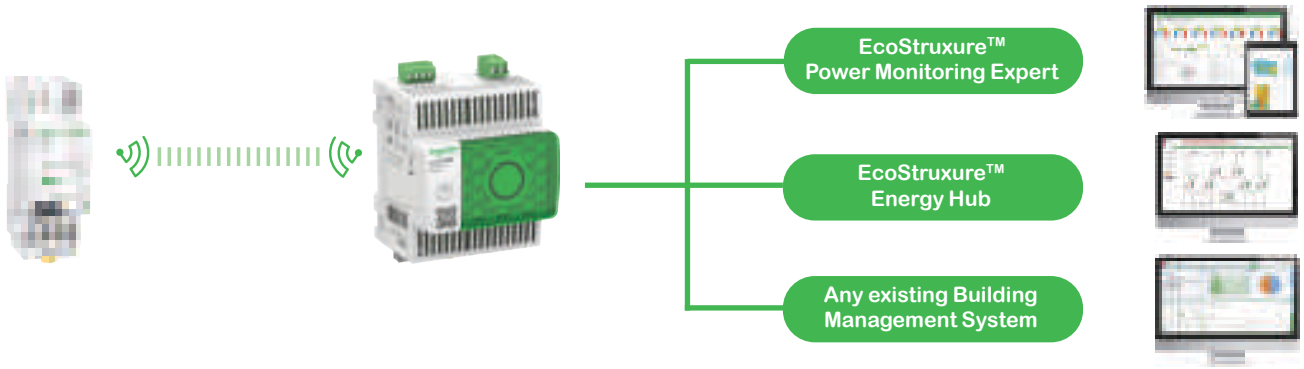
RCD Type
The A-SI type provides increased immunity from electrical interference and polluted or corrosive environments.

Wireless-communication device

- Used together with a concentrator or a gateway to collect and process the data, Acti9 Active AFDD provides circuit monitoring and diagnosis down to load level.
- Wireless-communication technology simplifies switchboard wiring and commissioning operations: no wiring is required for the Acti9 Active AFDD to communicate with the concentrator or the gateway.

Acti9 Active Arc Fault Detection Device





Acti9 Active "All-in-One" overview of available data:

- Device status (open/close/trip)
- Diagnostics: Reason for tripping (short-circuit, overload, earth leakage fault, serial arc, parallel arc, overvoltage)
- Customisable Pre-alarming (overload, earth leakage fault, overvoltage)
- Measurement: U, I, P, Power Factor, earth leakage %, internal temperature, time of use
- Protection log (date of 1st operation ON, date of last push on test button, number and reasons for tripping)
- RCD test reminder

Advanced visibility for active safety

Alarms & pre-alarms:

- Customisable thresholds for pre-alarms
- Overload
- Earth leakage
- Overvoltage



Diagnostics & analytics:

- Indication for nature of electrical fault
- Historical data
- Protection logs

Measuring & remote monitoring:

- U, I & P measuring
- Load monitoring

Advanced protection:

- Protection for people, appliances,circuit, and against fire MCB+MSU+RCD+AFDD (MSU : Overvoltage Release)

C Curve



A9TDFD606

Acti9 Active, A-SI type		
C Curve	Rating in amps	Sensitivity rating in milliamps (mA)
A9TDFD606	6 A	30 mA
A9TDFD610	10 A	30 mA
A9TDFD616	16 A	30 mA
A9TDFD620	20 A	30 mA
A9TDFD625	25 A	30 mA
A9TDFD632	32 A	30 mA
Operating voltage	230 VAC	
Operating frequency	50 Hz	
Breaking capacity	10kA	
Width in 9 mm modules	4	
Pole configuration	1P+N	
Comb busbars	A9XPC624, A9X21096, A9XPCM04	

ACTIVE



Associated concentrators / gateways

EcoStruxure™ Panel Server		
Entry	100-227V AC/DC	PAS400
Universal	24V DC	PAS600L
	240V AC/DC	PAS600
Advanced	110-277V AC/DC	PAS800
	24V DC	PAS800L
	PoE	PAS800P

Acti9 Arc Fault Detection Device - iARC



Acti9 iARC is an arc fault detection switch which aims to reduce the risk of electrical fire. By continuously analysing a large number of electrical parameters, it detects the appearance of electric arcs that are responsible for starting fires. It isolates the circuit concerned which reduces flame appearance occurrence.

Regulation 421.1.7 of BS 7671: 2018 (IET Wiring Regulations 18th Edition) requires the use of AFDD to protect against arc fault in AC final circuits in the applications below

- Higher Risk Residential Buildings (HRRB)
- House in Multiple Occupation (HMO)
- Purpose-built student accommodation
- Care homes

For all other locations, the use of AFDD is recommended.

More specifically, the installation of Acti9 iARC is highly recommended to protect circuits with highest risk of fire, such as:

- Protruding cables (risk of knocks)
- Outside cables (greater risk of deterioration)
- Unprotected cables in secluded areas (like storage rooms)
- Ageing, deteriorating wiring or wiring for which the connection boxes are inaccessible.

Acti9 iARC must not be installed on circuits requiring a high level of continuity of service.

Acti9 iARC is not compatible with ATEX regulations.

IEC/BS EN 62606

As per the above standard:

The arc fault detection switch Acti9 iARC monitors electric arcs that occur in cables and connections and may cause a fire.
These arcs are the result of localised cable deterioration or loose connections.

It is used for three types of situations that can result in a fire:

- parallel arc detection: insulation problems between two live conductors that cause a resistive short-circuit, too weak to be detected by a circuit breaker and with no earth leakage that would be detected by an earth-leakage protection device,
- series arc detection: a damaged conductor or connection will cause a local rise in temperature,
- overheating of electronic components in loads, when exposed to an overvoltage for several seconds.

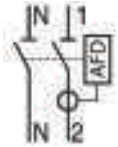
It combines the following functions:

- protection against fire hazards by detection of abnormal electric arcs,
- protection against load fire hazards due to slow overvoltages (network overvoltage),
- fire hazard tripping indication via the front panel indicator,
- positive contact indication (green strip),
- tripping faults diagnosis by LED blinking in front face.

- Coordinated with a MCB or a RCBO, max. 40 A, it protects phase-neutral circuits,in full coordination under short-circuit conditions up to a rated breaking capacity of 10,000 A

- Product is reverse feeding: it can be supplied either by the top or the bottom.

Catalogue numbers

Acti9 iARC		
Arc Fault Detection Device (AFDD) to IEC/BS EN 62606		
	Rating 40 A (In)	**A9TSB3640**
Operating voltage	230 VAC	
Operating frequency	50 Hz	
Width in 9 mm modules	4	
Pole Configuration	1P+N	

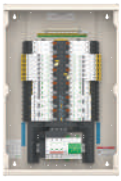
Acti9 Isobar P and AFDD arrangements

Hybrid and Standalone Active distribution boards can provide AFDD ways to accommodate Active AFDD devices.
Extension enclosures can provide additional DIN rail ways to accommodate devices such as Contactors, SPD and AFDD.

Acti9 DB + Extension Enclosure

Distribution boards

Acti9 isobar P Active distribution boards


Hybrid


Standalone

+


ACTIVE AFDD

Type	Part reference	No of AFDD ways
Hybrid	SEA9BPN8AFD6	6
	SEA9BPN14AFD6	6
	SEA9BPN10AFD12	12
Standalone	SEA9BPNAFD12	12
	SEA9BPNAFD24	24
	SEA9BPNAFD36	36

Distribution boards + Acti9 extension enclosure

Acti9 isobar P Standard distribution boards



Part reference
SEA9BPN4
SEA9BPN6
SEA9BPN8
SEA9BPN12
SEA9BPN16
SEA9BPN18
SEA9BPN24

Note: Please select required joining kit.

Top or bottom extension enclosures (Height 270 mm)



+


ACTIVE AFDD


iARC AFDD

Part reference	Description	No of rows	Total 18 mm SP ways	No of AFDD ways
SEA9BNEX034N	DIN rail extension box	1	17	8
SEA9BRAFDKIT	B Board Retro AFDD Kit (including 125A switch, 100a lug, busbar, 2x32A Active AFDD)	1	17	6

or

Side extension enclosures



+


ACTIVE AFDD


iARC AFDD

Part reference	Description	No of rows	Total 18 mm SP Ways	No Of AFDD ways (36mm)	Same dimensions as:
SEA9BN4SXS	Slotted Front Cover & Overall Door	2	34	16	SEA9BPN4
SEA9BN8SXS	Slotted Front Cover & Overall Door	2	34	16	SEA9BPN8
SEA9BN12SXS	Slotted Front Cover & Overall Door	3	51	24	SEA9BPN12
SEA9BN16SXS	Slotted Front Cover & Overall Door	4	68	32	SEA9BPN16
SEA9BN24SXS	Slotted Front Cover & Overall Door	5	85	40	SEA9BPN24
SEA9BN4SXP	Plain Front Cover & Overall Door	2	34	16	SEA9BPN4
SEA9BN8SXP	Plain Front Cover & Overall Door	2	34	16	SEA9BPN8
SEA9BN12SXP	Plain Front Cover & Overall Door	3	51	24	SEA9BPN12
SEA9BN16SXP	Plain Front Cover & Overall Door	4	68	32	SEA9BPN16
SEA9BN24SXP	Plain Front Cover & Overall Door	5	85	40	SEA9BPN24

Acti9 iC60H PoN RCBO's 10, 30 and 100 mA

Acti9 iC60H plug-on Residual Current Circuit Breaker with Overload.
Compatible with Isobar P distribution boards only.

B Curve



A9D56806

A type

B Curve	Rating in amps	Sensitivity rating in milliamps (mA)
A9D56806	6 A	30 mA
A9D56810	10 A	30 mA
A9D56816	16 A	30 mA
A9D56820	20 A	30 mA
A9D56825	25 A	30 mA
A9D56832	32 A	30 mA
A9D56840	40 A	30 mA
A9D56845	45 A	30 mA

PoN

C Curve



A9D01806

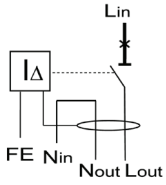
A type

C Curve	Rating in amps	Sensitivity rating in milliamps (mA)
A9D01806	6 A	10 mA
A9D01810	10 A	10 mA
A9D01816	16 A	10 mA
A9D01820	20 A	10 mA
A9D01825	25 A	10 mA
A9D01832	32 A	10 mA
A9D01840	40 A	10 mA
A9D01845	45 A	10 mA
A9D05806	6 A	30 mA
A9D05810	10 A	30 mA
A9D05816	16 A	30 mA
A9D05820	20 A	30 mA
A9D05825	25 A	30 mA
A9D05832	32 A	30 mA
A9D05840	40 A	30 mA
A9D05845	45 A	30 mA
A9D06806	6 A	100 mA
A9D06810	10 A	100 mA
A9D06816	16 A	100 mA
A9D06820	20 A	100 mA
A9D06825	25 A	100 mA
A9D06832	32 A	100 mA
A9D06840	40 A	100 mA
A9D06845	45 A	100 mA

PoN

PoN

PoN



A

Alternating current (AC) 50/60 Hz		
Breaking capacity (Icn) according to IEC/EN 61009-1		
Current Rating (In)	Voltage (Ue)	(Icn)
6 to 45 A	Ph/N 240 V	10000 A

Acti9 iC60H RCBO's 10, 30 and 100 mA

Acti9 iC60H Residual Current Circuit Breaker with Overload (wired RCBO).
Compatible with Isobar and Isobar P distribution boards.

B Curve



A9D31806

A type

B Curve	Rating in amps	Sensitivity rating in milliamps (mA)
A9D31806	6 A	30 mA
A9D31810	10 A	30 mA
A9D31816	16 A	30 mA
A9D31820	20 A	30 mA
A9D31825	25 A	30 mA
A9D31832	32 A	30 mA
A9D31840	40 A	30 mA
A9D31845	45 A	30 mA

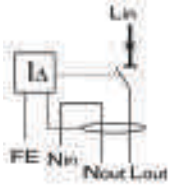
C Curve



A9D10806

A type

C Curve	Rating in amps	Sensitivity rating in milliamps (mA)
A9D10806	6 A	10 mA
A9D10810	10 A	10 mA
A9D10816	16 A	10 mA
A9D10820	20 A	10 mA
A9D10825	25 A	10 mA
A9D10832	32 A	10 mA
A9D10840	40 A	10 mA
A9D10845	45 A	10 mA
A9D11806	6 A	30 mA
A9D11810	10 A	30 mA
A9D11816	16 A	30 mA
A9D11820	20 A	30 mA
A9D11825	25 A	30 mA
A9D11832	32 A	30 mA
A9D11840	40 A	30 mA
A9D11845	45 A	30 mA
A9D12806	6 A	100 mA
A9D12810	10 A	100 mA
A9D12816	16 A	100 mA
A9D12820	20 A	100 mA
A9D12825	25 A	100 mA
A9D12832	32 A	100 mA
A9D12840	40 A	100 mA
A9D12845	45 A	100 mA



A

Alternating current (AC) 50/60 Hz		
Breaking capacity (Icn) according to IEC/EN 61009-1		
Current Rating (In)	Voltage (Ue)	(Icn)
6 to 45 A	Ph/N 240 V	10000 A

Acti9 iC60H RCBO 110 V (Ph/N) 30 mA

Acti9 iC60H Residual Current Circuit Breaker with Overload



A9D19832

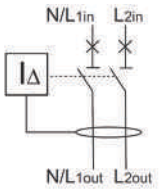
C Curve	Rating in amps	Sensitivity rating in milliamps (mA)	Rating in volts
A9D19810	10 A	30 mA	110 V
A9D19816	16 A	30 mA	110 V
A9D19820	20 A	30 mA	110 V
A9D19825	25 A	30 mA	110 V
A9D19832	32 A	30 mA	110 V

Alternating current (AC) 50/60 Hz		
Breaking capacity (Icn) according to IEC/EN 61009-1		
Current Rating (In)	Voltage (Ue)	(Icn)
10 to 32 A	Ph/N 110 V	10000 A



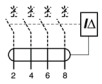
A9D19210

C Curve	Rating in amps	Sensitivity rating in milliamps (mA)	Rating in volts
A9D19210	10 A	30 mA	110 V
A9D19216	16 A	30 mA	110 V
A9D19220	20 A	30 mA	110 V
A9D19225	25 A	30 mA	110 V
A9D19232	32 A	30 mA	110 V
A9D11210	10 A	30 mA	240 V
A9D11216	16 A	30 mA	240 V
A9D11220	20 A	30 mA	240 V
A9D11225	25 A	30 mA	240 V
A9D11232	32 A	30 mA	240 V
A9D51210	10 A	300 mA	240 V
A9D51216	16 A	300 mA	240 V
A9D51220	20 A	300 mA	240 V
A9D51225	25 A	300 mA	240 V
A9D51232	32 A	300 mA	240 V



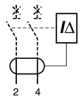
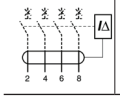


A9V02663

Vigi iC60 add-on residual current devices						
Type Product			A Vigi iC60			Width in 9 mm modules
Auxiliaries			Without auxiliaries			
1P+N		Sensitivity	30 mA	100 mA	300 mA	
	Rating	25 A	-	-	-	3
		63 A	A9V02663 A9V01663*	A9V03663	A9V06663	
3P+N		Sensitivity	30 mA	100 mA	300 mA	
	Rating	63 A	A9V02763	-	A9V06763	6
Voltage rating (Ue)			230 - 240 V, 400 - 415 V Except * 110 V			
Operating frequency			Except * 110 V			



A9V51225

Vigi iC60 add-on residual current devices									
Type Product			A Vigi iC60						Width in 9 mm modules
Auxiliaries			Without auxiliaries						
2P		Sensitivity	30 mA	100 mA	300 mA	500 mA	300 mA S	1000 mA S	
	Rating	25 A	A9V51225	A9V22225	A9V54225	A9V26225	-	-	3
		63 A	A9V51263	A9V22263	A9V54263	A9V26263	A9V25263	A9V29263	4
4P		Sensitivity	30 mA	100 mA	300 mA	500 mA	300 mA S	1000 mA S	
	Rating	25 A	A9V51425	A9V22425	A9V54425	A9V26425	-	-	
		63 A	A9V51463	A9V22463	A9V54463	A9V26463	A9V25463	A9V29463	6
Voltage rating (Ue)			230 - 240 V, 400 - 415 V						7
Operating frequency			50/60 Hz						

Vigi iC60 add-on residual current devices (SI type)



A9V30225

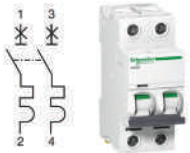
Vigi iC60 add-on residual current devices							
Type Product			SI Vigi iC60				Width in 9 mm modules
Auxiliaries			Without auxiliaries				
2P		Sensitivity	10 mA	30 mA	300 mA S	1000 mA S	
	Rating	25 A	A9V30225	A9V61225	-	-	3
		40 A	-	A9V61240	-	-	4
		63 A	-	A9V61263	A9V65263	A9V39263	4
4P		Sensitivity	10 mA	30 mA	300 mA S	1000 mA S	
		25 A	-	A9V61425	-	-	6
		40 A	-	A9V61440	-	-	7
	Rating	63 A	-	A9V61463	A9V65463	A9V39463	7
Voltage rating (Ue)			230 - 240 V, 400 - 415 V				
Operating frequency			50/60 Hz				

Acti9 iC60H Circuit Breaker

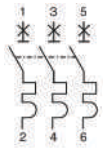
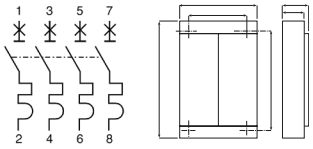
A9 F 54 1 32

Range	Family	Code	Internal code	Poles	Code	Rating (A)	Code
Acti 9 (A9)	iID	R		1P	1	1	01
	Vigi iC60	V		2P	2	2	02
	iC60	F		3P	3	3	03
	iK60	K		4P	4	4	04
	Auxiliaries and accessories	A				6	06
	Switches	S				8	08
	Reflex iC60	C				10	10
						16	16
						20	20
						25	25
						32	32
						40	40
						50	50
						63	63

Acti9 iC60H circuit breaker

Type	1P			2P		
						
Current rating (In)	Curve			Curve		
	B	C	D	B	C	D
1 A	A9F53101	A9F54101	A9F55101	A9F53201	A9F54201	A9F55201
2 A	A9F53102	A9F54102	A9F55102	A9F53202	A9F54202	A9F55202
3 A	A9F53103	-	-	-	-	-
4 A	A9F53104	A9F54104	A9F55104	A9F53204	A9F54204	A9F55204
6 A	A9F53106	A9F54106	A9F55106	A9F53206	A9F54206	A9F55206
10 A	A9F53110	A9F54110	A9F55110	A9F53210	A9F54210	A9F55210
16 A	A9F53116	A9F54116	A9F55116	A9F53216	A9F54216	A9F55216
20 A	A9F53120	A9F54120	A9F55120	A9F53220	A9F54220	A9F55220
25 A	A9F53125	A9F54125	A9F55125	A9F53225	A9F54225	A9F55225
32 A	A9F53132	A9F54132	A9F55132	A9F53232	A9F54232	A9F55232
40 A	A9F53140	A9F54140	A9F55140	A9F53240	A9F54240	A9F55240
50 A	A9F53150	A9F54150	A9F55150	A9F53250	A9F54250	A9F55250
63 A	A9F53163	A9F54163	A9F55163	A9F53263	A9F54263	A9F55263
Width in 9-mm modules	2			4		

Note: Acti9 Isobar P system is compatible with iC60H MCB's denoted A9F5xxx

Type	3P			4P		
						
Current rating (In)	Curve			Curve		
	B	C	D	B	C	D
1 A	A9F53301	A9F54301	A9F55301	A9F53401	A9F54401	A9F55401
2 A	A9F53302	A9F54302	A9F55302	A9F53402	A9F54402	A9F55402
3 A	-	-	-	-	-	-
4 A	A9F53304	A9F54304	A9F55304	A9F53404	A9F54404	A9F55404
6 A	A9F53306	A9F54306	A9F55306	A9F53406	A9F54406	A9F55406
10 A	A9F53310	A9F54310	A9F55310	A9F53410	A9F54410	A9F55410
16 A	A9F53316	A9F54316	A9F55316	A9F53416	A9F54416	A9F55416
20 A	A9F53320	A9F54320	A9F55320	A9F53420	A9F54420	A9F55420
25 A	A9F53325	A9F54325	A9F55325	A9F53425	A9F54425	A9F55425
32 A	A9F53332	A9F54332	A9F55332	A9F53432	A9F54432	A9F55432
40 A	A9F53340	A9F54340	A9F55340	A9F53440	A9F54440	A9F55440
50 A	A9F53350	A9F54350	A9F55350	A9F53450	A9F54450	A9F55450
63 A	A9F53363	A9F54363	A9F55363	A9F53463	A9F54463	A9F55463
Width in 9-mm modules	6			8		

Alternating current (AC) 50/60 Hz					
Breaking capacity (Icu) according to IEC/EN 60947-2					
		Voltage (Ue)			
Ph/Ph (2P, 3P, 4P)		12 to 133 V	220 to 240 V	380 to 415 V	440 V
Ph/N (1P)		12 to 60 V	100 to 133 V	220 to 240 V	-
Rating (In)	1 to 4 A	70 kA	70 kA	70 kA	50 kA
	6 to 40 A	42 kA	30 kA	15 kA	10 kA
	50/63 A	42 kA	-	15 kA	10 kA
Breaking capacity (Icn) according to IEC/EN 60898-1					
Current Rating (In)		Voltage (Ue)	(Icn)		
1 to 63 A		Ph/Ph 400 V	10000 A		
1 to 63 A		Ph/N 230 V	10000 A		
Direct current (DC)					
Breaking capacity (Icu) according to IEC/EN 60947-2					
	Voltage (Ue)				
Between +/-	12 to 48 V	72 V	100 to 133 V		220 to 250 V
Number of poles	1P		2P (in series)	3P (in series)	4P (in series)
Rating (In) 1 to 63 A	20 kA	10 kA	10 kA	20 kA	10 kA

Note: Acti9 Isobar P system is compatible with iC60H MCB's denoted A9F5xxx

Complementary Devices (DIN rail mounted)

Acti9 iID 2P B EV RCCB


A9Z51225

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9Z51225	ACTI9 iID 2P 25A 30MA B EV RCCB	EV RCCB	25 A	30 mA	8
A9Z51240	ACTI9 iID 2P 40A 30MA B EV RCCB	EV RCCB	40 A	30 mA	8

Acti9 iID 4P B EV RCCB


A9Z51440

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9Z51440	ACTI9 iID 4P 40A 30MA B EV RCCB	EV RCCB	40 A	30 mA	8
A9Z51463	ACTI9 iID 4P 63A 30MA B EV RCCB	EV RCCB	63 A	30 mA	8

Acti9 iID 2P B-SI RCCB


A9Z61225

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9Z61225	ACTI9 iID 2P 25A 30MA B-SI RCCB	Standard	25 A	30 mA	8
A9Z61240	ACTI9 iID 2P 40A 30MA B-SI RCCB	Standard	40 A	30 mA	8
A9Z61263	ACTI9 iID 2P 63A 30MA B-SI RCCB	Standard	63 A	30 mA	8
A9Z64225	ACTI9 iID 2P 25A 300MA B-SI RCCB	Standard	25 A	300 mA	8
A9Z64240	ACTI9 iID 2P 40A 300MA B-SI RCCB	Standard	40 A	300 mA	8
A9Z64263	ACTI9 iID 2P 63A 300MA B-SI RCCB	Standard	63 A	300 mA	8

Acti9 iID 4P B-SI RCCB


A9Z61425

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9Z61425	ACTI9 iID 4P 25A 30MA B-SI RCCB	Standard	25 A	30 mA	8
A9Z61440	ACTI9 iID 4P 40A 30MA B-SI RCCB	Standard	40 A	30 mA	8
A9Z61463	ACTI9 iID 4P 63A 30MA B-SI RCCB	Standard	63 A	30 mA	8
A9Z61480	ACTI9 iID 4P 80A 30MA B-SI RCCB	Standard	80 A	30 mA	8
A9Z64425	ACTI9 iID 4P 25A 300MA B-SI RCCB	Standard	25 A	300 mA	8
A9Z64440	ACTI9 iID 4P 40A 300MA B-SI RCCB	Standard	40 A	300 mA	8
A9Z64463	ACTI9 iID 4P 63A 300MA B-SI RCCB	Standard	63 A	300 mA	8
A9Z64480	ACTI9 iID 4P 80A 300MA B-SI RCCB	Standard	80 A	300 mA	8
A9Z65440	ACTI9 iID 4P 40A 300SMA B-SI RCCB	Standard	40 A	300 mA	8
A9Z65463	ACTI9 iID 4P 63A 300SMA B-SI RCCB	Standard	63 A	300 mA	8
A9Z65480	ACTI9 iID 4P 80A 300SMA B-SI RCCB	Standard	80 A	300 mA	8
A9Z66440	ACTI9 iID 4P 40A 500MA B-SI RCCB	Standard	40 A	500 mA	8
A9Z66463	ACTI9 iID 4P 63A 500MA B-SI RCCB	Standard	63 A	500 mA	8
A9Z66480	ACTI9 iID 4P 80A 500MA B-SI RCCB	Standard	80 A	500 mA	8

Acti9 iID 2P A-SI RCCB


A9R61225

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9R61225	Acti9 iID 2P 25A 30MA A-SI RCCB	Standard	25 A	30mA	4
A9R61240	Acti9 iID 2P 40A 30MA A-SI RCCB	Standard	40 A	30mA	4
A9R61263	Acti9 iID 2P 63A 30MA A-SI RCCB	Standard	63 A	30mA	4

Complementary Devices (DIN rail mounted)

Acti9 iID 4P A-SI RCCB



A9R61425

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9R61425	Acti9 iID 4P 25A 30MA A-SI RCCB	Standard	25 A	30mA	4
A9R61440	Acti9 iID 4P 40A 30MA A-SI RCCB	Standard	40 A	30mA	4
A9R61463	Acti9 iID 4P 63A 30MA A-SI RCCB	Standard	63 A	30mA	4
A9R61480	Acti9 iID 4P 80A 30MA A-SI RCCB	Standard	80 A	30mA	8
A9R61491	Acti9 iID 4P 100A 30MA A-SI RCCB	Standard	100 A	30mA	8
A9R34463	Acti9 iID 4P 63A 300MA A-SI RCCB	Standard	63 A	300mA	8
A9R34491	Acti9 iID 4P 100A 300MA A-SI RCCB	Standard	100 A	300mA	8

Acti9 iID 2P A RCCB



A9R21225

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9R21225	Acti9 iID 2P 25A 30MA A RCCB	Standard	25 A	30mA	4
A9R21240	Acti9 iID 2P 40A 30MA A RCCB	Standard	40 A	30mA	4
A9R21263	Acti9 iID 2P 63A 30MA A RCCB	Standard	63 A	30mA	4
A9R21291	Acti9 iID 2P 100A 30MA A RCCB	Standard	100 A	30mA	4
A9R24225	Acti9 iID 2P 25A 300MA A RCCB	Standard	25 A	300mA	4
A9R24240	Acti9 iID 2P 40A 300MA A RCCB	Standard	40 A	300mA	4
A9R24263	Acti9 iID 2P 63A 300MA A RCCB	Standard	63 A	300mA	4
A9R24291	Acti9 iID 2P 100A 300MA A RCCB	Standard	100 A	300mA	4

Acti9 iID 4P A RCCB



A9R21425

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9R21425	Acti9 iID 4P 25A 30MA A RCCB	Standard	25 A	30mA	8
A9R21440	Acti9 iID 4P 40A 30MA A RCCB	Standard	40 A	30mA	8
A9R21463	Acti9 iID 4P 63A 30MA A RCCB	Standard	63 A	30mA	8
A9R21480	Acti9 iID 4P 80A 30MA A RCCB	Standard	80 A	30mA	8
A9R21491	Acti9 iID 4P 100A 30MA A RCCB	Standard	100 A	30mA	8
A9R24425	Acti9 iID 4P 25A 300MA A RCCB	Standard	25 A	300mA	8
A9R24440	Acti9 iID 4P 40A 300MA A RCCB	Standard	40 A	300mA	8
A9R24463	Acti9 iID 4P 63A 300MA A RCCB	Standard	63 A	300mA	8
A9R24480	Acti9 iID 4P 80A 300MA A RCCB	Standard	80 A	300mA	8
A9R24491	Acti9 iID 4P 100A 300MA A RCCB	Standard	100 A	300mA	8

Acti9 A-Type iDPN N Vigi (6kA)



A9D06610

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9D06610	Acti9 A iDPN N Vigi 10A B-Cur 30MA	B-Curve	10 A	30mA	4
A9D06616	Acti9 A iDPN N Vigi 16A B-Cur 30MA	B-Curve	16 A	30mA	4
A9D06620	Acti9 A iDPN N Vigi 20A B-Cur 30MA	B-Curve	20 A	30mA	4
A9D01610	Acti9 A iDPN N Vigi 10A C-Cur 30MA	C-Curve	10 A	30mA	4
A9D01616	Acti9 A iDPN N Vigi 16A C-Cur 30MA	C-Curve	16 A	30mA	4
A9D01620	Acti9 A iDPN N Vigi 20A C-Cur 30MA	C-Curve	20 A	30mA	4

Complementary Devices (DIN rail mounted)

Acti9 iC60H2 2P RCBO (10kA)



A9D19210

Reference	Description	Type	Rating in amps	Sensitivity rating in milliamps (mA)	Width in 9 mm modules
A9D19210	Acti9 iC60H2 2P RCBO 10A 110V	110V	10 A	30mA	4
A9D19216	Acti9 iC60H2 2P RCBO 16A 110V	110V	16 A	30mA	4
A9D19220	Acti9 iC60H2 2P RCBO 20A 110V	110V	20 A	30mA	4
A9D19225	Acti9 iC60H2 2P RCBO 25A 110V	110V	25 A	30mA	4
A9D19232	Acti9 iC60H2 2P RCBO 32A 110V	110V	32 A	30mA	4
A9D11210	Acti9 iC60H2 2P RCBO 10A 240V	240V	10 A	30mA	4
A9D11216	Acti9 iC60H2 2P RCBO 16A 240V	240V	16 A	30mA	4
A9D11220	Acti9 iC60H2 2P RCBO 20A 240V	240V	20 A	30mA	4
A9D11225	Acti9 iC60H2 2P RCBO 25A 240V	240V	25 A	30mA	4
A9D11232	Acti9 iC60H2 2P RCBO 32A 240V	240V	32 A	30mA	4

iCT Contactor

Provides an optimised solution with desynchronised and reinforced contacts for head of group lighting applications



A9C22711



A9C24740

Reference	Description	No. of Poles	Control Voltage (VAC)	Contact	Rating (In) AC7a	Rating (In) AC7b
A9C22711	iCT 16A 1P 1NO 230...240VAC Contactor	1 Pole	230…240 VAC	1NO	16 A	6 A
A9C20731	iCT 25A 1P 1NO 230...240VAC Contactor	1 Pole	230…240 VAC	1NO	25 A	8.5 A
A9C22712	ICT 16A 2P 2NO 230...240VAC Contactor	2 Pole	230…240 VAC	2NO	16 A	6 A
A9C22715	iCT 16A 2P 1NO+1NC 230...240VAC Contactor	2 Pole	230…240 VAC	1NO+1NC	16 A	6 A
A9C22722	iCT 20A 2P 2NO 230...240VAC Contactor	2 Pole	230…240 VAC	2NO	20 A	-
A9C20732	iCT 25A 2P 2NO 230...240VAC Contactor	2 Pole	230…240 VAC	2NO	25 A	8.5 A
A9C20736	iCT 25A 2P 2NC 230...240VAC Contactor	2 Pole	230…240 VAC	2NC	25 A	8.5 A
A9C20842	iCT 40A 2P 2NO 220...240VAC Contactor	2 Pole	220…240 VAC	2NO	40 A	15 A
A9C20862	iCT 63A 2P 2NO 220...240VAC Contactor	2 Pole	220…240 VAC	2NO	63 A	20 A
A9C20882	iCT 100A 2P 2NO 220...240VAC Contactor	2 Pole	220…240 VAC	2NO	100 A	-
A9C22813	iCT 16A 3P 3NO 220...240VAC Contactor	3 Pole	220…240 VAC	3NO	16 A	6 A
A9C20833	iCT 25A 3P 3NO 220...240VAC Contactor	3 Pole	220…240 VAC	3NO	25 A	8.5 A
A9C20843	iCT 40A 3P 3NO 220...240VAC Contactor	3 Pole	220…240 VAC	3NO	40 A	15 A
A9C20863	iCT 63A 3P 3NO 220...240VAC Contactor	3 Pole	220…240 VAC	3NO	63 A	20 A
A9C22814	iCT 16A 4P 4NO 220...240VAC Contactor	4 Pole	220…240 VAC	4NO	16 A	6 A
A9C22818	iCT 16A 4P 2NO+2NC 220...240VAC Contactor	4 Pole	220…240 VAC	2NO+2NC	16 A	6 A
A9C22824	iCT 20A 4P 4NO 220...240VAC Contactor	4 Pole	220…240 VAC	4NO	20 A	-
A9C20834	iCT 25A 4P 4NO 220...240VAC Contactor	4 Pole	220…240 VAC	4NO	25 A	8.5 A
A9C20837	iCT 25A 4P 4NC 220...240VAC Contactor	4 Pole	220…240 VAC	4NC	25 A	8.5 A
A9C20838	iCT 25A 4P 2NO+2NC 220...240VAC Contactor	4 Pole	220…240 VAC	2NO+2NC	25 A	8.5 A
A9C20844	iCT 40A 4P 4NO 220...240VAC Contactor	4 Pole	220…240 VAC	4NO	40 A	15 A
A9C20847	iCT 40A 4P 4NC 220...240VAC Contactor	4 Pole	220…240 VAC	4NC	40 A	15 A
A9C20864	iCT 63A 4P 4NO 220...240VAC Contactor	4 Pole	220…240 VAC	4NO	63 A	20 A
A9C20867	iCT 63A 4P 4NC 220...240VAC Contactor	4 Pole	220…240 VAC	4NC	63 A	20 A
A9C20868	iCT 63A 4P 2NO+2NC 220...240VAC Contactor	4 Pole	220…240 VAC	2NO+2NC	63 A	20 A
A9C20869	iCT 63A 4P 3NO+1NC 220...240VAC Contactor	4 Pole	220…240 VAC	3NO+1NC	63 A	20 A
A9C24740	iCT 40A 3P+N 4NO 230...240VAC Contactor	3P+N	230…240 VAC	4NO	40 A	15 A
A9C22740	iCT 40A 3P+N 4NC 230...240VAC Contactor	3P+N	230…240 VAC	4NC	40 A	15 A
A9C24763	iCT 63A 3P+N 4NO 230...240VAC Contactor	3P+N	230…240 VAC	4NO	63 A	20 A
A9C22763	iCT 63A 3P+N 4NC 230...240VAC Contactor	3P+N	230…240 VAC	4NC	63 A	20 A

3-phase DIN rail mounted energy meters

DIN rail, 3-phase energy meters for monitoring distribution panels



A9MEM3155



A9MEM3255



A9MEM3355

Description	Reference
A9MEM3100	iEM3100 basic energy meter
A9MEM3110	iEM3110 energy meter with pulse output
A9MEM3115	iEM3115 multi-tariff energy meter
A9MEM3135	iEM3135 advanced multi-tariff energy meter & electrical parameter plus M-Bus comm port
A9MEM3150	iEM3150 energy meter & electrical parameter plus Modbus RS-485 comm port
A9MEM3155	iEM3155 advanced multi-tariff energy meter & electrical parameter plus Modbus RS-485 comm port
A9MEM3165	iEM3165 advanced multi-tariff energy meter & electrical parameter plus BACnet MS/TP comm port
A9MEM3175	iEM3175 advanced multi-tariff energy meter & electrical parameter plus LON TP/FT-10 comm port
A9MEM3200	iEM3200 basic energy meter
A9MEM3210	iEM3210 energy meter with pulse output
A9MEM3215	iEM3215 multi-tariff energy meter
A9MEM3235	iEM3235 advanced multi-tariff energy meter & electrical parameter plus M-Bus comm port
A9MEM3250	iEM3250 energy meter & electrical parameter plus Modbus RS-485 comm port
A9MEM3255	iEM3255 advanced multi-tariff energy meter & electrical parameter plus Modbus RS485 comm port
A9MEM3265	iEM3265 advanced multi-tariff energy meter & electrical parameter plus BACnet MS/TP comm port
A9MEM3275	iEM3275 advanced multi-tariff energy meter & electrical parameter plus LON TP/FT-10 comm port
A9MEM3300	iEM3300 basic energy meter
A9MEM3310	iEM3310 energy meter with pulse output
A9MEM3335	iEM3335 advanced multi-tariff energy meter & electrical parameter plus M-Bus comm port
A9MEM3350	iEM3350 energy meter & electrical parameter plus Modbus RS-485 comm port
A9MEM3355	iEM3355 advanced multi-tariff energy meter & electrical parameter plus Modbus RS485 comm port
A9MEM3365	iEM3365 advanced multi-tariff energy meter & electrical parameter plus BACnet MS/TP comm port
A9MEM3375	iEM3375 advanced multi-tariff energy meter & electrical parameter plus LON TP/FT-10 comm port
A9MEM3455	iEM3455 advanced multi-tariff energy meter & electrical parameter plus Modbus RS-485 comm port
A9MEM3465	iEM3465 advanced multi-tariff energy meter & electrical parameter plus BACnet MS/TP comm port
A9MEM3555	iEM3555 advanced multi-tariff energy meter & electrical parameter plus Modbus RS-485 comm port
A9MEM3565	iEM3565 advanced multi-tariff energy meter & electrical parameter plus BACnet MS/TP comm port

iPRD surge arresters

Type 2 or 3 LV withdrawable surge arresters

iPRD surge arresters

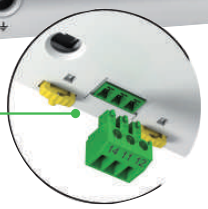
PB110281-60



Terminals
- IP20

Satisfactory operation indication
- By mechanical indicator
- white: operating
- red: cartridge must be replaced

- Transfer to Acti 9 Smartlink



Connection iPRD surge arrester with its short circuit disconnector

TT / TN-S
Power supply through the top
Connection with cables



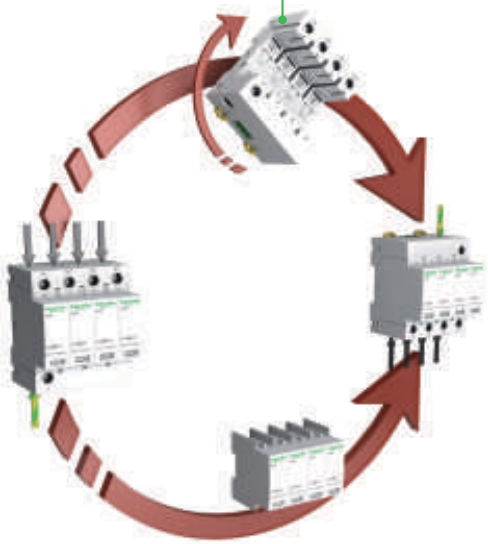
Surge arrester iPRD 3P+N + iC60N 3P+N

IT/TNC-S with neutral
Power supply through the top
Connection with comb busbar



Surge arrester iPRD 4P + iC60N 4P

Reversible
- The surge arrester base can be turned over to allow the phase/ neutral/earth cables to enter through either the top or the bottom



TT / TN-S
Power supply through the bottom
Connection with comb busbar



Surge arrester iPRD 3P+N + iC60N 3P+N

IT/TNC-S with neutral
Power supply through the bottom
Connection with comb busbar



Surge arrester iPRD 4P + iC60N 4P

iPRD surge arresters

iPRD withdrawable surge arresters.
- Type 1 surge arresters meet the normative withstand capability of current wave type 10/350 µs.
- Type 2 surge arresters meet the normative withstand capability of current wave type 8/20 µs.
- Type 3 surge arresters meet the normative withstand capability of combined wave type 1.2/50 µs and 8/20 µs.



A9L65601



A9L40600



A9L20601



A9L08601

Reference	Pole configuration	Rated discharge current (Imax)	Nominal discharge current (In)	Earthing system
iPRD65				
A9L65601	3P+N	65 kA Very high risk level (strongly exposed site)	20 kA	TT & TN-S
iPRD40				
A9L40600	3P+N	40 kA High risk level	15 kA	TT & TN-S
A9L40401	4P			TN-C-S
iPRD20				
A9L20601	3P+N	20 kA Medium risk level	5 kA	TT & TN-S
A9L20600	3P+N			TT & TN-S
iPRD8				
A9L08601	3P+N	8 kA Secondary protection: placed near the loads to be protected when they are at a distance of more than 10 m from the incoming surge arrester	2.5 kA	TT & TN-S
A9L08600	3P+N			TT & TN-S

Surge arrester/circuit breaker association			
Surge arrester	Associated circuit breaker		
	iPRD		iPRD IT
	Isc ≤ 25 kA	Isc ≤ 50 kA	Isc (IT 400 V AC) ≤ 5 kA
iPRD65	Curve C 50 A	Curve C 63 A	Curve C 25 A
iPRD40	Curve C 40 A	Curve C 63 A	Curve C 20 A
iPRD20	Curve C 20 A	Curve C 63 A	Curve C 10 A
iPRD8	Curve C 10 A	Curve C 63 A	Curve C 10 A



A9L16382

Reference	Pole Configuration	Rated discharge current (Imax)	Nominal discharge current (In)	Earthing system
iPRD1 12.5r				
A9L16382	3P	50 kA	20 kA	TN-C
A9L16482	3P+N			TT & TN-S

Surge protection kits for separate installation



PRD3PN40R

Each kit is supplied with:
- iPRD surge arrester
- Correctly rated 4 pole iC60H disconnection miniature circuit breaker
- Distributed neutral bar and SEA9NKIT connection
- Insulated high IP rated enclosure with transparent cover and lock
- L1, L2, L3, N, E connecting cables

Surge protection kits		
Catalogue number	Type	Number of poles
PRD3PN40	Type 2	Surge Arrester 40 kA 3P+N
PRD3PN40R	Type 2 (remote transfer)	Surge Arrester 40 kA 3P+N
PRD3PN65R	Type 2 (remote transfer)	Surge Arrester 65 kA 3P+N
PRD3PN8	Type 2	Surge Arrester 8 kA 3P+N

Surge protection kits (without enclosure)		
Catalogue number	Type	Number of poles
SEA9BLKITT2	Surge protection kit including 3p 50A C MCB & T2 3p+N iPRD40 SPD and cables	3P

Timers, Time and Twilight switches (DIN rail mounted)

Time Switches - Digital


CCT15441

Part number	Description
CCT15441	IHP 1C w (45 mm)
CCT15443	IHP 2C w (45 mm)
CCT15551	IHP+ 1C SMARTw (45 mm)
CCT15553	IHP+ 2C SMARTw (45 mm)
CCT15854	IHP 1C 18 mm Digital Timer
CCT15838	IHP+ 1C 18 mm Digital Timer
CCT15910	ITA 1C 36 mm Digital Timer Yearly
CCT15940	ITA 1C 36 mm Digital Timer Yearly

Time Switches - Mechanical


CCT15338

Part number	Description
CCT15338	IH 60m 1C 54 mm Mech Timer
CCT16364	IH 24h 1C 54 mm Mech Timer
CCT15365	IH 24h 1C Res 54 mm Mech Timer
15337	IH 24h 2C Res 54 mm Mech Timer
CCT15367	IH 7d 1C Res 54 mm Mech Timer
15335	IH 24h 1C 18 mm Mech Timer
15336	IH 24h 1C Res 18 mm Mech Timer
15331	IH 7d 1C Res 18 mm Mech Timer

Timers


CCT15232

Part number	Description
15363	MIN time switch 1-7 mins (delayed off)
CCT15232	MINs timer 0.5 - 20 min
CCT15233	MINp delay off timer 50% warning
CCT15234	MINt off warning, impulse relay

Twilight Switches (provided with sensor)



CCT15494



CCT15262

Part number	Description
CCT15494	IC100kp+ 1C SMART
CCT15495	IC100kp+ 2C SMART
CCT15225	IC Astro 1C SMART
CCT15245	IC Astro 2C SMART
CCT15482	IC100
CCT15285	IC2000d indoor (18 mm)
CCT15369	IC2000d outdoor (18 mm)
CCT15483	IC2000p+

Accessories



CCT15262

Part number	Description
CCT15262	Indoor analogue light sensor cell
CCT15263	O/door analogue light sensor cell
CCT15260	Digital add-on sensor (external)
CCT15261	Digital build-in sensor (switch board)
CCT15860	IHP+ key programming tool - PC
CCT15861	IHP+ programming key
CCT15950	ITA programming tool
CCT15955	ITA programming key
CCT15970	ITA GPS Antenna

Horizontal comb busbar for 18mm pitch for Acti9



A9XPH106

Reference	Description	No. of Poles	Rated Voltage (V)	Rating in amps (A)	Modules of 18mm
A9XPH106	Acti9 Comb Busbar 1P 6 MOD.	1 Pole	415V	100A	6 Modules
A9XPH112	Acti9 Comb Busbar 1P 12 MOD.	1 Pole	415V	100A	12 Modules
A9XPH124	Acti9 Comb Busbar 1P 24 MOD.	1 Pole	415V	100A	24 Modules
A9XPH157	Acti9 Comb Busbar 1P 57 MOD.	1 Pole	415V	100A	57 Modules
A9XPH212	Acti9 Comb Busbar 2P 12 MOD.	2 Pole	415V	100A	12 Modules
A9XPH224	Acti9 Comb Busbar 2P 24 MOD.	2 Pole	415V	100A	24 Modules
A9XPH257	Acti9 Comb Busbar 2P 57 MOD.	2 Pole	415V	100A	57 Modules
A9XPH306	Acti9 Comb Busbar 3P 6 MOD.	3 Pole	415V	100A	6 Modules
A9XPH312	Acti9 Comb Busbar 3P 12 MOD.	3 Pole	415V	100A	12 Modules
A9XPH324	Acti9 Comb Busbar 3P 24 MOD.	3 Pole	415V	100A	24 Modules
A9XPH357	Acti9 Comb Busbar 3P 57 MOD.	3 Pole	415V	100A	57 Modules
A9XPH412	Acti9 Comb Busbar 4P 12 MOD.	4 Pole	415V	100A	12 Modules
A9XPH424	Acti9 Comb Busbar 4P 24 MOD.	4 Pole	415V	100A	24 Modules
A9XPH457	Acti9 Comb Busbar 4P 57 MOD.	4 Pole	415V	100A	57 Modules
A9XPH512	Acti9 Comb Busbar 3P+N 12 MOD.	3P+N	415V	100A	12 Modules
A9XPH518	Acti9 Comb Busbar 3P+N 18 MOD.	3P+N	415V	100A	18 Modules
A9XPH524	Acti9 Comb Busbar 3P+N 24 MOD.	3P+N	415V	100A	24 Modules
A9XPH557	Acti9 Comb Busbar 3P+N 57 MOD.	3P+N	415V	100A	57 Modules

Acti9 Isobar P three phase accessories

General accessories

Reference No	Description	Hybrid Active boards	Standalone Active boards	Standard Boards/ meter ready boards/split metered	Heavy duty boards	Extension Enclosure and others
SEA9BPNFE	Acti9 Isobar P - PoN filler plate	√	X	√	√	X
SEA9XPH114	Active AFDD Comb Busbar 1P+N, 14 outgoing modules, 100A	X	X	X	X	√
SEA9XPH312	Active AFDD Comb Busbar 3P+N, 12 outgoing modules, 100A	X	X	X	X	√
SEA9PNBOOTS	Active AFDD Enclosure Pan Tooth Cap, Set of 20	√	√	√	√	X
SEA9PN2WL	Active AFDD Enclosure Way Labels - 24 ways	√*	√	X	X	X
SEA9P125SPKIT	B Board 125A Single phasing kit 4 pole	√	√	√	√	X
SEA9250SPEV	B Board 250A Single phasing kit 4 pole	√	X	√	X	X
SEA9BL	Isobar P - Door Lock	√	√	√	√	√
SEA9PD	Isobar P - Padlock Kit for Door	√	√	√	√	√
SELACK	15mm padlock common key	√	√	√	√	√
SELADK	15mm padlock different key	√	√	√	√	√
SEA9BP	DIN Rail mounted Blank Pole - 1P	√*	X	√	√	√
SEA9BP3	Blank Pole filler 3 Modules	√	√	√	√	√
SEA9TB1001	Terminal Block 100A 1P	√*	X	√	√	√
SEA9BNWL	TP&N label - 24 ways	√*	X	√	√	X
SEA9NEK1	Extra earth terminal bar 14 holes	√	√	√	√	√
SEA9NEK2	Extra earth terminal bar 20 holes	√	√	√	√	√
SEA9NEK3	Extra earth terminal bar 26 holes	√	√	√	√	√
SEA9BN63SPL	Split Load kit 63amp	√	√	√	X	X
SEA9BNSJKN	B Board side joining kit	√	√	√	X	√
SEA9BNTJKB	B Board Top/bottom kit replacing gland plate	√	√	√	X	√
SEA9BNTJKA	Top / Bottom joining kit for Enclosure>Extension>Enclosure	√	√	√	X	√
SEA9BNTJKN	B Board Joining Kit for Top / Bottom	√	√	√	X	√
SEA9BNBCE25	Clean Earth B Board 25 Holes	√	√	√	√	√
SEA9BNC	Isobar P - B Board Neutral Shroud (Spare)	√	X	√	√	X
SEA9ISOKEY	Isobar P - Pack of 5 Disconnector switch Keys	√	√	√	√	X
SEA9FCF	24 fixing screws for Isobar P distribution boards	√	√	√	√	√
SEA9BNGPN	B board top/bottom gland	√	√	√	X	√
SEA9BNGPNKO	B board top/bottom gland with knockouts	√	√	√	X	√
SEA9BNSGPN	B board Slotted gland plate	√	√	√	X	√
SEA9ISOPLA	Isobar Slider padlock attachment	√	√	√	X	X
SEK33	Isobar P - Spare key	√	√	√	X	√
SESDC	Isobar P - Spare door catch	√	√	√	X	√


SEA9250SPEV


SEA9BL


SEA9BP


SEA9ISOPLA


SEA9BPNFE


SEA9BNSJKN


SEA9BNTJKB


SEA9BNTJKA


SEA9BNTJKN


29370

Accessories for devices

Reference No	Description	AFDD	RCBO	MCB	MCCB-NSX
SEA9LA	Pack of 3 padlock attachment for MCB & AFDD	√	X	√	X
A9A27049	Pack of 10 padlock attachment for RCBO	X	√	X	X
29370	Pack of 3 padlock for NSX toggle OFF position	X	X	X	√

*Refer to Instruction Sheet for more details or contact customer care.

Distributed neutral kits



SEA9NA27

Part reference	Description	No of ways
SEA9NB4	Distributed neutral kit for 4 way TP&N	4
SEA9NB6	Distributed neutral kit for 6 way TP&N	6
SEA9NB8	Distributed neutral kit for 8 way TP&N	8
SEA9NB12	Distributed neutral kit for 12 way TP&N	12
SEA9NB16	Distributed neutral kit for 18 way TP&N	18
SEA9NB24	Distributed neutral kit for 24 way TP&N	24
SEA9NKIT	Phase to Neutral coversion kit (pack of 4)	

- These kits allow you to distribute and control the neutral through the board for 4 outgoing circuits.
- Note : These kits are not compatible on Active AFDD distribution boards

Top or bottom extension enclosures (height 270mm)

For use with Acti9 Isobar P B type distribution boards, used for additional wiring space or to house DIN rail mounted equipment



SEA9BNEX034N

Part Reference	Description
SEA9BNEXN	Plain front cover for additional wiring space
SEA9BNEX034N	Mounting of DIN devices, overall door and cutout for 17x18 mm poles
SEA9BNEXA14N	Single phase add on distribution Board 14 ways

Side extension enclosures



SEA9BN4SXS

Part reference	Description	No of rows	Total 18mm SP ways	Same dimensions as:
SEA9BN4SXS	Slotted Front Cover & Overall Door	2	34	SEA9BPN4
SEA9BN8SXS	Slotted Front Cover & Overall Door	2	34	SEA9BPN8
SEA9BN12SXS	Slotted Front Cover & Overall Door	3	51	SEA9BPN12
SEA9BN16SXS	Slotted Front Cover & Overall Door	4	68	SEA9BPN16
SEA9BN24SXS	Slotted Front Cover & Overall Door	5	85	SEA9BPN24
SEA9BN4SXP	Plain Front Cover & Overall Door	2	34	SEA9BPN4
SEA9BN8SXP	Plain Front Cover & Overall Door	2	34	SEA9BPN8
SEA9BN12SXP	Plain Front Cover & Overall Door	3	51	SEA9BPN12
SEA9BN16SXP	Plain Front Cover & Overall Door	4	68	SEA9BPN16
SEA9BN24SXP	Plain Front Cover & Overall Door	5	85	SEA9BPN24

- Select joining kits (SEA9BNSJKN or SEA9BNTJKN) when adding extension enclosures to main distribution board.

Acti 9 Isobar P connected products

Connect your Acti9 Isobar and Isobar P distribution board using wireless connectivity to see the power and optimise the use of your assets with Facility Expert, our simple on-line services platform.

Acti9 iC60H RCBO Powertag wireless sensors

Rated at 63A it assembles on to Acti9 iC60 RCBOs optimising asset management through real time monitoring and alarming of V, I, P, PF, kWh and loss of voltage.



A9MEM1563

Part reference	Type	Type of mounting
A9MEM1563	1PN	Bottom of RCBO

Acti9 iC60H Powertag wireless sensors

Rated at 63A it assembles on to Acti9 iC60 mcbs optimising asset management through real time monitoring and alarming of V, I, PF, kWh and loss of voltage.



A9MEM1520

Part reference	Type	Type of mounting
A9MEM1520	Acti9 Powertag 1PN	Top or bottom of mcb
A9MEM1521	Acti9 Powertag 1P+N	Top of mcb
A9MEM1522	Acti9 Powertag 1P+N	Bottom of mcb
A9MEM1540	Acti9 Powertag 3P Max 63 A	Top or bottom of mcb
A9MEM1541	Acti9 Powertag 3P+N	Top of mcb
A9MEM1542	Acti9 Powertag 3P+N	Bottom of mcb

Acti9 Isobar ready-to-install Panel Server extension kit

Compatible with all three phase distribution boards it contains an Panel Server, power and neutral reference terminals, and ethernet connection. It has wireless connectivity for Acti9 Active & Powertag wireless energy sensors.



Part reference	Description
Coming soon	Panel Server Connectivity Extension kit
Coming soon	

- New Kits coming soon

Acti9 Isobar ready-to-install Powertag retrofit side extension kit

Capable of retrofit adaptation to all Acti9 Isobar three phase distribution boards it contains an SiD Din Smartlink wireless concentrator, power and neutral reference terminals, and ethernet connection. It has wireless connectivity for up to 20 Powertag wireless energy sensors.



Part reference	Description
Coming soon	Wireless connectivity for up to 20 Powertag

- Includes extension enclosure of width of 135 mm and height of 323 mm to fit side of distribution board

Acti 9 Isobar P connected products

Acti9 Isobar three phase distribution board Powertag for incomers

Rated at 250A or 630A the Compact NSX PowerTag wireless energy sensor assembles on to the bottom of a 3P or 4P MCCB (100A to 250A) or switch disconnector (160A to 250A) optimising asset management through monitoring and alarming of V, I, P, PF and loss of voltage.



LV434021

Part reference	Description
LV434020	250A NSX MCCB PowerTag 3P
LV434021	250A NSX MCCB PowerTag 3P+N

Acti9 Isobar distribution board gateway

Compatible with all distribution boards, the gateway has wireless connectivity for up to 100 PowerTag wireless energy sensors.



PAS600L

Part reference	Description
PAS400	Panel Server Entry 110-277V AC/DC
PAS600L	Panel Server - Universal wireless, concentrator modbus gateway 24 V DC
PAS600T	Panel Server - Universal wireless, concentrator modbus gateway 110-240 V AC/DC
PAS800	Panel Server Advanced with 100-277 V AC/DC power supply
PAS800L	Panel Server Advanced with 24 V DC power supply
PAS800P	Panel Server Advanced with PoE power supply

Acti9 PowerTag digital I/O modules

These wireless input/output modules allow circuit control and status monitoring. Designed for use in commercial and building applications, they quickly and easily turn your distribution board into a connected panel.



A9XMC1D3

Part reference	Description
A9XMC1D3	PowerTag C IO 230 V
A9XMC2D3	PowerTag 2DI 230 V

SafePacT 2

Enclosed MCCB 63 to 630A & Enclosed Switch disconnectors 100 to 630A

Features

- The Safepact enclosure provides protection, isolation and control of motors and power circuits
- MCCBs or switch disconnectors can be fitted with adjustable Vigi earth fault protection modules,
  for improving disconnection times and providing fire protection
- Suitable for switching inductive loads
- AC23 contact rating and high mechanical endurance
- Security of isolation, positive contact indication in accordance with BS 7671
- Secure rotary handle or toggle padlocking options
- Extension enclosures for larger cables
- Poles: 2P/3P+N/4P
- [In] rated current: 40A to 630A
- Trip units options:
  - Thermal-magnetic (63A to 250A)
  - Electronic Micrologic 2.3 (400A & 630A)
  - Electronic Micrologic 5.2E (40A, 100A, 160A, 250A)
  - Micrologic 5.3E (400A & 630A)
- Earth-leakage protection (Vigi module) option:
  - With the NSX TM-D from 63A to 250A
  - With the NSX Micrologic 2.3 for 400A & 630A

Benefits

- **Flexible:** Wide current range with adjustable settings
- **Safe:** Voltage releases for remote tripping
- **Easy wiring:** Connection accessories
- **Simple operation:** Rotary handle

Applications

- Industrial
- Commercial





Extension enclosures for larger cables

Material	Material Description
MGEX160C	SafePact 2 160A 100mm extension box
MGEX250C	SafePact 2 250A 200mm extension box
MGEX630C	SafePact 2 630A 120mm extension box

2P Enclosed Circuit Breaker



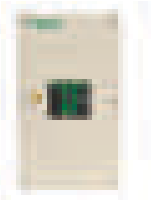
Material	Material Description	[In] rated current	Breaking capacity	Trip unit	Earth-leakage protection
SFP20632PX	SafePact 2 63A 2 Pole MCCB	63A	70 kA	TMD thermal magnetic	Without
SFP21002PX	SafePact 2 100A 2 Pole MCCB	100A	70 kA	TMD thermal magnetic	Without
SFP21252PX	SafePact 2 125A 2 Pole MCCB	125A	70 kA	TMD thermal magnetic	Without
SFP21602PX	SafePact 2 160A 2 Pole MCCB	160A	70 kA	TMD thermal magnetic	Without

3P+N Enclosed Circuit Breaker



Material	Material Description	[In] rated current	Breaking capacity	Trip unit	Earth-leakage protection
SFP20633PX	SafePact 2 63A 3 Pole +N MCCB	63A	70 kA	TMD thermal magnetic	Without
SFP21003PX	SafePact 2 100A 3 Pole +N MCCB	100A	70 kA	TMD thermal magnetic	Without
SFP21253PX	SafePact 2 125A 3 Pole +N MCCB	125A	70 kA	TMD thermal magnetic	Without
SFP21603PX	SafePact 2 160A 3 Pole +N MCCB	160A	70 kA	TMD thermal magnetic	Without
SFP22003PX	SafePact 2 200A 3 Pole +N MCCB	200A	70 kA	TMD thermal magnetic	Without
SFP22503PX	SafePact 2 250A 3 Pole +N MCCB	250A	70 kA	TMD thermal magnetic	Without
SFP24003PX	SafePact 2 400A 3 Pole +N MCCB	400A	70 kA	Micrologic 2.3 electronic trip unit	Without
SFP26303PX	SafePact 2 630A 3 Pole +N MCCB	630A	70 kA	Micrologic 2.3 electronic trip unit	Without

3P+N Enclosed Switch-Disconnector



Material	Material Description	[In] rated current	Earth-leakage protection
SFP21003PSW	SafePact 2 100A 3 Pole +N Switch	100A	Without
SFP21603PSW	SafePact 2 160A 3 Pole +N Switch	160A	Without
SFP22503PSW	SafePact 2 250A 3 Pole +N Switch	250A	Without
SFP24003PSW	SafePact 2 400A 3 Pole +N Switch	400A	Without
SFP26303PSW	SafePact 2 630A 3 Pole +N Switch	630A	Without

4P Enclosed Circuit Breaker





Material	Material Description	[In] rated current	Breaking capacity	Trip unit	Earth-leakage protection
SFP20404PXML5	SafePact 2 40A 4 Pole MCCB +ML5	40A	70 kA	Micrologic 5.2 electronic trip unit	Without
SFP20634PX	SafePact 2 63A 4 Pole MCCB	63A	70 kA	TMD thermal magnetic	Without
SFP20634PXEF	SafePact 2 63A 4 Pole MCCB +EL	63A	70 kA	TMD thermal magnetic	Add-on
SFP21004PX	SafePact 2 100A 4 Pole MCCB	100A	70 kA	TMD thermal magnetic	Without
SFP21004PXEF	SafePact 2 100A 4 Pole MCCB +EL	100A	70 kA	TMD thermal magnetic	Add-on
SFP21004PXML5	SafePact 2 100A 4 Pole MCCB +ML5	100A	70 kA	Micrologic 5.2 electronic trip unit	Without
SFP21254PX	SafePact 2 125A 4 Pole MCCB	125A	70 kA	TMD thermal magnetic	Without
SFP21254PXEF	SafePact 2 125A 4 Pole MCCB +EL	125A	70 kA	TMD thermal magnetic	Add-on
SFP21604PX	SafePact 2 160A 4 Pole MCCB	160A	70 kA	TMD thermal magnetic	Without
SFP21604PXEF	SafePact 2 160A 4 Pole MCCB +EL	160A	70 kA	TMD thermal magnetic	Add-on
SFP21604PXML5	SafePact 2 160A 4 Pole MCCB +ML5	160A	70 kA	Micrologic 5.2 electronic trip unit	Without
SFP22004PX	SafePact 2 200A 4 Pole MCCB	200A	70 kA	TMD thermal magnetic	Without
SFP22004PXEF	SafePact 2 200A 4 Pole MCCB +EL	200A	70 kA	TMD thermal magnetic	Add-on
SFP22504PX	SafePact 2 250A 4 Pole MCCB	250A	70 kA	TMD thermal magnetic	Without
SFP22504PXEF	SafePact 2 250A 4 Pole MCCB +EL	250A	70 kA	TMD thermal magnetic	Add-on
SFP22504PXML5	SafePact 2 250A 4 Pole MCCB +ML5	250A	70 kA	Micrologic 5.2 electronic trip unit	Without
SFP24004PX	SafePact 2 400A 4 Pole MCCB	400A	70 kA	Micrologic 2.3 electronic trip unit	Without
SFP24004PXEF	SafePact 2 400A 4 Pole MCCB +EL	400A	70 kA	Micrologic 2.3 electronic trip unit	Add-on
SFP24004PXML5	SafePact 2 400A 4 Pole MCCB +ML5	400A	70 kA	Micrologic 5.3 electronic trip unit	Without
SFP26304PX	SafePact 2 630A 4 Pole MCCB	630A	70 kA	Micrologic 2.3 electronic trip unit	Without
SFP26304PXEF	SafePact 2 630A 4 Pole MCCB +EL	630A	70 kA	Micrologic 2.3 electronic trip unit	Add-on
SFP26304PXML5	SafePact 2 630A 4 Pole MCCB +ML5	630A	70 kA	Micrologic 5.3 electronic trip unit	Without

3P+N Enclosed Switch-Disconnector



Material	Material Description	[In] rated current	Earth-leakage protection
SFP21004PSW	SafePact 2 100A 4 Pole Switch	100A	Without
SFP21004PSWEF	SafePact 2 100A 4 Pole Switch +EL	100A	Add-on
SFP21604PSW	SafePact 2 160A 4 Pole Switch	160A	Without
SFP21604PSWEF	SafePact 2 160A 4 Pole Switch +EL	160A	Add-on
SFP22504PSW	SafePact 2 250A 4 Pole Switch	250A	Without
SFP22504PSWEF	SafePact 2 250A 4 Pole Switch +EL	250A	Add-on
SFP24004PSW	SafePact 2 400A 4 Pole Switch	400A	Without
SFP24004PSWEF	SafePact 2 400A 4 Pole Switch +EL	400A	Add-on
SFP26304PSW	SafePact 2 630A 4 Pole Switch	630A	Without
SFP26304PSWEF	SafePact 2 630A 4 Pole Switch +EL	630A	Add-on

Acti**9** Isobar P
Technical Data



Acti9 Isobar P A type distribution boards

BS EN 61439-3 | IEC 61439-3

- Acti9 Isobar is a complete range of single-phase distribution board for commercial and industrial applications
- Any outgoing way can be converted to switch the neutral
- Fully type tested conditional short circuit rating of 16 kA to BS EN 61439-3
- High performance MCB 10 kA BS EN 60898 15 kA BS EN 60947-2 in B, C or D curve single and double pole
- 125 A busbar rating*
- Isobar disconnection to BS EN 60947-3 ensuring unused outgoing ways are isolated
- Option of switching outgoing neutral on all boards using distributed neutral kit
- Terminal block for feeding up to 100 A
- Range of incomers: switch disconnectors, Residual Current Devices, terminal blocks
- Single pole wireless RCBO
- Single pole wired RCBO
- Active AFDD
- Full IP2X internal shrouding
- Full range of device accessories and auxiliaries
- Knockouts for cable gland and conduit mixed to suit the installation needs without loss of space
- Split metering options
- Connectivity with MCB and RCBO single phase wireless energy sensors
- Connectivity with all-in-one AFDD

Technical data standard, multi service, split load, dual incomer, split metered Acti9 Isobar

SEA9ANI8



Main characteristics	Type A type distribution boards
Main Busbar Current Rating (In)	125 A
Rated operational voltage (Ue)	110 V ; 230/240 V
Rated frequency	50/60 Hz
Rated Insulation voltage (Ui)	500 V
Rated impulse withstand voltage (Uimp)	6 kV
Rated Conditional Short circuit Current Rating (Icc)	10 kA*
Pollution degree	3
Degree of protection	IP3X External , Door closed
	IP2X Internal
Endurance (O-C) Isobar switch disconnector	3000
Overvoltage category	IV
Operating temperature*	-35 to +70 °C
Storage teperature	-40 to +80 °C

Connections				
Rating in amp	Tightening torque	Copper lugs	Cables bare	Device
125 A	3.5 Nm	■	50 mm^2	DIN switch disconnector
125 A	3.5 Nm	■	50 mm^2	Terminal block
100 A	3.5 Nm	■	35 mm^2	RCCB

* For typical assembly configuration ratings (I_{nA}) with incomers fitted consult us

Acti9 Isobar P B type distribution boards

BS EN 61439-3 | IEC 61439-3

- Acti9 Isobar P distribution board is a three phase distribution board for commercial and industrial applications
- Fully type tested conditional short circuit rating up to 25 kA to BS EN 61439-3
- Up to 250 A busbar rating*
- Any outgoing way can be converted to switch the neutral in standard, meter ready, split metered & heavy duty board
- sobar disconnection to BS EN 60947-3 ensuring unused outgoing ways are isolated
- Terminal block for feeding up to 100 A for outgoing ways
- Range of incomers: switch disconnectors, residual current devices, terminal blocks, MCCB
- Range of outgoers :
  - All in One AFDDs with inbuilt connectivity
  - PoN RCBOs for quick and easier installations
  - High performance MCB
- Full IP2X internal shrouding Isobar P
- Full range of device accessories and auxiliaries
- Knockouts for cable gland and conduit mixed to suit the installation needs without loss of space
- Removable insulated pan assembly
- Fully shrouded neutral
- Split neutral bars
- Removable gland plates
- Optional metering, dual supply and contactor on incoming
- Metered extension enclosures
- Connectivity with MCB, RCBO, AFDD and MCCB Powertag wireless energy sensors

Technical data : Acti9 Isobar P distribution boards

new



new



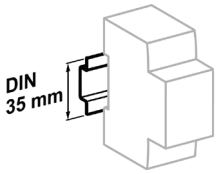




Main characteristics	Hybrid Active AFDD boards	Standalone Active AFDD boards	Standard, meter ready, split metered boards	Heavy duty boards
Main Busbar Current Rating (In)	250 A	125 A	250 A (125A for Meter Ready)	125 A
Rated operational voltage (Ue)	230/240 V ; 400V/415 V	230/240 V ; 400V/415 V	230/240 V ; 400V/415 V	230/240 V ; 400V/415 V
Rated frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated Insulation voltage (Ui)	500 V	500 V	500 V	500 V
Rated impulse withstand voltage (Uimp)	6 kV	6 kV	6 kV	6 kV
Busbar Short circuit Withstand Rating at 230/240V ; 400V/415V UnConditional (Icw)	25 kA/100 ms	25 kA/100 ms	25 kA/100 ms	25 kA/100 ms
	17 kA/200 ms	17 kA/200 ms	17 kA/200 ms	17 kA/200 ms
Rated Conditional Short circuit Current Rating (Icc)	25 kA*	16 kA*	25 kA*	25 kA*
Pollution degree	3	3	3	3
Degree of protection	IP3X External , Door closed	IP3X External , Door closed	IP3X External , Door closed	IP55 External , Door closed
	IP2X Internal	IP2X Internal	IP2X Internal	IP2X Internal
Mechanical Endurance (O-C) Isobar off-load switch	3000	3000	3000	3000
Overvoltage category	IV	IV	IV	IV
Operating temperature*	-35 to +70 °C	-35 to +70 °C	-35 to +70 °C	-35 to +70 °C
Storage temperature	-40 to +80 °C	-40 to +80 °C	-40 to +80 °C	-40 to +80 °C

* For typical assembly configuration ratings (I_{nA}) with incomers fitted consult us

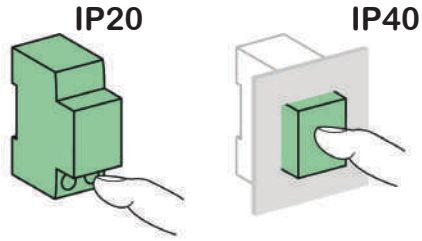
Acti9 Active Arc Fault Detection Device



Clip on DIN rail 35 mm.



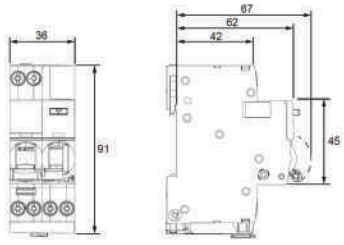
Indifferent position of installation.



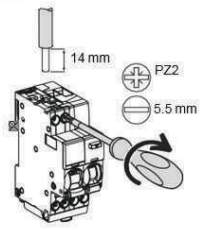
Technical data

Main characteristics						
Tripping time/arc current value with Un = 230 V AC (to IEC/BS EN 62606)	Arc current	2.5 A	5 A	10 A	16 A	40 A
	Max. operating time	1 s	0.5 s	0.25 s	0.15 s	0.12 s
Overvoltage time limits	Voltage (V AC)	255	275	300	350	400
	Max. operating time	No tripping	15 s	5 s	0.75 s	0.20 s
	Min. non-response time		3 s	1 s	0.25 s	0.07 s
Insulation voltage (Ui)		250 V AC				
Starting current	Ist	100 mA				
According to BS EN IEC 61009-2-1						
Limitation class		3				
Rated breaking capacity (Icn)		10,000 A				
Service breaking capacity (Ics)		100 % Icn				
Rated breaking and making capacity on a single pole (Icn1)		3000 A				
Magnetic tripping	C curve	5 to 10 In				
8/20 µs impulse withstand without tripping	A-SI type	3 kÂ				
Behaviour in case of voltage drop		Residual current protection down to 0 V according to BS EN IEC 61009-2-1 § 3.3.8				
Operating temperature		30 °C				
According to BS EN IEC 60947-2						
Rated impulse withstand voltage (Uimp)		4 kV				
Breaking capacity (Icu)		10 kA				
Service breaking capacity (Ics)	≤ 25 A	75 % Icu				
	32 A	50 % Icu				
Magnetic tripping	C curve	8 In ±20 %				
Operating temperature		50 °C				
Degree of pollution		2				
Radio-frequency communication						
ISM band 2.4 GHz		2.4 GHz to 2.4835 GHz				
Channels	As per IEEE 802.15.4	11 to 26				
Isotropic Radiated Power	Equivalent (EIRP)	0 dBm				
Maximum transmission time		< 5 ms				
Channel occupancy	Messages sent every	5 seconds minimum				
Additional characteristics						
Degree of protection	Unit alone	IP20				
	Unit in a modular enclosure	IP40 Insulation class II				
Endurance (O-C)	Electrical ≤ 25 A	20,000 cycles				
	32 A	10,000 cycles				
	Mechanical	20,000 cycles				
Operating temperature		-25 to +60 °C				
Storage temperature		-40 to +85 °C				
Tropicalization (to IEC/BS EN 62606)		Severity B (to IEC/BS EN 60068-2-30) during 28 days				

Dimensions (mm)



Connection

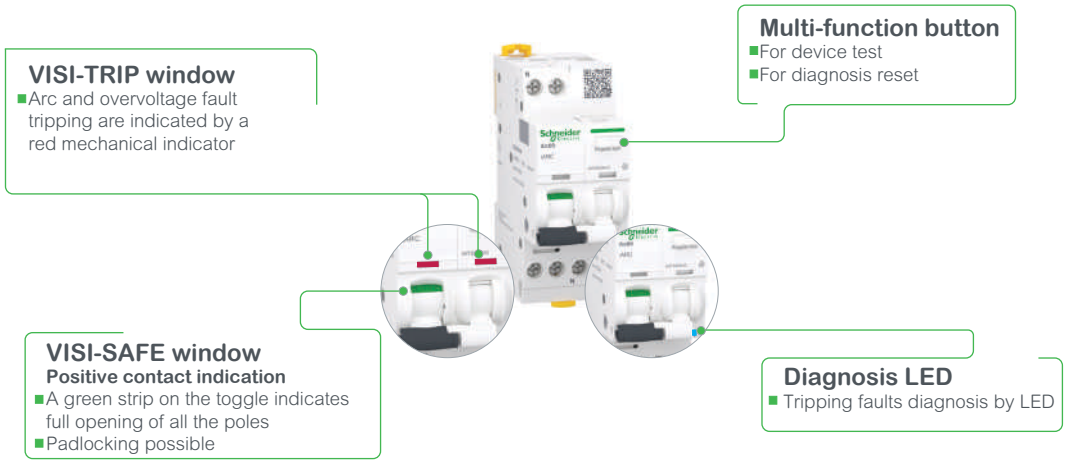


Tightening torque	Copper cables only	
	Rigid	Flexible or with ferrule
		
2 N.m	1 x 1 to 16 mm²	1 x 1 to 10 mm²

Weight (g)

Arc Fault Detection Device	
Type	Acti9 Active
1P+N	220

Acti9 Arc Fault Detection Device - iARC

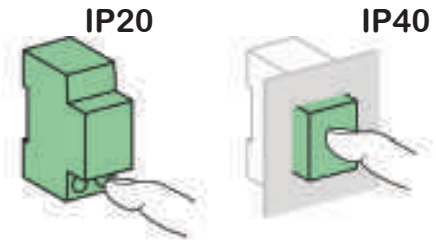




Clip on DIN rail 35 mm.



Indifferent position of installation.



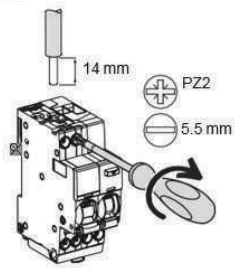
Technical data

Main characteristics						
Tripping time/arc current value with Un = 230 V AC (to IEC/BS EN 62606)	Arc current	2.5 A	5 A	10 A	16 A	40 A
	Max. operating time	1 s	0.5 s	0.25 s	0.15 s	0.12 s
Overvoltage time limits	Voltage (V AC)	255	275	300	350	400
	Max. operating time	No tripping	15 s	5 s	0.75 s	0.20 s
	Min. non-response time		3 s	1 s	0.25 s	0.07 s
Insulation voltage (Ui)		250 VAC				
Degree of pollution		2				
Rated impulse withstand voltage (Uimp)		4 kV				
Rated making and breaking capacity (Im)		500 A				
One pole rated making and breaking capacity (Im1)		500 A				
Overvoltage category		III				
Coordinated with an upstream circuit breaker	Max. rating	40 A				
	Curve	B or C				
	Rated breaking capacity	Up to 10,000 A				
Additional characteristics						
Degree of protection	Unit alone	IP20				
	Unit in a modular enclosure	IP40 Insulation class II				
Endurance (O-C)	Electrical ≤ 25 A	20,000 cycles				
	40 A	10,000 cycles				
	Mechanical	20,000 cycles				
Operating temperature		-25 to +60 °C				
Storage temperature		-40 to +85 °C				
Tropicalization (to IEC/BS EN 62606)		Severity B (to IEC/BS EN 60068-2-30) during 28 days				

Dimensions (mm)



Connection



Tightening torque	Copper cables only	
	Rigid	Flexible or with ferrule
		
2 N.m	1 x 1 to 16 mm²	1 x 1 to 10 mm²

Weight (g)

Arc Fault Detection Device	
Type	Acti9 iARC
1P+N	210

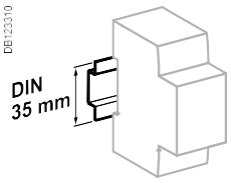
Acti9 iC60H circuit breakers (curve B, C, D)



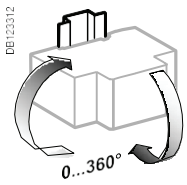
Increased product service life thanks to:

- Overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage)
- High performance limitation (see limitation curves)
- Fast closing independent of the speed of actuation of the toggle
- Remote indication, open/closed/tripped, by optional auxiliary contacts
- Top or bottom electrical feeding

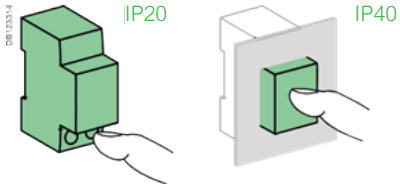
Acti9 iC60H circuit breakers (curve B, C, D)



Clip on DIN rail 35 mm.



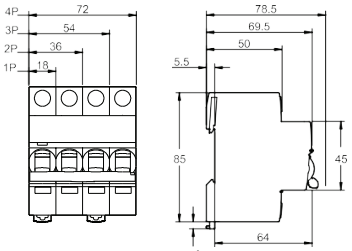
Indifferent position of installation.



Technical data

Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		500 VAC
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50 °C
Magnetic tripping	B curve	4 In ± 20 %
	C curve	8 In ± 20 %
	D curve	12 In ± 20 %
Utilization category		A
According to IEC/EN 60898-1		
Limitation class		3
Rated making and breaking capacity of an individual pole (Icn1)		Icn1 = Icn
Additional characteristics		
Breaking capacity under 1 pole with IT 380-415 V isolated neutral system (case of double fault)	40 A	4 kA
	50/63 A	3 kA
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation classe II
Endurance (O-C)	Electrical	10,000 cycles
	Mechanical	20,000 cycles
Overvoltage category (IEC 60364)		IV
Operating temperature		-35 to +70 °C
Storage temperature		-40 to +85 °C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity 95 % to 55 °C)

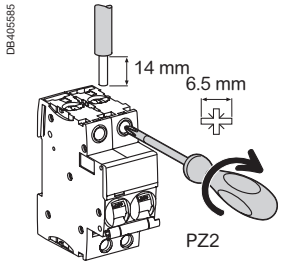
Dimensions (mm)



Weight (g)

Circuit breaker	
Type	iC60H
1P	125
2P	250
3P	375
4P	500

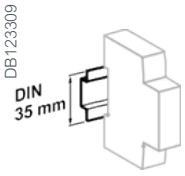
Connection



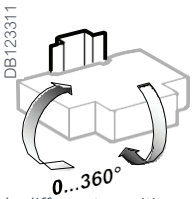
Rating	Tightening torque	Without accessory: Copper cables: Rigid	Without accessory: Copper cables: Flexible or with ferrule	With accessories: 50 mm² Al terminal	With accessories: Screw-on connection for ring terminal	With accessories: Multi-cables terminal: Rigid cables	With accessories: Multi-cables terminal: Flexible cables
		DB122945	DB122946 DB122935	DB118789 Al	DB118787 Ø		
1 to 25 A	2 N.m	1 to 25 mm²	1 to 16 mm²	-	Ø 5 mm	-	-
32 to 63 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²	50 mm²		3 x 16 mm²	3 x 10 mm²

Acti9 iC60H PoN RCBO 10, 30 and 100 mA

IEC 61009-1, IEC 61009-2-2, BS EN 61009-1 Type A



Clip on DIN rail 35 mm.



Indifferent position of installation.





Weight (g)

iC60 RCBO	
iC60H PoN RCBO	156

VISI-TRIP window
■ Fault tripping is indicated by a red mechanical indicator on the front face

■ Test push-button





■ Strong FE blade



Positive contact indication
■ The presence of the green strip guarantees physical opening of the contacts and allows operations to be performed on the downstream circuit in complete safety

■ Padlocking device



■ Robust neutral jaw

■ Autolock locking clip

■ Increased product service life thanks to fast closing independent of the speed of actuation of the toggle
■ Remote indication, open/closed/tripped, by optional auxiliary contacts

Acti9 iC60H PoN RCBO 10, 30 and 100 mA

IEC 61009-1, IEC 61009-2-2, BS EN 61009-1 Type A

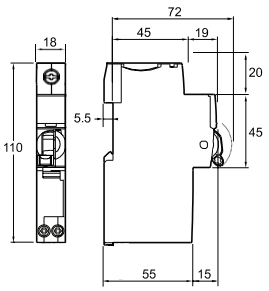
The single-phase iC60H RCBO PoN's self-contained residual current device carries out complete protection of final circuits:

- Protection against short-circuits and cable overloads.
- Protection of persons against electric shock by direct contact (10, 30 mA sensitivities).
- Protection of persons against electric shock by indirect contact (100 mA sensitivity).
- Protection of equipment against fires set by leakage currents (100 mA sensitivity).
- The neutral is not interrupted when the device is tripped. Hence iC60H RCBO PoN can be used on most circuits, except for the ones operating under TT or IT earthing systems.
- iC60H RCBO PoN device carries out a quick and reliable plug-on installation with FE blade and neutral jaw.

Main characteristics		iC60H PON RCBO
Insulation voltage (Ui)		400 V AC
Rated impulse withstand voltage (Uimp)		4 kV
Rated residual operating current (IΔn)		10, 30, 100 mA
Magnetic tripping	B Curve	Between 3 and 5 in
	C curve	Between 5 and 10 in
Thermal tripping	Reference temperature	50 °C
Limitation class		3
Surge current withstand (8/20 µs) without tripping		250 A
Rated nominal breaking capacity (Icn)		10,000 A
Phase/earth rated residual breaking and making capacity (IΔm)		7,500 A
Additional characteristics		
Plug-on functional earth and neutral connection		
Degree of protection	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Endurance (O-C)	Electrical	5,000 cycles
	Mechanical	20,000 cycles
Operating temperature		-15 to +60 °C
Storage temperature		-40 to +85 °C
Tropicalization		Treatment 2 (relative humidity: 95 % at 55 °C)

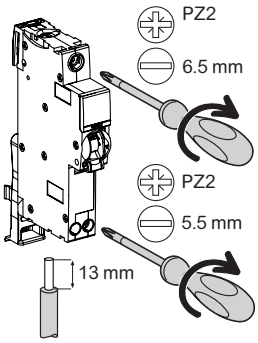
Alternating current (AC) 50/60 Hz		
Breaking capacity (Icn) according to IEC 61009-1		
		Voltage (Ue)
Ph/N		240 V
Rating (In)	6 to 45 A	10000 A

Dimensions (mm)



iC60H RCBO

Connection



Type	Rating	Tightening torque	Copper cables	
			Rigid	Flexible
				
L in	6 to 45 A	3.5 N.m	1 to 25 mm²	1 to 16 mm²
L out and N out		2 N.m	1 to 16 mm²	1 to 10 mm²

Acti9 iC60H RCBO 10, 30 and 100 mA

IEC 61009-1, IEC 61009-2-2, BS EN 61009-1 Type A

The single phase iC60H RCBO's self contained Residual Current Device carries out complete protection of final circuits:

- Protection against short circuits and cable overloads
- Protection of persons against electric shock by direct contact (10, 30 mA sensitivities),
- Protection of persons against electric shock by indirect contact (100 mA sensitivity),
- Protection of equipment against fires set by leakage currents (100 mA sensitivity).
- The neutral is not interrupted when the device is tripped. Hence iC60H RCBO can be used on most circuits, except for the ones operating under TT or IT earthing systems when the neutral needs to be isolated.
- Increased product service life thanks to fast closing independent of the speed of actuation of the toggle.
- Remote indication, open/closed/tripped, by optional auxiliary contacts.

Alternating current (AC) 50/60 Hz			
Breaking capacity (Icn) according to IEC 61009-1			
		Voltage (Ue)	
Ph/N		110 V	240 V
Rating (In)	6 to 45 A	10000 A	10000 A



Insulated terminals IP20

Visi-Trip Window
Fault tripping is indicated by a red mechanical indicator on the front face

Positive contact indication
The presence of the green strip indicates physical opening of the contacts and allows operations to be performed on the downstream circuit with complete protection

Test push-button

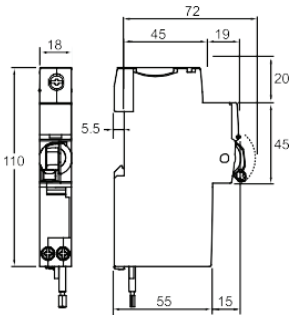
Padlocking device

Technical data

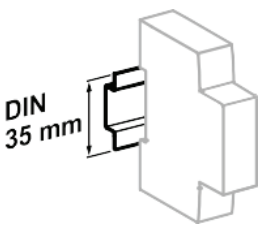
Main characteristics		iC60H RCBO
Insulation voltage (Ui)		400 VAC
Rated impulse withstand voltage (Uimp)		4 kV
Rated residual operating current (IΔn)		10, 30, 100 mA
Thermal tripping	Reference temperature	50 °C
Limitation class		3
Surge current withstand (8/20 µs) without tripping		250 A
Rated nominal breaking capacity (Icn)		10,000 A
Phase/earth rated residual breaking and making capacity (IΔm)		7,500 A
Additional characteristics		
Degree of protection	Device only	IP20
	Device in modular enclosure	IP40
Endurance (O-C)	Electrical	5,000 cycles
	Mechanical	20,000 cycles
Operating temperature		-15 to +60 °C
Storage temperature		-40 to +85 °C
Tropicalization		Treatment 2 (relative humidity: 95 % at 55 °C)

- Please refer Connection table from iC60H PON RCBO for Torque and Cable connections details

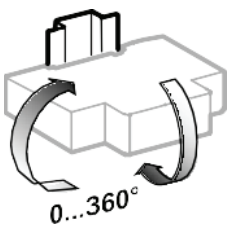
Dimensions (mm)



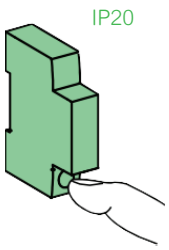
iC60H RCBO

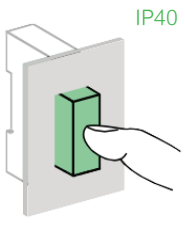


Clip on DIN rail 35 mm.



Indifferent position of installation.





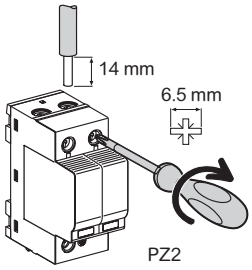
Weight (g)

iC60 RCBO	
iC60H RCBO	**205**

iPRD surge arresters

Type 2 or 3 LV withdrawable surge arresters

Connection iPRD surge arresters

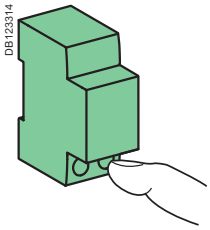


Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB122945 	DB122946 
iPRD	3.5 N.m	2.5 to 25 mm²	4 to 16 mm²

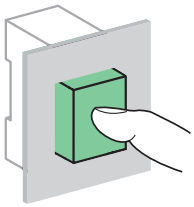
Technical data iPRD surge arresters

Main characteristics		iPRD	iPRD IT
Operating frequency		50/60 Hz	
Operating voltage (Ue)		230/400 V AC ±10 %	
Permanent operating current (Ic)		< 1 mA	
Response time		< 25 ns	
Short circuit current rating (Isccr)		50 kA (50 Hz)	-
Short circuit current rating (Isccr), case of double fault		-	5 kA (50 Hz)
Temporary overvoltage withstand (U_T)	U_T (L-N)	337 V AC / 5 s	337 V AC / 5 s
	U_T (L-PE)	442 V AC / 120 min	-
Temporary overvoltage **Safe failure mode** (U_T)	U_T (N-PE)	1200 V AC / 200 ms	1455 V AC / 200 ms
	U_T (L-PE)	1455 V AC / 200 ms	1455 V AC / 200 ms
Ground residual current (I_{PE})	I_{PE} (L-PE)	600 µA for 1P, 2P, 3P, 4P	
	I_{PE} (N-PE)	3 µA for 1P+N, 3P+N	-
Satisfactory operation indication: by mechanical indicator	White	In operation	
	Red	Must be replaced	
Remote indication of satisfactory operation		By contact NO, NC 250 V / 0.25 A	
Additional characteristics			
Degree of protection (IEC 60529)	Device only	IP20 (built-in)	
	Device in modular enclosure	IP40	
Operating temperature		-25 to +60°C	
Storage temperature		-40 to +85°C	
Humidity range		5 % to 95 %	
Type of connection terminals		Tunnel terminals, 2.5 to 35 mm²	
Standards		IEC 61643-11: 2011 T2, T3 and EN 61643-11: 2012 Type 2, Type 3	

IP20

DB123314 

IP40



Weight (g)

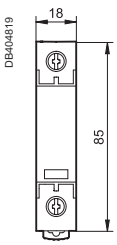
Surge arrester	
Type	**iPRD**
1P	119
1P+N, 2P	220
3P	340
3P+N, 4P	450

Surge arrester/circuit breaker association

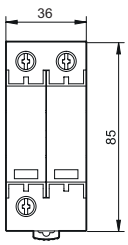
Surge arrester	Associated circuit breaker		
	iPRD		iPRD IT
	Isc y 25 kA	Isc y 50 kA	Isc (IT 400 V AC) y 5 kA
iPRD65	Curve C 50 A	Curve C 63 A	Curve C 25 A
iPRD40	Curve C 40 A	Curve C 63 A	Curve C 20 A
iPRD20	Curve C 20 A	Curve C 63 A	Curve C 10 A
iPRD8	Curve C 10 A	Curve C 63 A	Curve C 10 A

iPRD dimensions (mm)

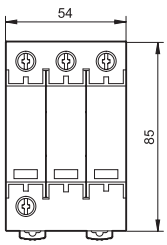
DB404819



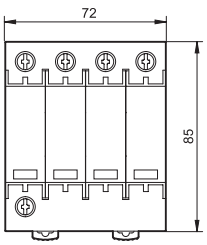
1P



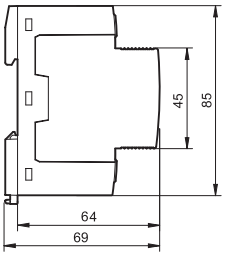
1P+N, 2P



3P



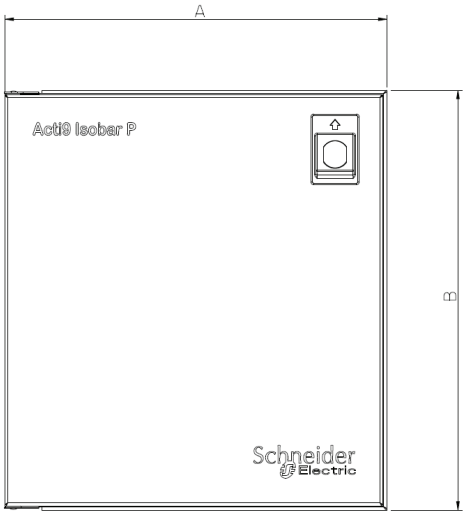
3P+N, 4P

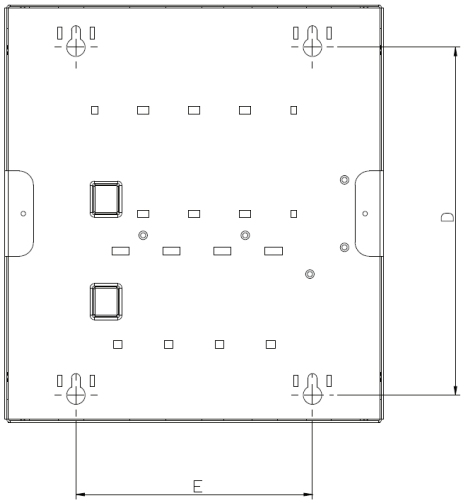


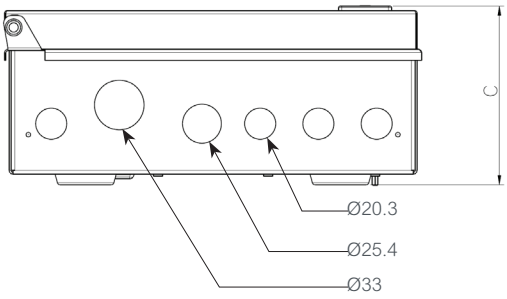
Acti**9** Isobar P Dimensions

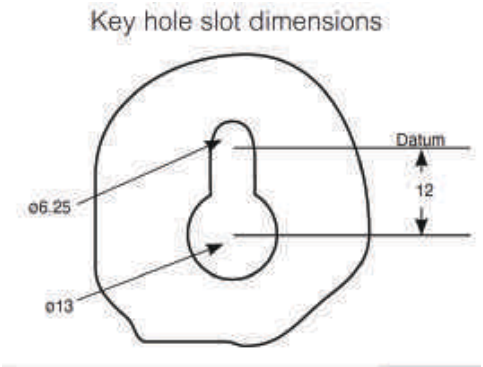
Acti9 Isobar A type distribution boards

Part number	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
SEA9APN2	200	300	117	245	114.8
SEA9APN6	273	300	117	245	166.8
SEA9APN10	345	300	117	245	238.8
SEA9APN14, SEA9APN616MS, SEA9APN108MS	417	300	117	245	310.8
SEA9APN18,SEA9APN6S6, SEA9APN624MS, SEA9APN1016MS, SEA9APN148MS	489	300	117	245	382.8
SEA9APN27, SEA9APN10S10, SEA9APN1432MS	417	570	117	515	310.8
SEA9APN14S14	470	700	140	602	380









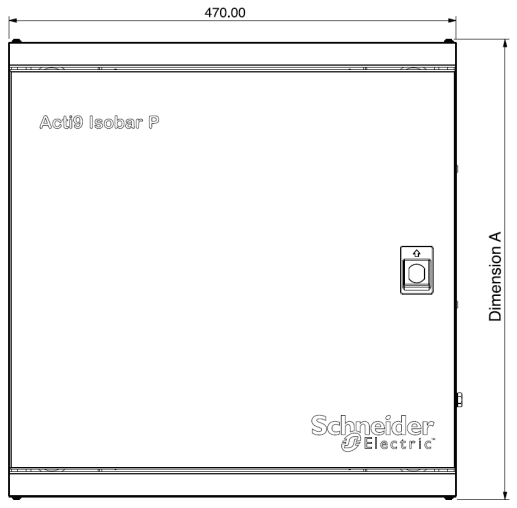
Acti9 Isobar B type distribution boards

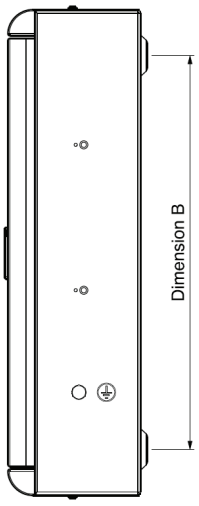
Active AFDD distribution boards

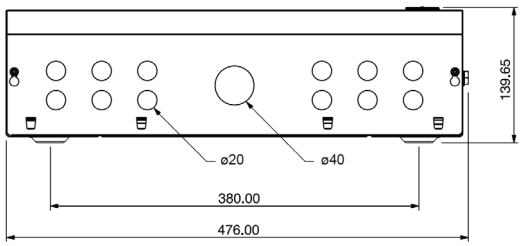
Part number	A (mm)	B (mm)	Weight
SEA9BPNAFD12	538	440	11.2 Kg
SEA9BPN8AFD6	700	602	15.5 Kg
SEA9BPNAFD24	808	710	17.0 Kg
SEA9BPN14AFD6	862	764	18.2 Kg
SEA9BPN10AFD12	862	764	18.4 Kg
SEA9BPNAFD36	1024	926	22.8 Kg

Standard and meter ready board

Part number	A (mm)	B (mm)	Weight
SEA9BPN4, SEA9BPN6, SEA9BPN6M	484	386	10.5 Kg
SEA9BPN8, SEA9BPN8M	538	440	11.0 Kg
SEA9BPN12, SEA9BPN12M	700	602	13.5 Kg
SEA9BPN16, SEA9BPN16M	808	710	16.0 Kg
SEA9BPN18, SEA9BPN18M	862	764	16.2 Kg
SEA9BPN24, SEA9BPN24M	1024	926	22.0 Kg



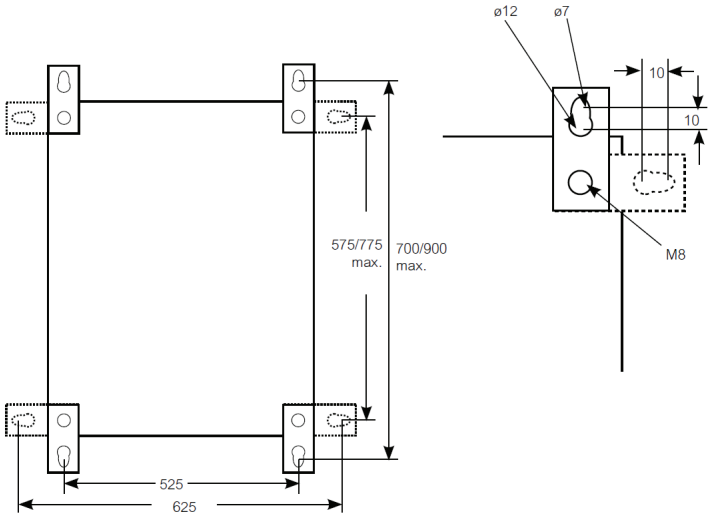




Heavy duty distribution board (125 A)

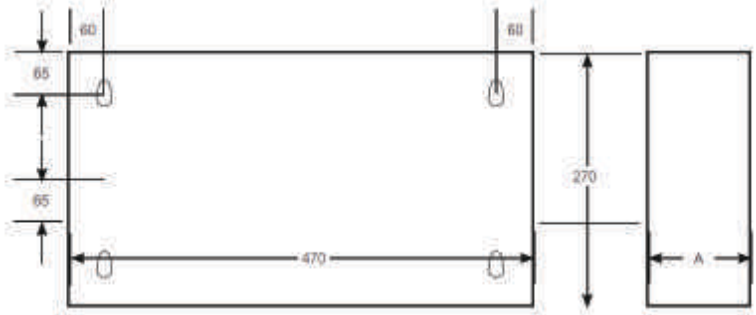
Part number	Number of TP ways	Dimensions (mm)			Weight
		Height	Width	Depth	
SEA9BPW6HDGK/G-R	6	650	600	290*	32.4 Kg
SEA9BPW8HDGK/G-R	8	650	600	290*	32.9 Kg
SEA9BPW12HDGK/G-R	12	850	600	290*	40.1 Kg
SEA9BPW16HDGK/G-R	16	850	600	290*	41.4 Kg

* Denotes the maximum depth dimensions with key fitted.



B board extension box enclosures	
Part number	A (mm)
SEA9BNEXN	124
SEA9BNEX034N	140
SEA9BNKWH	124
SEA9BNEXA14N	140
SEA9BN100CCI	140
SEA9PNDSI	124

* Not compatible with HDGR and HDGK heavy duty distribution board



Acti9 Isobar P - B board metering

Dual metering extension enclosure

Part number	Dimensions (mm)			Weight
	Height	Width	Depth	
SEA9BNDM160SD	745	1147	139	22 Kg
SEA9BNDM200SD	745	1147	139	22 Kg
SEA9BNDM250SD	745	1147	139	22 Kg
SEA9BQDM160M	745	1147	139	22 Kg
SEA9BQDM250M	745	1147	139	22 Kg

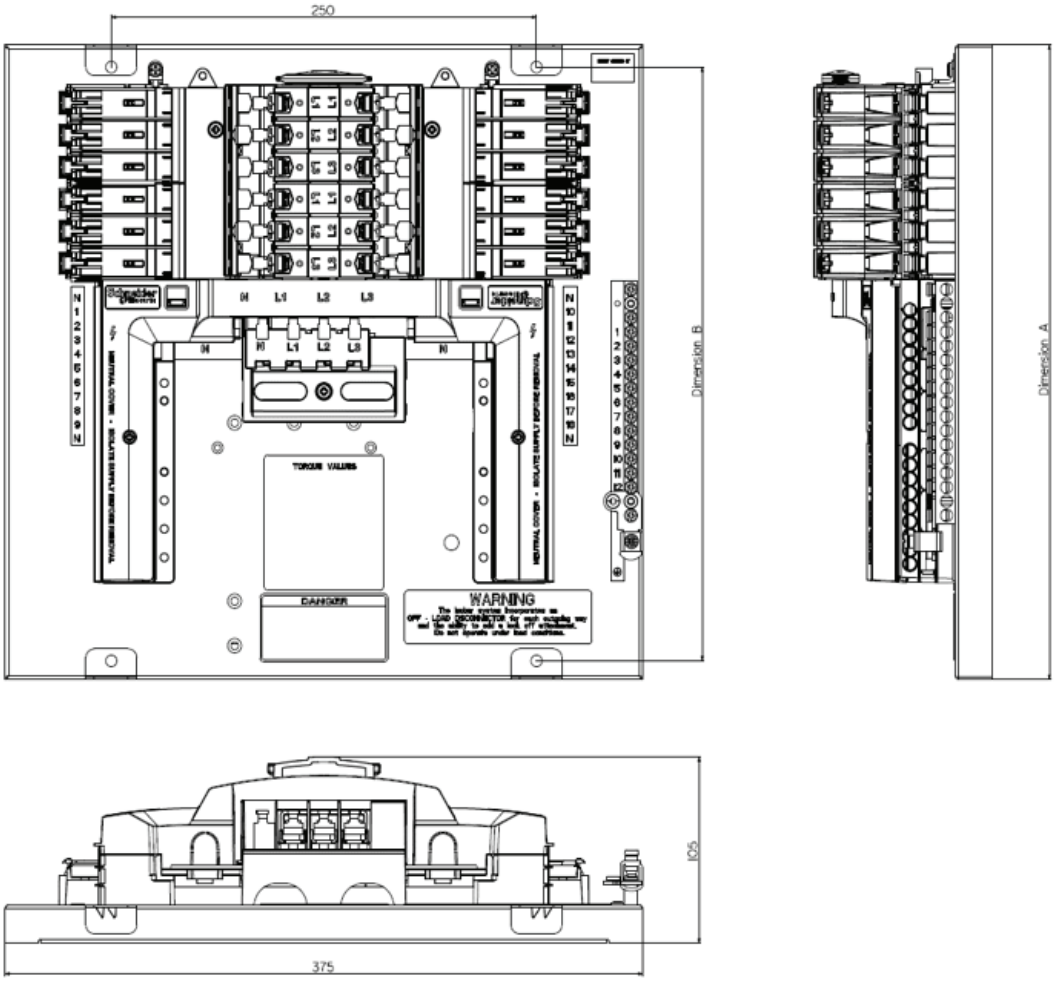
Split metered distribution boards

Part number	Dimensions (mm)			Weight
	Height	Width	Depth	
SEA9BPN1258S8	1132	470	139	28 Kg
SEA9BPN12514S8	1294	470	139	28 Kg
SEA9BPN12516S6	1294	470	139	28 Kg
SEA9BPN12518S4	1294	470	139	28 Kg
SEA9BPN2508S8	1267	470	139	32 Kg
SEA9BPN25014S8	1429	470	139	32 Kg
SEA9BPN25016S6	1429	470	139	32 Kg
SEA9BPN25018S4	1429	470	139	32 Kg

Isobar P – Pan assembly

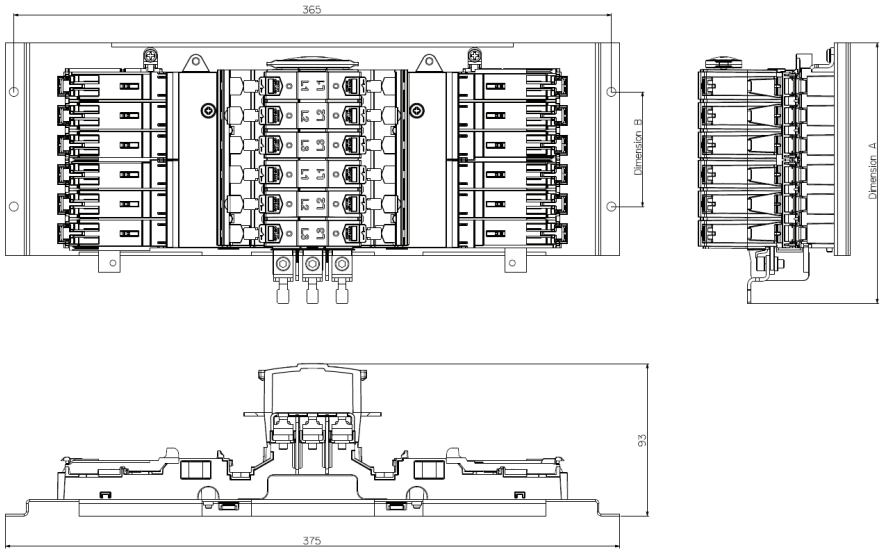
Pan Assembly with neutral distribution

Part number	A (mm)	B (mm)	Weight
SEA9BPN4E	356	333	2.64 Kg
SEA9BPN6E	421	400	3.21 Kg
SEA9BPN8E	471	450	3.78 Kg
SEA9BPN12E	571	550	4.92 Kg
SEA9BPN16E	681	650	6.16 Kg
SEA9BPN18E	746	725	6.78 Kg
SEA9BPN24E	896	875	8.49 Kg



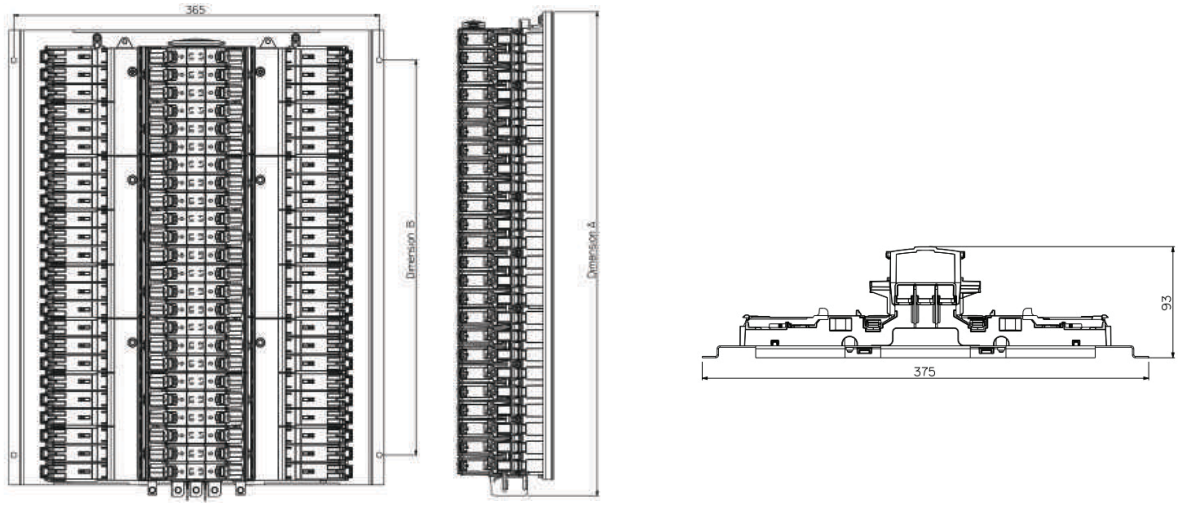
Pan assembly without neutral distribution

Part number	A (mm)	B (mm)	Weight
SEA9BPN4TN	159	70	1.18 Kg
SEA9BPN6TN	213	124	1.75 Kg
SEA9BPN8TN	267	178	2.32 Kg
SEA9BPN12TN	375	286	3.46 Kg
SEA9BPN16TN	429	340	4.60 Kg
SEA9BPN18TN	483	394	5.27 Kg
SEA9BPN24TN	699	610	6.88 Kg



Active AFDD pan assembly

Part number	A (mm)	B (mm)	Weight
SEA9BPNAFD24TN	469	394	5.2 Kg
SEA9BPNAFD36TN	685	610	10.3 Kg



Metering

Acti9 iEM2000 and iEM2400 series

The Acti9 iEM2xxx range energy meters offer a cost-attractive, competitive range of single-phase DIN rail-mounted energy meters ideal for sub-billing, cost allocation applications and support two protocols (Modbus RS-485 or M-Bus) that allow them to integrate seamlessly into any energy monitoring system.

Applications

- Monitor power consumption for each floor, office sector, unit or workshop with maximum current from 40 A, 45 A, and 100 A
- Allocate energy cost to lower cost of operations, optimise building's power efficiency
- Connect to power management software to take full advantage of the IoT digital power installation
- Various businesses, industrial and residential applications



A9MEM2000



A9MEM2055



A9MEM2435

Basic energy metering

The solution for:

All markets that can benefit from a solution that includes Acti9 PowerLogic™ iEM2000, iEM2400 series meters:

- Buildings
- Industry
- Data Centre and networks
- Infrastructures (airport, road tunnels, telecom...)

Benefits

The Acti9 PowerLogic™ iEM2xxx meters are economical and easy to install in panelboards and switchboards:

- DIN rail mounted, compact size
- Accurate data measurement with Class 1 accuracy for kWh and Class 2 accuracy for kVARh*
- Measures basic electrical parameters like voltage, current,
- frequency, power factor and power*

Energy management system:

- To get the most effective use from your Schneider Electric
- measurement and metering devices, we offer a range of
- dedicated data loggers and gateways for your building energy
- management.

*in selected references.

Competitive advantages*

- Compact size - compatible with Acti9 range, 18 mm width in iEM2000, 36 mm width in iEM2400
- Display - available in displayless, electromech counter display or LCD display
- Communication - Pulse output, Modbus RS-485 or M-Bus communication port
- Self-powered, direct connect up to 100 A
- MID compliant providing certified accuracy and data security
- Four quadrant measurement
- Two tariffs
- Basic electrical parameter eg. V, I, F, PF, PQS

Conformity of standards

- BS/EN/IEC 61557-12:2018/AMD1:2021*
- EN / IEC 62053-21
- EN / IEC 62053-23*
- EN 50470-1/3:2006*
- EN / IEC 62052-11
- IEC 62052-31:2015*
- BS / EN / IEC 61326-1
- BS / IEC / EN 61010-1
- CE and UKCA certified

Acti9 iEM2xxx range commercial reference numbers

iEM2000, iEM2400 series commercial/ordering reference numbers

Commercial reference number	Product description
A9MEM2000T	iEM2000T energy meter, Class 1, 230 V, 40 A, pulse output, no display
A9MEM2000	iEM2000 energy meter, Class 1, 230 V, 40 A, MID, electromechanical counter display
A9MEM2010	iEM2010 energy meter, Class 1, 230 V, 40 A, MID, pulse output, electromechanical counter display
A9MEM2050	iEM2050 power and energy meter, Class 1, 230 V, 45 A, RS-485, 2 tariffs, pulse output, LCD display
A9MEM2055	iEM2055 power and energy meter, Class 1, 230 V, 45 A, RS-485, MID, 2 tariffs, pulse output, LCD display
A9MEM2435	iEM2435 power and energy meter, Class 1, 230 V, 100 A, M-Bus, MID, 2 tariffs, 2 pulse outputs, 4 quadrants, LCD display
A9MEM2455	iEM2455 power and energy meter, Class 1, 230 V, 100 A, RS-485, MID, 2 tariffs, 2 pulse outputs, 4 quadrants, LCD display

See your Schneider Electric representative for complete ordering information.

Acti9 iEM3000 series

The Acti 9 iEM3000 series energy meters is a cost-attractive, feature-rich energy metering offer for DIN rail, modular enclosures. With Modbus, BACnet, M-Bus and LonWorks protocol support, you can easilyintegrate these meters into commercial and non-critical buildings to add simple energy management applications to any BMS, AMR or EMS system.

Applications

Cost management applications

- Bill checking to verify that you are only charged for the energy you use.
- Sub-billing individual tenants for their energy consumption, including WAGES.
- Aggregation of energy consumption, including WAGES, and allocating costs per area, per usage, per shift, or per time within the same facility.

Network management applications

- Basic metering of electrical parameters to better understand the behaviour of your electrical distribution system.



A9MEM3135



A9MEM3255



A9MEM3355

Basic energy metering

More than just kWh meters, the Acti 9 iEM3000 series meters provide a full view of both energy consumption and on-site generation with full four-quadrant measurement of active and reactive energy delivered and received. Additionally, extensive real-time measurements (V, I, P, PF) give customers greater detail on their energy usage, and multiple tariffs give customers the flexibility to match the billing structure of their utility.

The solution for

All markets that can benefit from a solution that includes PowerLogic™ iEM3000 series meters:

- Buildings and industry
- Data centres and networks
- Infrastructure (airports, road tunnels, telecom)

Benefits

Optimise your energy consumption & enable energy efficiency practices:

- Collect and analyse energy consumption data from each area for each type of load or circuit
- Gain an accurate understanding of business expenses by allocating the energy-related costs
- Identify energy savings opportunities and monitor continuously
- Use information to implement actions designed to reduce energy consumption

Monitor the energy consumption of your tenants or customers and establish accurate invoices:

- Drive energy-efficient behaviour
- Allow building owners to bill tenants for individual measured utility usage
- Give accurate and achievable objectives for energy savings

Features

- Multi-line circuit: Measure individual phase energy in three phase network system
- Partial and Total energy: Separate counters for measuring active, reactive and apparent energy
- 4 Quadrant measurement: For measuring quadrant based power and energy
- Multi tariff energy: Up to 4 counters activated through RTC, digital inputs or command register
- Digital input/output: For status monitoring/tariff control and energy pulsing/overload alarm
- Demand measurement: Per-phase and average current, total power for active, reactive and apparent
- Current: Direct connected/ whole current with the option of 63 A or 125 A, 1 A or 5 A CT operated, LVCT or Rogowski coil supported
- Internal clock: Quartz crystal based back up by super capacitor

* Available in selected references

Competitive advantages

- Compact size
- MID compliant for Wh and VARh (selected models) providing certified accuracy and data security
- Programmable digital inputs/outputs
- Multi-tariff capability
- Onboard Modbus, LonWorks, M-Bus or BACnet communication*
- Baud Rate configurable
- Communication protection: enable or disable through communication
- A complete range of energy meters
- Compatible with Acti 9 range
- Direct connect up to 125 A
- Password: configurable from 0-9999*
- Pulse output*: configurable pulse constant (imp/kWh, imp/kVARh), pulse width (ms)

Energy management system:

To get the most effective use from your Schneider Electric measurement and metering devices, we offer a range of dedicated data loggers and gateways for your building energy management.

Conformity of standards*

- BS / EN / IEC 61557-12
- EN / IEC 62053-21
- EN / IEC 62053-22
- EN / IEC 62053-23
- EN 50470-3
- EN 50470-1
- METAS
- EN / IEC 62052-11
- BS / EN / IEC 61326-1
- EN / IEC 62052-31:2015
- BS / IEC / EN / UL 61010-1
- ANSI C12.20 / ANSI C12.16
- NMI M 6-1, RCM
- UL, CE and UKCA certified
- CAN/CSA-C22.2
- EAC, KZ

Acti 9 iEM3000 series

Current Input/ Wh Accuracy	iEM3000 series Energy meters							
63 A Direct/ Class 1	iEM3100	iEM3115	iEM3110	iEM3135	iEM3150	iEM3155	iEM3165	iEM3175
1 A or 5 A CT/ Class 0.5S (+1)	iEM3200	iEM3215	iEM3210	iEM3235	iEM3250	iEM3255	iEM3265	iEM3275
125 A Direct/ Class 1	iEM3300		iEM3310	iEM3335	iEM3350	iEM3355	iEM3365	iEM3375
1/3rd or 1 V LVCT/ Class 0.5S						iEM3455		
Rogowski coil/ Class 0.5S						iEM3555		
Communication Protocol								
Modbus					■	■		
M-Bus				■				
BACnet							■	
LonWorks								■
Measurement (Integrated)								
Active energy - Total and Partial energy	■	■	■	■	■	■	■	■
4 Quadrant Active, Reactive energy and Apparent energy				■		■	■	■
MID compliant (Wh) (+2) MID compliant (VARh) (+2)		■	■	■		■	■	■
Demand (per-ph & average current, total power for P Q S) (+3)						■	■	
Peak Demand (per-ph & average current, total power for P Q S) (+3)						■	■	
Measurement (Instantaneous)								
Voltage				■	■	■	■	■
Current				■	■	■	■	■
Power - P Q S				■	■	■	■	■
Power factor				■	■	■	■	■
Frequency				■	■	■	■	■
Multi-Tariff, control by								
Internal clock		4		4		4	4	4
Digital Inputs		4		2		2	2	2
Communication		-		4		4	4	4
Digital inputs								
For Status, Tariff control or Input monitoring				1		1	1	1
Tariff control only		2						
Digital outputs								
Energy pulsing or Overload alarm				1		1	1	
Pulse output only			1					
Internal clock								
Quartz crystal based		■		■		■	■	■
Date/time format (DD-MMM-YYYY/hh:mm)		■		■		■	■	■
Commercial reference								
Commercial References/ordering references	A9MEM3100	A9MEM3115	A9MEM3110	A9MEM3135	A9MEM3150	A9MEM3155	A9MEM3165	A9MEM3175
	A9MEM3200	A9MEM3215	A9MEM3210	A9MEM3235	A9MEM3250	A9MEM3255	A9MEM3265	A9MEM3275
	A9MEM3300		A9MEM3310	A9MEM3335	A9MEM3350	A9MEM3355	A9MEM3365	A9MEM3375
						A9MEM3455		
						A9MEM3555		

(+1) MID certification available for x/5 A and x/1 A.
(+2) MID certification not applicable for iEM34xx and iEM35xx series.
(+3) Demand parameters available in iEM34xx and iEM35xx series only.

PowerLogic™ PowerTag Energy series

PowerTag Energy is a wireless-communication energy sensor.

PowerTag Energy is designed specifically for energy management, load monitoring and power availability applications. Associated to a concentrator or a gateway, PowerTag Energy provides a full wireless class 1 solution to monitor energy at any level of a distribution panel.

Applications

- Monitors your electrical installation from main incomer down to load level
- Suitable for various businesses, buildings, industrial and residential applications with easy integration in upper systems
- Supports and enables Energy Efficiency programs and standards such as:
  - European Energy Efficiency Directive (EED)
  - Energy Performance of Buildings Directive (EPBD)
  - IEC 60364-8-1 “Low Voltage Electrical installations - Energy Efficiency”
  - EN 17267 “Energy Measurement and Monitoring plan”
  - ISO 50001 “Energy Management System”



PowerTag Energy
Monoconnect 250 A (M250)

Scan to view the PowerTag Energy webpage



PowerTag Energy Flex
160 A (F160)



PowerTag Energy
Flex 160 A (F160)



PowerTag Energy
Rope 2000 A (R2000)

Basic energy metering

The solution for:

Markets that benefit from a solution that includes PowerLogic™ PowerTag Energy series:

- Residential
- Small business
- Medium and large buildings
- Industrial sites

Benefits

PowerTag Energy sensor incorporates all features required to perform accurate real-time measurements (U, V, I, P, PF) and energy values up to 2000 A.

Different designs of PowerTag Energy are available to ensure it fits the protective device on which it ismounted.

- PowerTag Energy Monoconnect (M): can be mounted directly on the device, no additional wiring is required
- PowerTag Energy PhaseNeutral (P): for DIN offers with 9 mm pitch between phase and neutral
- PowerTag Energy Rope (R) thanks to its openable current sensors can be easily installed on busbars or wires in new installations and in retrofit applications
- PowerTag Energy sensor is acting as an autonomous meter. Energy counters are stored inside PowerTag Energy sensor.

Energy management system

To get the most effective use from your Schneider Electric measurement and metering devices, we offer a range of dedicated gateways concentrators depending on your application.

Advantages

- Wireless-communication
- Range up to 2000 A
- Voltage loss alarming
- Class 1 accuracy
- Compact design
- Easy installation and commissioning
- Scalable solution
- Perfect for retrofit or new panels

Conformity of standards

- IEC 61557-12
- IEC 61010-1
- IEC 61010-2-030
- IEC 61326-1 (Industrial Environment)
- IEC 62311
- ETSI EN 300 328
- ETSI EN 301 487-1
- ETSI EN 301 489-17 (Radiated EMC)

Feature selection






	A9MEM15••	A9MEM15••	A9MEM1580	LV434020/LV434021
Product name	M63	P63	F160	M250
Max current (I Max) A	63	63	160	250
Starting current (Ist)	40 mA	40 mA	100 mA	160 mA
Design	Monoconnect	PhaseNeutral	Flex	Monoconnect
Mounting type	On device	On device	On wires	On device
Current sensors type	Solid core	Solid core	Solid core	Solid core
Poles	1P + W / 1P+N / 3P / 3P+N	1P+N / 3P+N	3P / 3P+N	3P / 3P+N
Self-powered	■	■	■	■
Voltage (L-N)	Depends on ref	200 - 240 V AC	100 - 277 V AC	230 V AC
Measurements*				
Nb quadrant	2	2	4	4
Active Energy	Class 1	Class 1	Class 1	Class 1
Reactive Energy			■	■
Apparent Energy			■	
Active Power	■	■	■	■
Reactive Power			■	■
Apparent Power	■	■	■	■
Power Factor	■	■	■	■
Frequency			■	■
Current and Voltage	■	■	■	■
* Data availability depending on the concentrator / gateway				







	LV434022/LV434023	A9MEM1590	A9MEM1591	A9MEM1592	A9MEM1593
Product name	M630	R200	R600	R1000	R2000
Max current (I Max) A	630	200	600	1000	2000
Starting current (Ist)	400 mA	120 mA	400 mA	600 mA	1.2 A
Design	Monoconnect	Rope	Rope	Rope	Rope
Mounting type	On device	On wires	On wires	On wires	On wires
Current sensors type	Solid core	Split core	Split core	Split core	Split core
Poles	3P / 3P+N	3P / 3P+N	3P / 3P+N	3P / 3P+N	3P / 3P+N
Self-powered	■	■	■	■	■
Voltage (L-N)	230 V AC	100 - 277 V AC	100 - 277 V AC	100 - 277 V AC	100 - 277 V AC
Measurements*					
Nb quadrant	4	4	4	4	4
Active Energy	Class 1	Class 1	Class 1	Class 1	Class 1
Reactive Energy	■	■	■	■	■
Apparent Energy		■	■	■	■
Active Power	■	■	■	■	■
Reactive Power	■	■	■	■	■
Apparent Power	■	■	■	■	■
Power Factor	■	■	■	■	■
Frequency	■	■	■	■	■
Current and Voltage	■	■	■	■	■
* Data availability depending on the concentrator / gateway					

PowerLogic™ PowerTag Energy 63 A

IEC 61557-12 PMD-I/DD/K55/1

As per the above standard:

With its compact design and innovative concept, PowerTag Energy 63 A fits directly on the protective device and as a result has no impact on DIN rail occupancy and switchboard size. It is therefore well adapted to be mounted from head of group down to final circuits. Since voltage and current are measured directly at the same point on the circuit to be monitored, it provides accurate measurement and relevant information such as voltage loss. PowerTag Energy is compatible with SE product ranges as per the selection guide CA908058.

Main characteristics

PowerTag Energy measures the following values in accordance with the IEC 61557-12 standard PMD-I/DD/K55/1:

- Energy:
  - Active energy (kWh): total and partial, delivered and received.
- Real-time measurement values:
  - Voltages (V): phase-to-phase and phase-to-neutral.
  - Currents (A): per phase.
  - Power:
    - Active power (W): total and per phase.
    - Apparent power (VA): total.
    - Power factor.
- Voltage loss alarms:
  - PowerTag Energy sends a “voltage loss” alarm and the current-per-phase value before being de-energised.
  - At “voltage loss”, PowerTag Energy adds an overload alarm if the current is higher than the rated current of the associated protective device.

Note: Functions listed above depends on Concentrator/Gateway.





PowerTag Energy
Monoconnect 63 A (M63)

PowerLogic™ PowerTag Energy 63 A



A9MEM1520



A9MEM1521



A9MEM1540



A9MEM1522



A9MEM1541



A9MEM1542

PowerTag Energy Monoconnect 63 A Commercial reference numbers

PowerTag Energy for Acti9 and Multi9 Monoconnect offers: «Single-terminal» circuit breakers, RCDs and switches with 18 mm pitch between phase and neutral, rating less than or equal to 63 A.

Commercial reference number	Type	Mounting	Description
A9MEM1520	1P+wire	Top or bottom	PowerTag Energy M63 1PW
A9MEM1521	1P+N	Top	PowerTag Energy M63 1PN T
A9MEM1522		Bottom	PowerTag Energy M63 1PN B
A9MEM1540	3P	Top or bottom	PowerTag Energy M63 3P
A9MEM1541	3P+N	Top	PowerTag Energy M63 3PN T
A9MEM1542		Bottom	PowerTag Energy M63 3PN B



A9MEM1563

PowerTag Energy PhaseNeutral 63 A Commercial reference numbers

PowerTag Energy for Acti9 and Multi9 PhaseNeutral offers: «Single-terminal» circuit breakers, RCDs and switches at pitch of 9 mm between phase and neutral, rating less than or equal to 63 A.

Commercial reference number	Type	Mounting	Description
A9MEM1563	1P+N RCBO	Bottom	PowerTag Energy P63 1PN B RCBO 18mm

PowerLogic™ PowerTag Energy Flex 160 A

IEC 61557-12 PMD-II/DD/K70/1

As per the above standard:

With its flex design this PowerTag Energy can be used on many products or group of loads up to 160 A on 3P or 3P+N networks. Its removable spring connector for voltage picking facilitates its installation, and shapes for brackets allows to mount and maintain it where needed in a panel.

Main characteristics

PowerTag Energy Flex 160 A measures the following values in accordance with the IEC 61557-12 standard PMD-II/DD/K70/1:

- Energy (4 quadrants):
  - Active energy (kWh): total and partial, delivered and received.
  - Active energy per phase (kWh): total and partial, delivered and received.
  - Reactive energy (kVARh): total and partial, delivered and received.
  - Reactive energy per phase (kVARh): total and partial, delivered and received.
  - Apparent energy (kVAh): total and partial.
  - Apparent energy per phase (kVAh): total and partial.
- Real-time measurement values:
  - Voltages (V): phase-to-phase (U12, U23, U31) and phase-to-neutral (V1N, V2N, V3N).
  - Currents (A): per phase (I1, I2, I3), calculated neutral current when connected (IN) .
  - Power:
    - Active power (W): total and per phase.
    - Reactive power (VAR): total and per phase.
  - Apparent power (VA): total and per phase.
  - Frequency (Hz)
- Voltage loss alarms:
  - PowerTag Energy sends a “voltage loss” alarm and the current-per-phase value before being de-energised.
  - At “voltage loss”, PowerTag Energy adds an overload alarm if the current is higher than the rated current of the associated protective device.

Note: Functions listed above depends on Concentrator/Gateway.



PowerTag Energy Flex 160 A

PowerLogic™ PowerTag Energy Monoconnect 250 A & 630 A

IEC 61557-12 PMD-II/DD/K70/1

As per the above standard:

PowerTag Energy M250/M630 is designed for Molded Case Circuit Breakers and Switches (ComPact, EasyPact CVS and TeSys) for 3P and 3P+N electrical networks. This PowerTag Energy is mounted directly on the bottom side of the circuit breaker or the Vigi add-on if any. Thanks to its integrated design, it does not require any specific wiring, and is compatible with the same connection accessories than the device it is mounted on.

Main characteristics

PowerTag Energy M250/M630 measures the following values in accordance with the IEC 61557-12 standard PMD-II/DD/K70/1:

- Energy (4 quadrants):
  - Active energy (kWh): total and partial, delivered and received
  - Active energy per phase (kWh): total
  - Reactive energy (kVARh): partial, delivered and received
- Real-time measurement values:
  - Voltages (V): phase-to-phase (U12, U23, U31) and phase-to-neutral (V1N, V2N, V3N).
  - Currents (A): per phase (I1, I2, I3).
  - Power:
    - Active power (W): total and per phase
    - Reactive power (VAR): total
    - Apparent power (VA): totalApparent power (VA): total and per phase
  - Frequency (Hz)
  - Power factor
- Voltage loss alarms:
  - PowerTag Energy sends a “voltage loss” alarm and the current-per-phase value before being de-energised.
  - At “voltage loss”, PowerTag Energy adds an overload alarm if the current is higher than the rated current of the associated protective device.



PowerTag Energy Monoconnect 250 A

PowerLogic™ PowerTag Energy Monoconnect 250 A & 630 A



LV434020



LV434021



LV434022



LV434023



PowerTag Energy Monoconnect 250 A & 630 A Commercial reference numbers

Commercial reference number	Type	Description	Connection adapter for mounting on plug-in base only
LV434020	M250 3P	PowerTag Energy 250 A 3P	LV429306
LV434021	M250 3P+N	PowerTag Energy 250 A 3P+N	LV429307
LV434022 (1)	M630 3P	PowerTag Energy 630 A 3P	LV432584
LV434023 (1)	M630 3P+N	PowerTag Energy 630 A 3P+N	LV432585

(1) For plug-in devices only: when plate mounted, need to add an intercalary wedging plate under the PowerTag Energy module with following dimensions:

Contact your Schneider Electric representative for complete ordering information.

PowerLogic™ PowerTag Energy Rope 200 A to 2000 A

IEC 61557-12 PMD-II/DD/K70/1

As per the above standard:

With its flexible and openable current sensors, this PowerTag Energy Rope can be installed easily on busbars and cables without having to disconnect the conductors, and is suitable for 3P or 3P+N networks. Its removable spring connector for voltage picking facilitates its installation, and the module can be mounted on a DIN rail or maintained with brackets where needed in a panel.

Main characteristics

PowerTag Energy Flex 160 A measures the following values in accordance with the IEC 61557-12 standard PMD-II/DD/K70/1:

- Energy (4 quadrants):
  - Active energy (kWh): total and partial, delivered and received.
  - Active energy per phase (kWh): total and partial, delivered and received.
  - Reactive energy (kVARh): total and partial, delivered and received.
  - Reactive energy per phase (kVARh): total and partial, delivered and received.
  - Apparent energy (kVAh): total and partial.
  - Apparent energy per phase (kVAh): total and partial.
- Real-time measurement values:
  - Voltages (V): phase-to-phase (U12, U23, U31) and phase-to-neutral (V1N, V2N, V3N).
  - Currents (A): per phase (I1, I2, I3), calculated neutral current when connected (IN) .
  - Power:
    - Active power (W): total and per phase.
    - Reactive power (VAR): total and per phase.
  - Apparent power (VA): total and per phase.
  - Frequency (Hz)
- Voltage loss alarms:
  - PowerTag Energy sends a “voltage loss” alarm and the current-per-phase value before being de-energised.
  - At “voltage loss”, PowerTag Energy adds an overload alarm if the current is higher than the rated current of the associated protective device.

Note: Functions listed above depends on Concentrator/Gateway.

PowerLogic™ PowerTag Energy Rope 200 A to 2000 A



A9MEM159

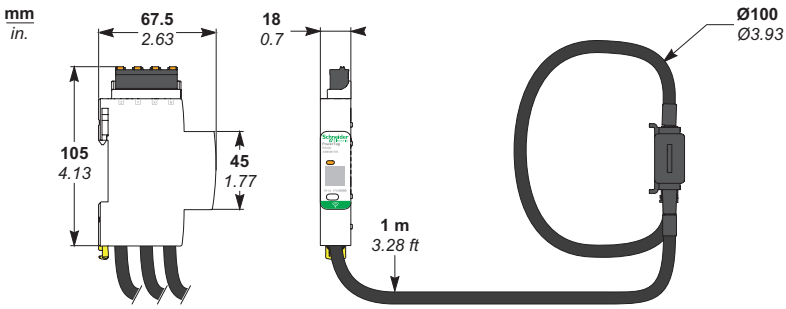
PowerTag Energy Rope 200 A to 2000 A Commercial reference numbers

Commercial reference number	Type	Description
A9MEM1590	R200 3P/3P+N	PowerTag Energy Rope 200 A 3P / 3P+N
A9MEM1591	R600 3P/3P+N	PowerTag Energy Rope 600 A 3P / 3P+N
A9MEM1592	R1000 3P/3P+N	PowerTag Energy Rope 1000 A 3P / 3P+N
A9MEM1593	R2000 3P/3P+N	PowerTag Energy Rope 2000 A 3P / 3P+N

Check the Concentrators /Gateways compatibility and the list of Schneider Electric compatible devices with the Selection Guide pages 87 to 97.

Contact your Schneider Electric representative for complete ordering information.

PowerTag Energy Rope 200 A to 2000 A dimensions



PowerTag Energy Rope 200 A to 2000 A weight

Type	Weight (g)
R200 3P/3P+N R600 3P/3P+N R1000 3P/3P+N R2000 3P/3P+N	360

Please refer to PowerTag Energy Rope 200 A to 2000 A Installation Sheet for accurate and complete information on the installation of this product.

PowerLogic™ PM5000 series

The PowerLogic™ PM5000 series power meters are the new benchmark in affordable, precision metering.

The value you want, the precision you need. Compact, affordable power meters with high-end cost capabilities and basic mobile energy management.

Applications:

Capable of essential cost management:

- Sub-billing/tenant metering (+1)
- Equipment sub-billing
- Energy cost allocation

Also ideal for electrical network management:

- Track real-time power conditions
- Monitor control functions
- Provide basic power quality values
- Detect and capture voltage sag and swell events
- Monitor residual current
- Analyse equipment and network status
- BACnet/IP, EtherNet/IP, and DNP3.0 protocol support



The solution for

Markets that can benefit from a solution that includes PowerLogic™ PM5000 series meters:

- Buildings
- Industry
- Healthcare
- Data Center and networks
- Infrastructure

Benefits

- System integrators' benefit
- Ease of integration
- Ease of setup
- Cost effectiveness

Panel builders' benefit

- Ease of installation
- Cost effectiveness
- Aesthetically pleasing
- Simplified ordering
- Low Voltage DC control power option
- Analog inputs options

End users' benefit

- Ease of use
- Precision metering & sub-billing (+2)
- Billing flexibility
- Comprehensive, consistent and superior performance
- Maximise uptime, eliminate faults, and enhance safety
- Cybersecurity features

Competitive advantages

- Easy to install and operate
- Easy for circuit breaker monitoring and control
- WAGES monitoring
- Data logging up to 16 parameters
- Power quality analysis up to 63rd harmonics
- Load management combined with alarm and timestamping
- High performance and accuracy
- Residual Current Monitoring (RCM) in PM56xx(+4) and PM57xx(+4)
- Voltage sag and swell detection with waveform capture
- MID ready compliance for legal billing application
- Onboard BACnet/IP, EtherNet/IP, and DNP3.0 protocol support
- PM5310R (+3) and PM5320R (+3) are enabled to connect with LVCT for faster installations

Power management solutions

Schneider Electric provides innovative power management solutions to increase your energy efficiency and cost savings, maximize electrical network reliability and availability, and optimize electrical asset performance.

Conformity of standards

- BS/EN/IEC 61557-12:2018/AMD1:2021
- BS/EN/IEC 62052-11:2020 edition 2
- IEC 62052-31:2015
- BS/EN/IEC 62053-22:2020 edition 2
- BS/EN/IEC 62053-23:2020 edition 2
- IEEE 802.3
- EN 50470-1:2006
- EN 50470- 3:2006
- CE and UKCA as per IEC/BS 61010-1 edition 3
- cULus as per UL 61010-1 edition 3
- BS/EN/IEC 61010-2-30:2017
- BS/EN/IEC 61326-1: edition 3
- FCC part 15 Class B
- EN 55022 Class B
- BACnet/IP - BTL listed (B-ASC)
- EtherNet/IP - ODVA certified
- ANSI C12.1-2008 (PM55xx)
- ANSI C12.20 Class 0.2 & 0.5
- Align with cyber security guidelines as per IEC 62443
- Type A as per IEC 62020 for RCM

Meets IEC 61557-12 PMD/[SD|SS]/K70/0.5 for PM5100 and PM5300
Meets IEC 61557-12 PMD/[SD|SS]/K70/0.2 for PM5500, PM5600, PM5700

- Legal billing compliance
  - MID compliance is compulsory for billing applications across Europe
  - In addition to billing applications, for facility managers responsible for energy cost
  - MID means same level of quality as a billing meter

MID Certified according to MID Directive, Annex "B" + Annex "D" for legal metrology relevant to active electrical energy meters (see Annex MI-003 of MID). Can be used for fiscal (legal) metrology.

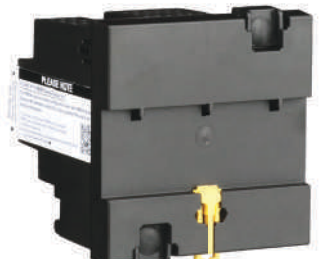
MID ready compliance, EN 50470-1/3 – Class C

(+2) Subjected to local regulations.
(+3) PM5310R and PM5320R must be used with Schneider Electric's "Quick Click" 3-in-1 LVCTs.
(+4) PM5660, PM5661, PM5760, PM5761 must be used with Toroids.

PM5000 series

PowerLogic™ PM5100, PM5300 and PM5500 series

The PowerLogic™ PM5000 power meter is the ideal fit for cost management applications. Designed for use in both energy management systems and building management systems, it provides the measurement capabilities needed to allocate energy usage, perform tenant metering and sub-billing, pin-point energy savings, optimise equipment efficiency and utilisation, and perform a high level assessment of the power quality of the electrical network.



PowerLogic™ PM5563 meter

In a single 96 x 96 mm unit, with a graphical display, (plus optional remote display) all three phases, neutral and ground can be monitored simultaneously. The bright, anti-glare display features large characters and powerful backlighting for easy reading even in extreme lighting conditions and viewing angles. Easy to understand menus, text in 8 selectable languages, icons and graphics create a friendly environment to learn about your electrical network. Ethernet gateway and enhanced cyber security. These are highly accurate devices with global billing certifications.

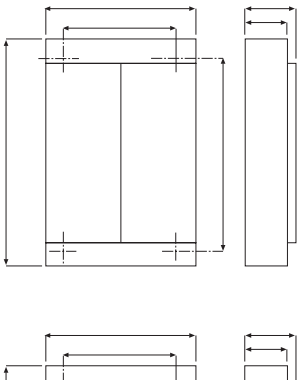
Applications

- Cost management: Cost saving opportunities become clear once you understand how and when your facility uses electricity. The PowerLogic™ PM5000 series meters are ideal for:
    - Sub-billing / tenant metering: Allows a landlord, property management firm, condominium association, homeowners association, or other multi-tenant property to bill tenants for individual measured utility (electricity) usage depending on the local regulations. MID approved meters for billing applications across Europe.
    - Cost allocation: Allocate energy costs between different departments (HVAC, indoor and outdoor lighting, refrigeration, etc.), different parts of an industrial process or different cost centres. Cost allocation systems can help you save money by making changes to your operation, better maintaining your equipment, taking advantage of pricing fluctuations, and managing your demand.
- Network management: Improving reliability of the electrical network is key for success in any business. Monitoring values such as voltage levels, harmonics distortions, voltage unbalance, residual current, voltage sag and swell will help you to ensure proper operation and maintenance of your electrical network and equipment. PowerLogic™ PM5000 series meters are the perfect tool for:
    - Basic Power Quality monitoring: Power quality phenomena can cause undesirable effects such as heating in transformers, capacitors, motors, generators and misoperation of electronic equipment and protection devices.
    - Min/ Max monitoring (with timestamp): Understanding when electrical parameters, such as voltage, current and power demand, reach maximum and minimum values will give you the insight to correctly maintain your electrical network and assure equipment will not be damaged.



PowerLogic™ PM5563 remote display front ISO

- Alarming: alarms help you to be aware of any abnormal behaviour on the electrical network in the moment it happens.
- WAGES monitoring: take advantage of the input metering on PM5000 meters to integrate measurements from third party devices such as water, air, gas, electricity or steam meters.
- Residual current monitoring: measures leakage current flowing in TN & TT network system.
- Voltage sags and swells: measures and captures wave form in the event of voltage sags and swells in the network.



PowerLogic™ PM5563 remotedisplay rear ISO

Main characteristics

- Easy to install
  - Mounts using two clips, in standard cut out for DIN 96 x 96 mm, no tools required. Compact meter with 72 mm (77 mm for PM5500) depth connectable up to 690 V L-L without voltage transformers for installations compliant with category III. Optional remote display (PM5563). Ethernet gateway functionality via RS-485 port.

- Easy to operate
  - Intuitive navigation with self-guided, language selectable menus, six lines, four concurrent values. Two LEDs on the meter face help the user confirm normal operation with a green LED - heartbeat/communications indicator, and the amber LED - customisable either for alarms or energy pulse outputs. Onboard web pages (PM5500) show real-time and logged information, and verify communications.
- Easy circuit breaker monitoring and control
  - The PM5300 provides two relay outputs (high performance Form A type) with capability to command most of the circuit breaker coils directly. For Digital Inputs, monitored switches can be wired directly to the meter without external power supply by using whetting output voltage.
  - PM5500 series have 4 status inputs (digital) and 2 digital output (solid state) to use for WAGES monitoring, control and alarm annunciation.

Accurate energy measurement for precise cost allocation:

	PM5100	PM5300	PM5500	PM5600	PM5700
IEC 62053-22 (Active Energy)	Class 0.5S	Class 0.5S	Class 0.2S	Class 0.2S	Class 0.2S
IEC 62053-23 (Reactive Energy)	Class 1.0	Class 1.0	Class 1.0	Class 1.0	Class 1.0

PM5000 series

Comm. ref numbers	Description
METSEPM5100	Power Meter, 600V AC L-L/ 5A or 1A input, 415V AC L-L or 250V DC control power, Cl 0.5S, 15th harmonic, 1DO
METSEPM5110	Power Meter, 600V AC L-L/ 5A or 1A input, 415V AC L-L or 250V DC control power, Cl 0.5S, 15th harmonic, 1DO, RS-485
METSEPM5111	Power Meter, 600V AC L-L/ 5A or 1A input, 415V AC L-L or 250V DC control power, Cl 0.5S, 15th harmonic, 1DO, RS-485, MID
METSEPM5310	Power Meter, 600V AC L-L/ 5A or 1A input, 415V AC L-L or 250V DC control power, Cl 0.5S, 31st harmonic, 256 kB, 2DI/2DO, RS-485
METSEPM5310R	Power Meter, 600V AC L-L/ RJ45 LVCT input, 415V AC L-L or 250V DC control power, Cl 0.5S, 31st harmonic, 256 kB, 2DI/2DO, RS-485
METSEPM5320	Power Meter, 600V AC L-L/ 5A or 1A input, 415V AC L-L or 250V DC control power, Cl 0.5S, 31st harmonic, 256 kB, 2DI/2DO, Ethernet
METSEPM5320R	Power Meter, 600V AC L-L/ RJ45 LVCT input, 415V AC L-L or 250V DC control power, Cl 0.5S, 31st harmonic, 256 kB, 2DI/2DO, Ethernet
METSEPM5330	Power Meter, 600V AC L-L/ 5A or 1A input, 415V AC L-L or 250V DC control power, Cl 0.5S, 31st harmonic, 256 kB, 2DI/2DO/2-Relay, RS-485
METSEPM5331	Power Meter, 600V AC L-L/ 5A or 1A input, 415V AC L-L or 250V DC control power, Cl 0.5S, 31st harmonic, 256 kB, 2DI/2DO/2-Relay, RS-485, MID
METSEPM5340	Power Meter, 600V AC L-L/ 5A or 1A input, 415V AC L-L or 250V DC control power, Cl 0.5S, 31st harmonic, 256 kB, 2DI/2DO/2-Relay, Ethernet
METSEPM5341	Power Meter, 600V AC L-L/ 5A or 1A input, 415V AC L-L or 250V DC control power, Cl 0.5S, 31st harmonic, 256 kB, 2DI/2DO/2-Relay, Ethernet, MID
METSEPM5560	Power Meter, 690V AC L-L/ 5A or 1A input, 480V AC L-L or 250V DC control power, Cl 0.2S, 63rd harmonic, 1.1 MB, 4DI/2-DO, RS-485, Ethernet
METSEPM5561	Power Meter, 690V AC L-L/ 5A or 1A input, 480V AC L-L or 250V DC control power, Cl 0.2S, 63rd harmonic, 1.1 MB, 4DI/2-DO, RS-485, Ethernet, MID
METSEPM5563	Power Meter, 690V AC L-L/ 5A or 1A input, 480V AC L-L or 250V DC control power, Cl 0.2S, 63rd harmonic, 1.1 MB, 4DI/2-DO, RS-485, Ethernet, DIN mount, No display
METSEPM5563RD	Power Meter, 690V AC L-L/ 5A or 1A input, 480V AC L-L or 250V DC control power, Cl 0.2S, 63rd harmonic, 1.1 MB, 4DI/2-DO, RS-485, Ethernet, DIN mount, Remote display
METSEPM5570	Power Meter, 690V AC L-L/ 5A or 1A input, 480V AC L-L or 250V DC control power, Cl 0.2S, 63rd harmonic, 1.1 MB, 2DI/2AI/2-DO, RS-485, Ethernet
METSEPM5580	Power Meter, 690V AC L-L/ 5A or 1A input, 24 to 64V DC control power, Cl 0.2S, 63rd harmonic, 1.1 MB, 4DI/2-DO, RS-485, Ethernet
METSEPM5650	Power Meter, 690V AC L-L/ 5A or 1A input, 480V AC L-L or 250V DC control power, Cl 0.2S, 63rd harmonic, 1.1 MB, 4DI/2-DO, RS-485, Ethernet, Wave Form Capture and Sag/swell
METSEPM5660	Power Meter, 690V AC L-L/ 5A or 1A input, 480V AC L-L or 250V DC control power, Cl 0.2S, 63rd harmonic, 1.1 MB, 2DI/2-DO, RS-485, Ethernet, Residual Current Monitor
METSEPM5760	Power Meter, 690V AC L-L/ 5A or 1A input, 480V AC L-L or 250V DC control power, Cl 0.2S, 63rd harmonic, 1.1 MB, 2DI/2-DO, RS-485, Ethernet, Wave Form Capture and Sag/swell, Residual current monitor

PowerLogic™ PM5350 series

The PowerLogic™ PM5350 series power meters are the new benchmark in affordable, precision metering.

The PowerLogic™ PM5350, PM5350IB, PM5350PB, and PM5350P power meters offer all the measurement capabilities required to monitor an electrical installation in a space-efficient, single 96 x 96 mm unit with small depth. DNC certifies for marine applications.

Applications:

- Panel instrumentation
- Cost allocation or energy management
- Electrical installation remote monitoring
- Sophisticated alarming
- Circuit beaker monitoring and control



The solution for

Markets that can benefit from a solution that includes PowerLogic™ PM5350 series meters:

- Buildings
- Industry
- Healthcare
- Data Centre and networks
- Infrastructure

Benefits

- System integrators' benefit
- Ease of integration
- Ease of setup
- Cost effectiveness

Panel builders' benefit

- Ease of installation
- Cost effectiveness
- Aesthetically pleasing
- Simplified ordering

End users' benefit

- Ease of use
- Precision metering and sub-billing
- Billing flexibility
- Comprehensive, consistent and superior performance

Competitive advantages

- Easy to install and operate
- Easy for circuit breaker monitoring and control
- Power quality analysis
- Load management combined with alarm and timestamping
- High performance and accuracy
- Multi-tariff capabilities
- Individual harmonics up to 31st

Power management solutions

Schneider Electric provides innovative power management solutions to increase your energy efficiency and cost savings, maximize electrical network reliability and availability, and optimize electrical asset performance.

Conformity of standards

- IEC 62053-22
- IEC 61557-12
- IEC 62053-23
- IEC/UL 61010-1
- IEC 61326-1
- UL 61010-1
- IEC 61000-3-3
- FCC part 15 Class A
- DNV GL certified

PM5350 series

The PowerLogic™ PM5350 series power meters offer electrical installation measurement capabilities in a single 96 x 96 mm unit. Three-phases and neutral can be monitored simultaneously using a bright, anti-glare display with large characters and backlighting. Menus are intuitive and the meter supports English, Chinese, Hebrew, and Spanish languages. Its compact size and high performance make the PowerLogic™ PM5350 series suitable for many applications.

Commercial reference number	Description
METSEPM5350	RS-485 Modbus, THD, 4DI, 2Relay

Applications

- Panel instrumentation.
- Cost allocation or energy management.
- Electrical installation remote monitoring.
- Alarming with under/over, digital status, control power interruption, meter reset, self diagnostic issue.
- Circuit Breaker monitoring and control with relay outputs and whetted digital inputs.

Main characteristics

- Easy to install
  - Mounts using two clips, no tools required. Ultra compact meter with 44 mm depth connectable up to 480 V L-L without voltage transformers for installations compliant with category III, as per IEC 61010-1. See specification table for UL voltage limits.
- Easy to operate
  - Intuitive navigation with self-guided, language selectable menus, six lines, four concurrent values. Two LEDs help confirm normal operation.
- Easy circuit breaker monitoring and control
  - Two relay outputs (high performance) to command most circuit breaker coils directly. Monitored switches can be wired directly without external power supply.
- System status at a glance
  - Bright, anti-glare, backlit display plus two LEDs; orange for energy pulse or alarm and green for heartbeat/communications indication.
  - IEC 62053-22 class 0.5S accuracy for active energy
  - Accurate energy measurement for cost allocation.
- Load management
  - Peak demands with Timestamping are provided. Predicted demand values can be used in basic load shedding applications.
    Alarming with timestamping
  - Over 30 alarm conditions, such as under/over conditions, digital input changes, and phase unbalance inform you of events. A time-stamped log maintains a record of the last 40 alarm events.
  - Load timer setpoint adjustable to monitor and advise maintenance requirements.
  - Performance Standard Meets IEC 61557-12 PMD/Sx/K70/0.5.

EcoStruxure™ Panel Server
IoT for an intelligent power network

The EcoStruxure™ Panel Server is the next generation of gateway, providing a seamless connection of wired or unwired smart IoT devices to your edge control software or cloud-based applications and analytics. It is a foundational enabler for Schneider Electric EcoStruxure™ solutions.

Electrical safety
Panel Server is an integral part of Schneider Electric's continuous thermal monitoring application, helping reduce risk of electrical fires, increase people and assets protection. Implement the thermal monitoring of your electrical panel by connecting thermal and heat sensors to your Panel Server.

Power availability
Electrical distribution monitoring and power event analysis help avoid unplanned downtime caused by electrical failure. Panel Server collects real-time data and alarms, presenting information through embedded webpages, making it available to edge control software or cloud-based applications and analytics for electrical system diagnostics. Use embedded webpages for first-level monitoring or monitor from your edge control system.

Optimise energy efficiency
Improve your facility's energy efficiency and reduce energy consumption with energy usage analysis and performance tracking. Panel Server collects and shares energy data to help achieve your energy conservation initiatives. It is part of an energy data management system certified for compliance with ISO 50001, 50002, 50006 requirements.

Cybersecurity Guarding your electrical assets and systems against cyber attacks is vital. Panel Server is an IEC 62443 compliant device and is central to the IEC 62443-3-3 SL1 certified EcoStruxure™ Power system. Use Cybersecurity Admin Expert to manage user accounts, define your cybersecurity policy and retrieve security logs.





EcoStruxure Panel Server gives you access to the information you need to protect, maximise and optimise your power system.

- Help keep people and assets safer
- Maximise power availability
- Optimise energy efficiency
- Improve cybersecurity

All-in-one gateway

- Separates your OT network from your IT network
- Wireless data concentrator
- Modbus RS485 to Modbus TCP/IP
- Supports multiple Ethernet connections for serving information to edge control software and cloud applications

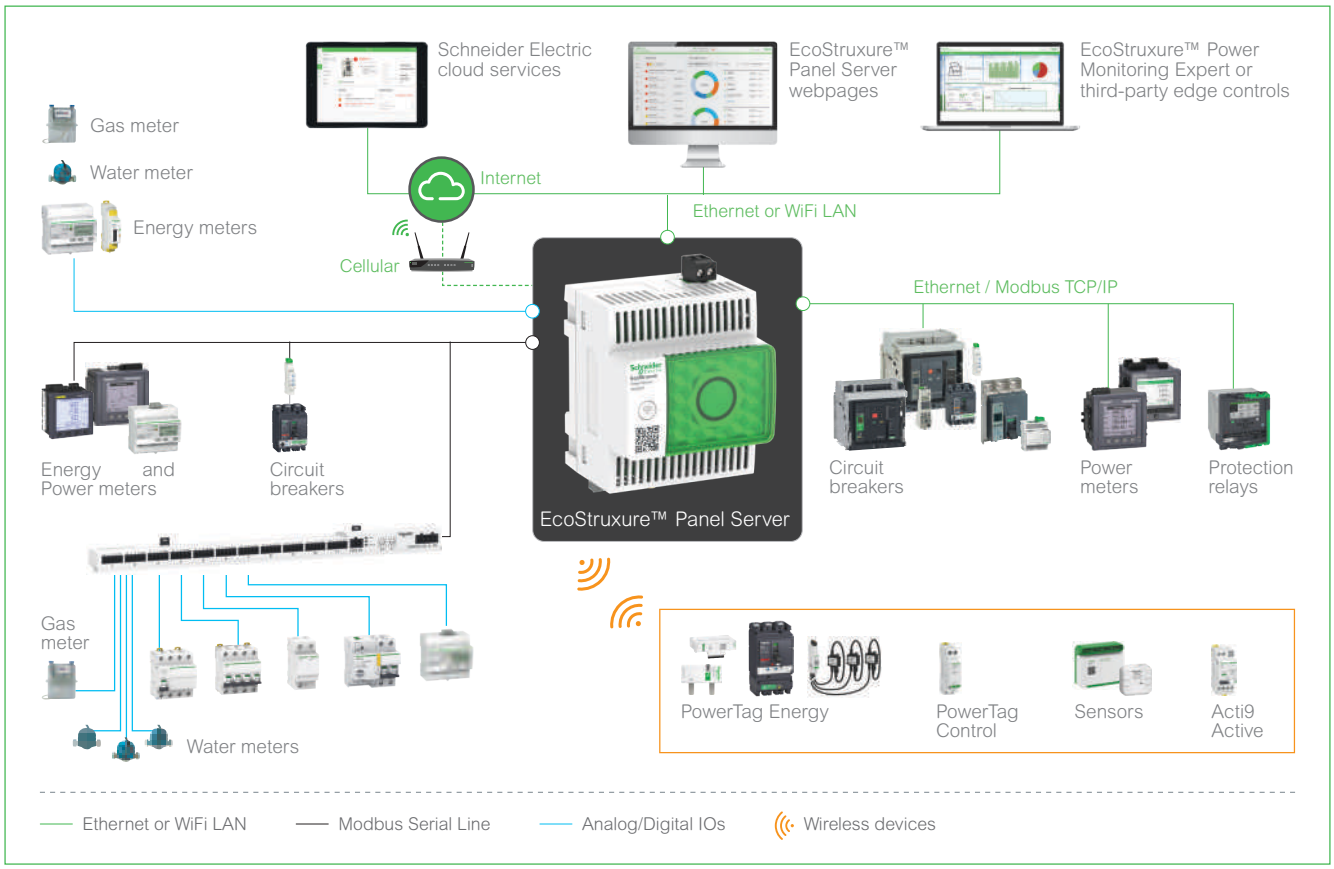
Intuitive operation

- User-friendly webpages offer first-level monitoring
- Contextualised data and operational insights
- Simple alarm setup for email notification
- Standardised IEC 62974-1 compliant datalogger and energy server

Simple commissioning

- EcoStruxure™ Power Commission software
- Device auto discovery
- Generation of acceptance reports to validate gateway configuration
- Commission via WiFi

Architecture overview



Panel Server Entry*

Functions

- Optimised gateway to retrieve data from your wireless devices.
- Connect to your monitoring and control software such as EcoStruxure™ Power Monitoring Expert, EcoStruxure™ Power Operation or to your Building Management System.
- Connect to Schneider Electric cloud applications such as EcoStruxure™ Energy Hub or Asset Advisor.
- Ease of commissioning with EcoStruxure™ Power Commission software, enabling device plug-and-play and auto-discovery features.
- Ease of operation with user friendly embedded webpages and data contextualisation for more relevant analytics.

Main features

- Power Supply 110 to 277 V AC/DC
- Designed to match with electrical switchboard environment (temperature, humidity electromagnetic compatibility)
- One Ethernet 10Base-T/100Base-T port
- Wi-Fi
- IEEE 802.15.4 wireless communication
- Modbus TCP/IP server
- Support of HTTPS, NTP, SNTP, DHCP client with proxy management
- Wireless devices concentrator to Modbus TCP/IP
- Designed through a Secured Development Life Cycle in accordance to IEC 62443-4-1
- Commissioning through EcoStruxure™ Power Commission or through Embedded Web-Pages
- Speed-up commissioning through device list import and configuration export to the monitoring software
- Fully integrated in Cybersecurity Admin Expert tool to facilitate the management of cybersecurity in your electrical network's (User Management with Role Base Access and other security features such as enabling/disabling communication means).
- Embedded web server for real-time measurement visualisation, power consumption by usage
- Customisable alarm with alarm log
- Alarms can be viewed in the web-pages and notified by e-mail



Panel Server Entry

Standards & certifications

- IEC 61010-1 Ed.2010
- UL 61010-1 Ed.2012
- IEC 61974
- IEC 62443

Comm. Reference	Description
PAS400	Panel Server Entry 110-277 V AC/DC

Panel Server Universal

Functions

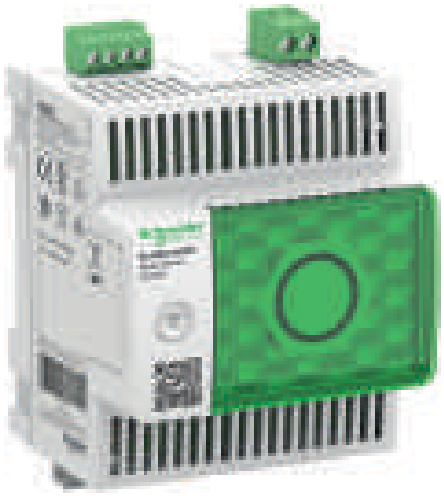
- An all-in-one gateway to retrieve data from both your IEEE 802.15.4 and Modbus devices.
- Connect to your monitoring and control software such as
- EcoStruxure™ Power Monitoring Expert, EcoStruxure™ Power Operation or to your Building Management System.
- Connect to Schneider Electric cloud applications such as EcoStruxure™ Energy Hub or Asset Advisor.
- Ease of commissioning with EcoStruxure™ Power Commission software, enabling device plug-and-play and auto-discovery features.
- Ease of operation with user friendly embedded webpages, and data contextualisation for more relevant analytics.

Main features

- Alarms can be viewed in the web-pages and notified by e-mail
- Power Supply 24 V DC, 110 to 240 V AC/DC, 110 to 277 V AC/DC
- Designed to match demanding electrical switchboard environment (temperature, humidity electromagnetic compatibility)
- Two Ethernet 10Base-T/100Base-T port (supporting switched or separated network topology)
- Wi-Fi
- Modbus RS485 serial communication
- IEEE 802.15.4 wireless communication
- Modbus TCP/IP server and client
- Support of HTTPS, NTP, SNTP, DHCP client and server with proxy management
- Modbus RS485 to Modbus TCP/IP Gateway
- Wireless devices concentrator to Modbus TCP/IP
- Two digital inputs (24VDC version only) for contact information or WAGES pulse meter
- Designed through a Secured Development Life Cycle in accordance to IEC 62443-4-1
- Commissioning through EcoStruxure™ Power Commission or through Embedded Web-Pages
- Speed-up commissioning through device list import and configuration export to the monitoring software
- Fully integrated in Cybersecurity Admin Expert tool to facilitate the management of cybersecurity in your electrical network's (User Management with Role Base Access and other security features such as enabling/disabling communication means)
- Embedded web server for real-time measurement visualisation, power consumption by usage
- Customisable alarm with alarm log
- Alarms can be viewed in the web-pages and notified by e-mail

Compatible accessories

- Wi-Fi external antenna (PASA-ANT1)



Panel Server Universal

Standards & certifications

- IEC 61010-1 Ed.2010
- UL 61010-1 Ed.2012
- IEC 61974
- IEC 62443

Panel Server Universal

Comm. Reference	Description
PAS600L	Panel Server Universal with 24 V DC power supply
PAS600	Panel Server Universal with 110-277 V AC/DC power supply

Panel Server Advanced

Functions

- An all-in-one gateway to retrieve data from both your wireless IEEE 802.15.4 devices and Modbus devices.
- Connect to your monitoring and control software such as EcoStruxure™ Power Monitoring Expert, EcoStruxure™ Power Operation or to your Building Management System.
- Connect to Schneider Electric cloud applications such as EcoStruxure™ Energy Hub or Asset Advisor.
- Ease of commissioning with EcoStruxure™ Power Commission software, enabling device plug-and-play and auto-discovery features.
- Ease of operation with user friendly embedded webpages, and data contextualisation for more relevant analytics.

Main features

- Power Supply 24 V DC, 110 to 277 V AC/DC, PoE-PD (CLASS 0,IEEE802.3af/at)
- Designed to match demanding electrical switchboard environment (temperature, humidity electromagnetic compatibility)
- Two Ethernet 10Base-T/100Base-T port (supporting switched or separated network topology)
- Wi-Fi
- Modbus RS485 serial communication
- IEEE 802.15.4 wireless communication
- Modbus TCP/IP server and client
- Support of HTTPS, NTP, SNTP, DHCP client and server with proxy management
- Modbus RS485 to Modbus TCP/IP Gateway
- Wireless devices concentrator to Modbus TCP/IP
- Two digital inputs (24 V DC version only) for contact information or WAGES pulse meter
- Designed through a Secured Development Life Cycle in accordance to IEC 62443-4-1
- Commissioning through EcoStruxure™ Power Commission or though Embedded Web-Pages
- Speed-up commissioning through device list import and configuration export to the monitoring software
- Fully integrated in Cybersecurity Admin Expert tool for security settings (Role Base Access and other security features such enabling/disabling communication means)
- Embedded web server for real-time measurement and alarm visualization, energy & power consumption by usage and location, 3 years historical trending and dashboarding
- 3 years Data Logger with 32 GB memory
- Customisable alarm with alarm log
- Alarms can be viewed in the web-pages and notified by e-mail

Compatible accessories

- Wi-Fi external antenna (PASA-ANT1)
- IEEE 802.15.4 external antenna (PASA-ANT1)



Panel Server Advanced

Standards & certifications

- IEC 61010-1 Ed.2010
- UL 61010-1 Ed.2012
- IEC 61974
- IEC 62443

Comm. Reference	Description
PAS800L	Panel Server Advanced with 24 V DC power supply
PAS800P	Panel Server Advanced with PoE power supply
PAS800	Panel Server Advanced with 110-277 V AC/DC power supply



PowerPact 4

Panelboards



Schneider Electric's flexible and versatile series of power and panel boards come with a history of innovation, dating back to the 1980's.

With decades of innovation, the family has regularly been improved to meet the latest industry needs.

The PowerPact 4 range is a simple answer to all power requirements. Now ranging from 250A 25kA, up to 1600A 50kA, it provides an off-the-shelf solution for most standard distribution applications.

The PowerPact 4 panelboard family features an exclusive safe connection system, ensuring precise torque for busbar/breaker connections. Breakers can be easily repositioned in any order on the panelboard, whilst ensuring they remain securely tightened. Utilising the Compact NSX range of MCCBs, the system ensures electrical fault protection.

Within the PowerPact 4 powerboards family, there's an alternative space-saving powerboard featuring Compact NSXm devices. This allows for additional outgoing ways without occupying the space typically needed by alternative boards.

Once the supply is energised, the PowerPact 4 system can monitor the energy inefficiencies via the Powerlogic metering solution and, in conjunction with the Ecostruxture software platform, report on the data captured, allowing site operators and/or managers to take decisive action to improve operating costs and report on energy billing.

This ensures that an entire distribution system from the smallest to the biggest installation can be protected, managed, and monitored with the PowerPact 4 system.




Life Is On

The PowerPact 4 product family comprises six versions, catering to your application for either a compact simplified version or a bespoke one. All versions maintain off-the-shelf product availability.

Powerboards



Style A

- Space saving
- 4-pole requirements
- NSX MCCBs



Style B

- Space saving
- 3-pole requirements
- Compact kits adding energy metering and surge protection
- NSXm MCCBs



Style C

- 4-pole requirements
- High quantity of outgoing devices
- NSX MCCBs

Panelboards



Style D



Style E



Style G

Style D, E, G panelboards

- Form 3B Type 2 / Form 4 Type 2&6
- 4-pole requirements
- High quantity of outgoing devices
- NSX MCCBs
- Outgoing current (A) up to 630A
- Full / high selectivity achieved with downstream devices
- Incoming and outgoing energy metering

If reading digitally, please use double-page view to read this table.

Busbar rating (415V, 50hz)
Lowest incomer rating
Short circuit withstand (ICW for .5 or 1s)
Manufactured and tested to BS EN 61439-2
IP rating
RAL colour
Top or bottom entry
MAX triple pole outgoing ways
MAX single pole outgoing ways
Form of separation
Max form of separation achievable**
Extension top/bottom
Extension side
Blanking plates as standard
Key lock
Connectable to remote monitoring

*When an extension cubicle is added
**Can be achieved by use of single disconnectable neutral links adjacent to breakers, or by the use of 4-pole breakers. Outgoing terminals should be shrouded with long terminal shields. The main neutral bar either side of the incomer should be removed and discarded together with the connecting copper bar. The incoming breaker should be a 4-pole breaker.
More information on forms of separation is available on pages 150 and 151

	Style A	Style B	Style C	Style D	Style E	Style G
						
	250A	250A	250A	400A/630A	800A	1600A
	100A	160A	100A	100A	800A	1250A
	36kA	25kA	36kA	36kA	50kA	50kA
	✓	✓	✓	✓	✓	✓
	IP3X	IP3X	IP3X	IP3X	IP3X	IP3X
	RAL 9001	RAL 9003	RAL 9001	RAL 9001	RAL 9001	RAL 9003
	Bottom	Both	Both	Both	Both	Both
	4	12	13	18	18	28*
	13	36	39	54	54	84
	Form 3b Type 2	Form 3b Type 2	Form 3b Type 2	Form 3b Type 2	Form 4 Type 2&6	Form 4 Type 2&6
	Form 3b Type 2	Form 3b Type 2	Form 4 Type 2&6	Form 4 Type 2&6	Form 4 Type 2&6	Form 4 Type 2&6
	✓	✓	✓	✓	✓	
				✓	✓	✓
	3 x SP	6 x SP	3 x SP	3 x SP	3 x SP	3 x SP
	✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓

Try our product selector tool


Life Is On
L3
L2
L1
NEUTRAL
ComPacT
WARNING

Contribute to a better world. Enhance sustainability with ComPact NSX & NSXm

Achieve Green Building certification with Green Premium ecolabel.

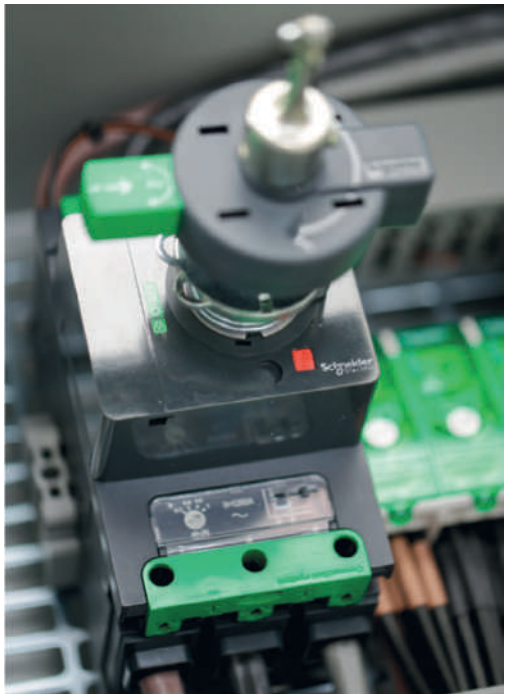
In compliance with ISO 14025 PEP ecopassport program, we publish a comprehensive Life Cycle Analysis of our product, providing the environmental data you need to achieve Green Building certifications.

For example, Com**Pact** NSX & NSXm contributes to 3 LEED™ points in the Building Product Disclosure and Optimisation section:

- Environmental Product Declaration
- Material Ingredients

Green Premium™

Com**Pact** NSX range is now enriched with the new Com**Pact** NSXm, designed according to the EcoDesign Way™ by Schneider Electric. It now features new space saving frame size for reduced resource consumption, and more.



Space saving

The new 160A frame has been designed with a volume 40% smaller, using less resources to manufacture and saving a significant amount of space

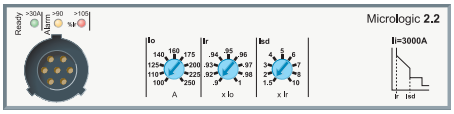
Halogen free

The Com**Pact** NSXm TMD is free of halogenated flame retardants in plastic

This product is REACh and RoHS compliant

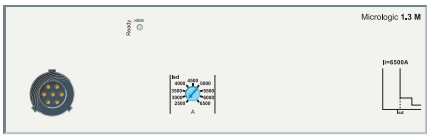


TM thermal-magnetic and MA magnetic trip units can be used on ComPact NSX100/160/250 circuit breakers with performance levels B/F/H/N/S/L. TM trip units are available in 2 versions:
- TM-D, for the protection of distribution cables
- TM-G, with a low threshold, for the protection of generators or long cable lengths.





ComPact NSX250



TM-D and TM-G thermal-magnetic trip units

Circuit breakers equipped with thermal-magnetic trip units are used mainly in industrial and commercial electrical distribution applications:TM-D, for protection of cables on distribution systems supplied by transformers.
- TM-G, with a low pick-up for generators (lower short-circuit currents than with transformers) and distribution systems with long cable lengths (fault currents limited by the resistance of the cable)

Protection

Thermal protection (Ir)ww

Thermal overload protection based on a bimetal strip providing an inverse time curve I2t, corresponding to a temperature rise limit. Above this limit, the deformation of the strip trips the circuit breaker operating mechanism.

This protection operates according to:
- Ir that can be adjusted in amps from 0.7 to 1 times the rating of the trip unit (16 A to 250 A), corresponding to settings from 11 to 250 A for the range of trip units
- A non-adjustable time delay, defined to ensure protection of the cables

Magnetic protection (Im)

Short-circuit protection with a fixed or adjustable pick-up Im that initiates instantaneous tripping if exceeded.
- TM-D: fixed pick-up, Im, for 16 to 160 A ratings and adjustable from 5 to 10 x In for 200 and 250 A ratings
- Fixed pick-up for 16 to 63 A ratings

Protection against insulation fault

Two solutions are possible by adding:
- A Vigi add-on acting directly on the trip unit of the circuit breaker
- A Vigirex relay connected to an MN or MX voltage release

MicroLogic 2

Circuit breakers equipped with MicroLogic 2 trip units can be used to protect distribution systems supplied by transformers. For generators and long cables, MicroLogic 2 G trip units offer better suited low pick-up solutions

Protection

Settings are made using the adjustment dials with fine adjustment possibilities.

Overloads: Long time protection (Ir)

Inverse time protection against overloads with an adjustable current pick-up Ir set using a dial and a non-adjustable time delay tr

Short-circuits: Short-time protection with fixed time delay (Isd)

Protection with an adjustable pick-up Isd. Tripping takes place after a very short delay used to allow selectivity with the downstream device.

Short-circuits: Non-adjustable instantaneous protection

Instantaneous short-circuit protection with a fixed pick-up.

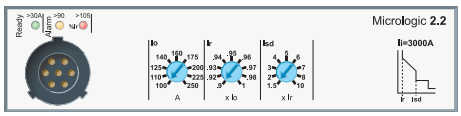
Neutral protection

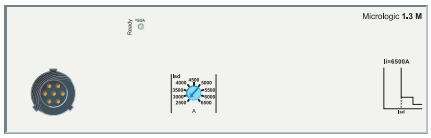
- On 3-pole circuit breakers, neutral protection is not possible
- On four-pole circuit breakers, neutral protection may be set using a three-position switch:

- 4P 3D: neutral unprotected
- 4P 3D + N/2: neutral protection at half the value of the phase pick-up, i.e. 0.5 x Ir
- 4P 4D: neutral fully protected at Ir

MicroLogic 2 trip units can be used on ComPact NSX100 to 630 circuit breakers with performance levels B/F/H/N/S/L/R/HB1/HB2.
They provide:

- standard protection of distribution cables
- indication of:
  - overloads (via LEDs)
  - overload tripping (via the SDx relay module).





Note: all the trip units have a transparent lead-sealable cover that protects access to the adjustment dials.

MicroLogic 2

Circuit breakers equipped with MicroLogic 2 trip units can be used to protect distribution systems supplied by transformers. For generators and long cables, MicroLogic 2 G trip units offer better suited low pick-up solutions.

Protection

Settings are made using the adjustment dials with fine adjustment possibilities.

Overloads: Long time protection (Ir)

Inverse time protection against overloads with an adjustable current pick-up Ir set using a dial and a non-adjustable time delay tr.

Short-circuits: Short-time protection with fixed time delay (Isd)

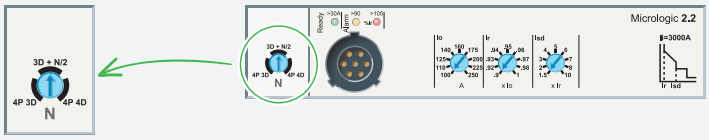
Protection with an adjustable pick-up Isd. Tripping takes place after a very short delay used to allow selectivity with the downstream device.

Short-circuits: Non-adjustable instantaneous protection

Instantaneous short-circuit protection with a fixed pick-up.

Neutral protection

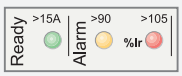
- On 3-pole circuit breakers, neutral protection is not possible
- On four-pole circuit breakers, neutral protection may be set using a three-position switch:
  - 4P 3D: neutral unprotected
  - 4P 3D + N/2: neutral protection at half the value of the phase pick-up, i.e. 0.5 x Ir
  - 4P 4D: neutral fully protected at Ir



Indications

Front indications

- Green “Ready” LED: flashes slowly when the circuit breaker is ready to trip in the event of a fault.
- Orange overload pre-alarm LED: steady on when I > 90 % Ir.
- Red overload LED: steady on when I > 105 % Ir.

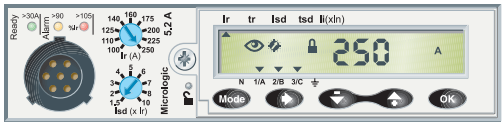


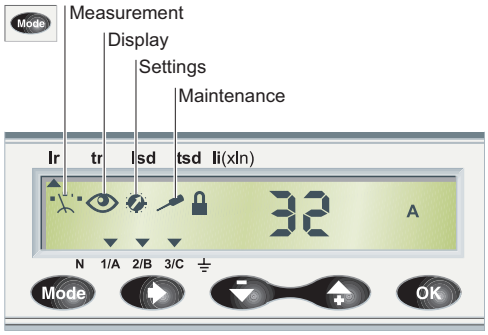
Remote indications

An overload trip signal can be remoted by installing an SDx relay module inside the circuit breaker.

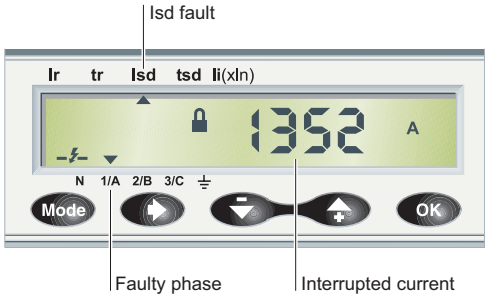
This module receives the signal from the MicroLogic electronic trip unit via an optical link and makes it available on the terminal block. The signal is cleared when the circuit breaker is reclosed.

MicroLogic 5 / 6 A (Ammeter) or E (Energy) trip units can be used on ComPact NSX100 to 630 circuit breakers with performance levels B/F/H/N/S/L/R/HB1/HB2. They all have a display unit.
They offer basic LSI protection (MicroLogic 5) or LSI and ground-fault protection G (MicroLogic 6).
They also offer measurement, alarm and communication functions.





Trip unit menus.



Display of interrupted current.

Note: all the trip units have a transparent lead-sealable cover that protects access to the adjustment dials.

Protection

Settings can be adjusted in two ways, using the dials and/or the keypad. The keypad can be used to make fine adjustments in 1 A steps below the maximum value defined by the setting on the dial. Access to setting modifications via the keypad is protected by a locking function displayed on the screen and controlled by a microswitch. The lock is activated automatically if the keypad is not used for 5 minutes. Access to the microswitch is protected by a transparent lead-sealable cover. With the cover closed, it is still possible to display the various settings and measurements using the keypad.

Overloads: Long time protection (Ir)

Inverse time protection against overloads with an adjustable current pick-up **Ir** set using a dial or the keypad for fine adjustments. The time delay **tr** is set using the keypad.

Short-circuits: Short-time protection (Isd)

Short-circuit protection with an adjustable pick-up **Isd** and adjustable time delay **tsd**, with the possibility of including a portion of an inverse time curve (I2t On).

Short-circuits: Instantaneous protection (Ii)

Instantaneous protection with adjustable pick-up **Ii**.

Additional ground fault protection (Ig) on MicroLogic 6

Residual type ground-fault protection with an adjustable pick-up **Ig** (with Off position) and adjustable time delay **tg**. Possibility of including a portion of an inverse time curve (I^2t On).

Neutral protection

On 4-pole circuit breakers, this protection can be set via the keypad:
- Off: neutral unprotected
- 0.5: neutral protection at half the value of the phase pick-up, i.e. 0.5 x Ir
- 1.0: neutral fully protected at Ir
- OSN: Oversized neutral protection at 1.6 times the value of the phase pick-up Used when there is a high level of 3rd order harmonics (or orders that are multiples of 3) that accumulate in the neutral and create a high current. In this case, the device must be limited to Ir = 0.63 x In for the maximum neutral protection setting of 1.6 x Ir
- With 3-pole circuit breakers, the neutral can be protected by installing an external neutral sensor with the output (T1, T2) connected to the trip unit

Zone selective interlocking (ZSI)

A ZSI terminal block may be used to interconnect a number of MicroLogic control units to provide zone selective interlocking for short-time (Isd) and ground-fault (Ig) protection, without a time delay. For ComPact NSX 100 to 250, the ZSI function is available only in relation to the upstream circuit breaker (ZSI out).

Display of type of fault

On a fault trip, the type of fault (Ir, Isd, Ii, Ig), the phase concerned and the interrupted current are displayed. An external power supply is required.

Indications

Front indications



- Green “Ready” LED: flashes slowly when the circuit breaker is ready to trip in the event of a fault
- Orange overload pre-alarm LED: steady on when I > 90 % Ir
- Red overload LED: steady on when I > 105 % Ir

Remote indications

An SDx relay module installed inside the circuit breaker can be used to remotely access to the following information:
- Overload trip
- Overload prealarm (MicroLogic 5) or ground fault trip (MicroLogic 6)

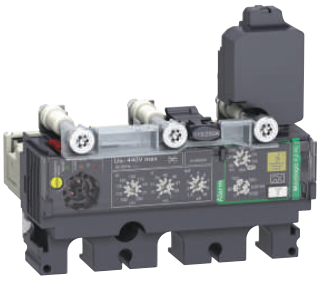
This module receives the signal from the MicroLogic electronic trip unit via an optical link and makes it available on the terminal block. The signal is cleared when the circuit breaker is closed.These outputs can be reprogrammed to be assigned to other types of tripping or alarm. The module is described in detail in the section dealing with accessories.



PP40404X36ML2



MicroLogic Vigi 4 (LS_oIR).



MicroLogic Vigi 4 AL (LS_oI + Earth Leakage Alarm).

MicroLogic Vigi 4

There are two versions of MicroLogic Vigi 4:

- Distribution protection including Earth Leakage Protection (LSoIR)
- Distribution protection including Earth Leakage Alarm (LSoI + Earth Leakage Alarm)

Protections

Settings are made using the rotary dial with fine adjustment capabilities.

Short circuit and overload protections
Overload: long-time protection (Ir)

Inverse time protection against overload with an adjustable current pick-up Ir set using a dial and a non-adjustable time delay tr.

Short-circuit: short-time protection with fixed time delay (Isd)

That protection is set with an adjustable pick-up Isd. The tripping takes place after a very short time used to allow selectivity with downstream devices.

Short circuit: non-adjustable instantaneous protection (with a fix pick-up)
Neutral protection

- On a 3-pole device, neutral protection is not possible
- On a 4-pole device, neutral protection may be set using the dedicated coding wheel to meet the following configurations: 4P 3D, 4P 3D + N/2 or 4P 4D (same as for MicroLogic 2)

Earth leakage protection

Adjustable leakage threshold (IΔn) and adjustable time delay threshold (Dt) by using the two dials on the green area of the trip unit.

Power supply

The trip unit is self supplied, and so does not need any external source. It works even when fed by 2 phases only.

Sensitivity IΔn (A)

- Type A: 30mA - 100mA - 300mA - 500mA - 1A - 3A - 5A (for the ratings 40 to 250A)
- Type A: 300mA - 500mA - 1A - 3A - 5A - 10A (for the ratings 400 to 570A)

Caution: "OFF" setting of IΔn is possible. It cancels the earth leakage protection, in that case, the circuit breaker with MicroLogic Vigi 4 behaves as a standard circuit breaker. That "OFF" position is located on the highest side of the coding wheel.

Intentional delay IΔt (s)

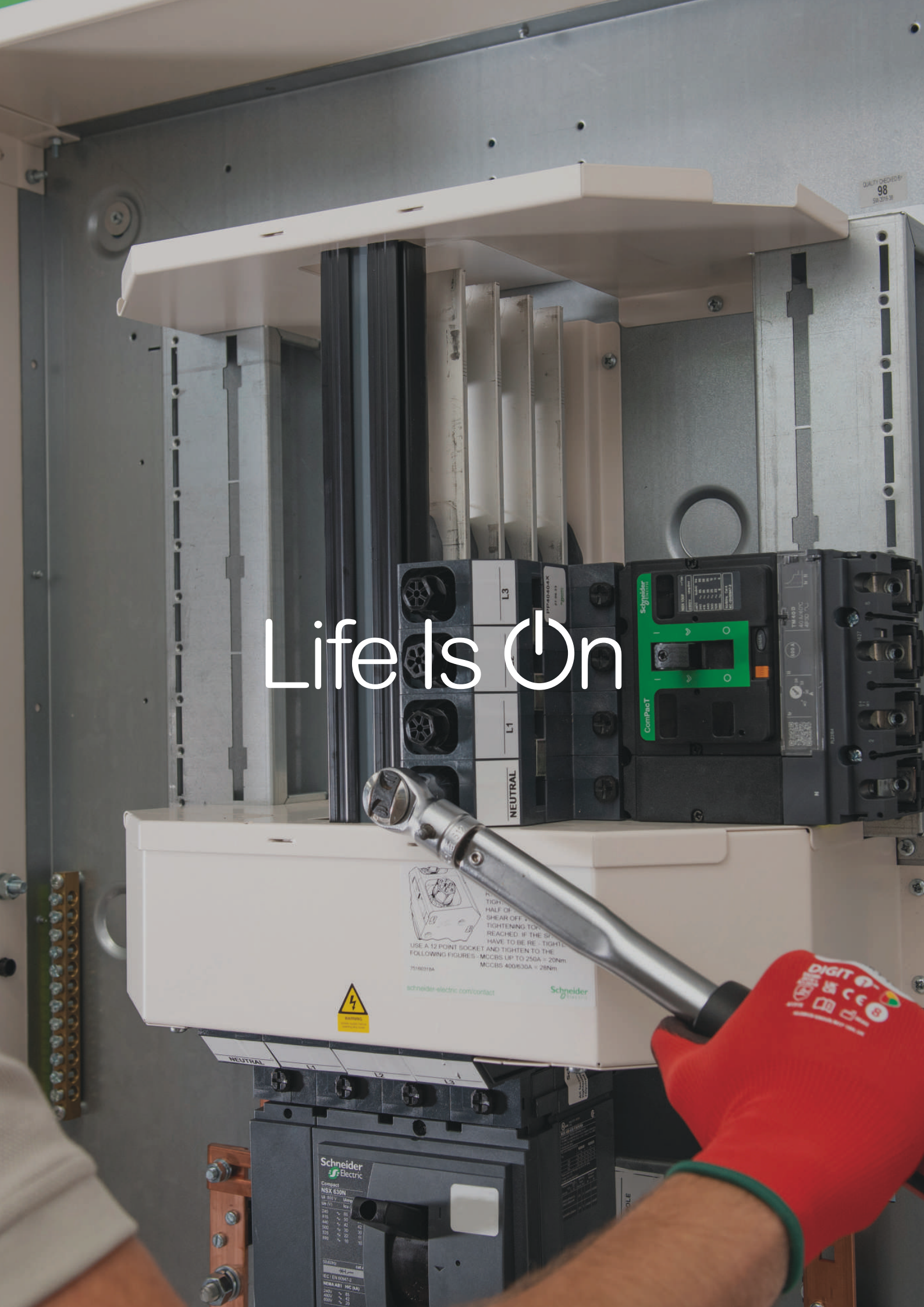
Case IΔn = 30mA: Δt 0 sec (whatever the setting)
Case IΔn > 30mA: Δt 0 – 60ms – 150ms – 500ms – 1sec (by setting)

Operated voltage

200 to 440 VAC (only) – 50/60 Hz

Operating safety

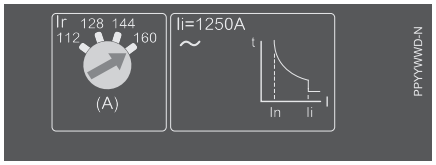
The earth leakage protection is a user safety device. It must be regularly tested using the test button (T) that simulates a real current leakage within the toroid.
When IΔn is set on the OFF position, press the T will cancel any test.
As for standard circuit breaker, the circuit breaker with MicroLogic Vigi 4 can be reset after any fault by operating an OFF/ON procedure.
Specific for the circuit breaker with MicroLogic Vigi 4 Alarm (AL), after testing as well as after a real leakage fault, it can be reset by pressing more than 3 seconds the test button (T), to avoid switching OFF the device.


Life Is On
L3
L1
NEUTRAL
ComPacT
Schneider Electric
Compact
NSX 630N
NEUTRAL
L1
L2
L3

The Compact NSXm outgoing devices for the Style B PowerPact panel are a modern innovation for the future of the industry



ComPact NSXm has a built-in thermal magnetic trip unit.



TM-D thermal-magnetic trip units

Circuit breakers equipped with thermal-magnetic trip units are used mainly in industrial and commercial electrical distribution applications for protection of cables on distribution systems supplied by transformers.

Protection
Thermal protection (Ir)

Thermal overload protection based on a bimetal strip providing an inverse time curve I^2t, corresponding to a temperature rise limit. Above this limit, the deformation of the strip trips the circuit breaker operating mechanism.
This protection operates according to:

- Ir that can be adjusted in amps from 0.7 to 1 times the rating of the circuit breaker (16 A to 160 A), corresponding to settings from 11 to 160 A for the range of products
- A non-adjustable time delay, defined to ensure protection of the cables

Magnetic protection (Im)

Short-circuit protection with a fixed pick-up Im that initiates instantaneous tripping if exceeded with a non adjustable time delay to ensure selectivity and cascading.

Protection versions

3-pole:

- 3P 3D: 3-pole frame (3P) with detection on all 3 poles (3D)

4-pole:

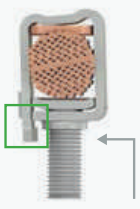
- 4P 3D: 4-pole frame (4P) with detection on 3 poles (3D).
- 4P 4D: 4-pole frame (4P) with detection on all 4 poles (same threshold for phases and neutral)

Note: All the circuit breakers have a transparent lead-sealable cover that protects access to the adjustment dials.

Technical Data for Circuit Breakers	
Manufactured and tested to	BS EN 60947-2
ICS	100% Icu 16-250
Calibration Temperature	40 ° C
Thermal Overload Ajustment	= 0.4 - 1 x In
Micrologic Overload Adjustment	= 0.4 - 1 x In



Installation



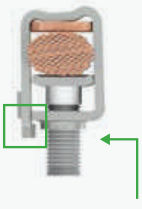
Space for spring effect
Untightened

Tightening



In contact
Untightened

Over time

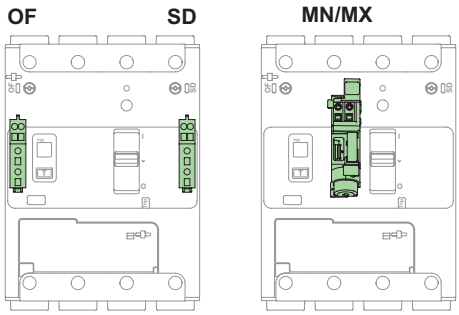


Creep-compensating effect



Spring maintains contact pressure:
Creep compensation

The Compact “PP4” NSXm outgoing devices with remote indication



3-Poles Device

Auxiliary and alarm indication contacts

Indication contacts provide remote information of the circuit breaker status and can thus be used for indications, electrical locking, relays, etc.They are common point changeover type contacts, with a normaly open (NO) contact and a normaly closed (NC) contact.

Open/Closed - Auxiliary switches (OF)

Indicates the position of the circuit breaker contacts.

Trip indication - Alavrm switch (SD)

Indicates that the circuit breaker has tripped due to:

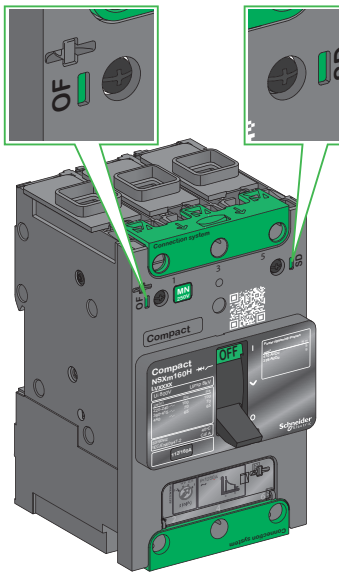
- An electrical fault (overload, short circuit)
- The operation of a shunt trip
- Undervoltage release
- The push-to-trip button
- Resets when the circuit breaker is reset

Installation and connection

- The auxiliary switch (OF) and alarm switch (SD) indication contacts snap into cavities behind the front accessory cover of the circuit breaker and their presence is visible on the front face through green flags
- One model serves for all indication functions depending on where it is fitted in the circuit breaker
- Each NO and NC spring terminal may be connected by one 0.5...1.5 mm² flexible copper wire and by two for the common point



Auxiliary Switch (OF) / Alarm Switch (SD).



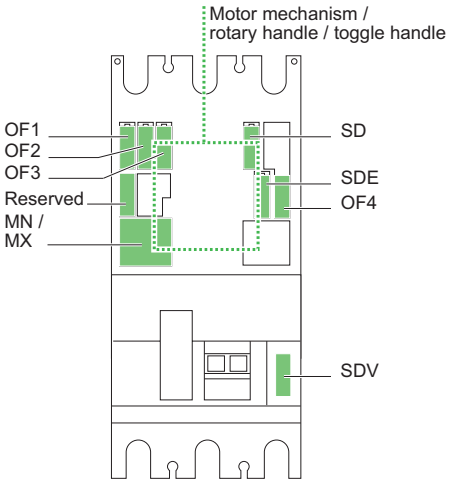
Electrical characteristics of auxiliary contacts

Characteristics						
Rated thermal current (A)		5				
Minimum load		2 mA at 17 V DC				
Utilization cat. (IEC 60947-5-1)		AC12	AC15	DC12	DC13	DC14
Operational current (A)	24 V AC/DC	5	5	5	2.5	1
	48 V AC/DC	5	5	2.5	1.2	0.2
	110...127 V AC / 110 V DC	5	4	0.6	0.35	0.05
	220/240 V AC	5	3	-	-	-
	250 V DC	-	-	0.3	0.05	0.03
	380/440 V AC	5	2.5	-	-	-
	660/690 V AC	5	0.1	-	-	-

Standards

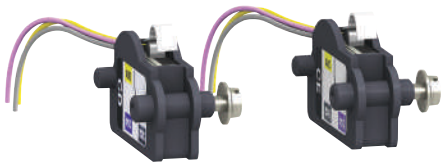
- Auxiliary indicator contacts comply with IEC 60947-5-1
- Auxiliary contacts have also been tested according IEC 60 947-5-4

The Compact “PP4” NSX outgoing devices with remote indication





Indication contacts



CE/CD carriage switches.

One contact model provides circuit-breaker status indications
(OF - SD - SDE - SDV).
An early-make or early-break contact, in conjunction with a rotary handle, can be used to anticipate device opening or closing.
A CE / CD contact indicates that the chassis is connected / disconnected.

These common-point changeover contacts provide remote circuit-breaker status information.
They can be used for indications, electrical locking, relaying, etc.
They comply with the IEC 60947-5 international standards.

Functions

Breaker-status indications, during norm T:/02-SCHNEIDER/05_Usine S2E/Bases/544_Base Compact fusion NSX et NSXm et INS/554E/544E4300/Links/DB125549.eps al operation or after a fault

A single type of contact provides all the different indication functions:
- OF (ON/OFF) indicates the position of the circuit breaker contacts
- SD (trip indication) indicates that the circuit breaker has tripped due to:
- An overload
- A short-circuit
- An earth fault (Vigi) or a ground fault (MicroLogic 6)
- Operation of a voltage release
- Operation of the “push to trip” button
- Disconnection when the device is ON
- The SD contact returns to de-energised state when the circuit breaker is reset.
- SDE (fault-trip indication) indicates that the circuit breaker has tripped due to:
- An overload
- A short-circuit
- An earth fault (Vigi) or a ground fault (MicroLogic 6)

The SD contact returns to de-energised state when the circuit breaker is reset.
- SDV indicates that the circuit breaker has tripped due to an earth fault. It returns to de-energised state when the Vigi add-on is reset

All the above auxiliary contacts are also available in “low-level” versions capable of switching very low loads (e.g. for the control of PLCs or electronic circuits)

Rotary-handle position contact for early-make or early-break functions
- CAM (early-make or early-break function) contacts indicate the position of the rotary handle
- They are used in particular for advanced opening of safety trip devices (early break) or to energise a control device prior to circuit-breaker closing (early make)

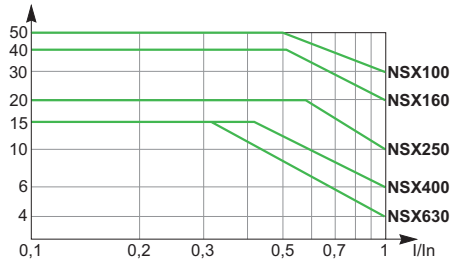
Chassis-position contacts
- CE/CD (connected/disconnected) contacts are microswitch-type carriage switches for withdrawable circuit breakers

Electrical characteristics of auxiliary contacts

Contacts			Standard				Low level			
Types of contacts			All				OF, SD, SDE, SDV			
Rated thermal current (A)			6				5			
Minimum load			100 mA at 24 V DC				1 mA at 4 V DC			
Utilisation cat. (IEC 60947-5-1)			AC12	AC15	DC12	DC14	AC12	AC15	DC12	DC14
Operational current (A)	24 V	AC/DC	6	6	6	1	5	3	5	1
	48 V	AC/DC	6	6	2.5	0.2	5	3	2.5	0.2
	110 V	AC/DC	6	5	0.6	0.05	5	2.5	0.6	0.05
	220/240 V	AC	6	4	-	-	5	2	-	-
	250 V	DC	-	-	0.3	0.03	5	-	0.3	0.03
	380/440 V	AC	6	2	-	-	5	1.5	-	-
	480 V	AC	6	1.5	-	-	5	1	-	-
	660/690 V	AC	6	0.1	-	-	-	-	-	-

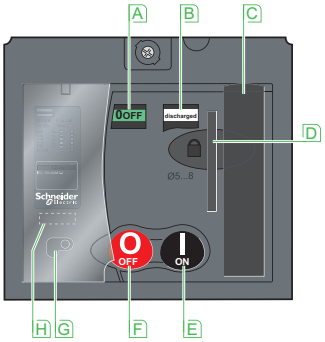
The Compact “PP4” NSX outgoing devices with remote control

Electrical endurance





ComPact NSX250
with motor mechanism



- **A** Position indicator (positive contact indication)
- **B** Spring status indicator (charged, discharged)
- **C** Manual spring-charging lever
- **D** Keylock device (optional) Locking device (OFF position), using 1 to 3 padlocks, shackle diameter 5 to 8 mm, not supplied
- **E** I (ON) pushbutton
- **F** O (OFF) pushbutton
- **G** Manual/auto mode selection switch. The position of this switch can be indicated remotely
- **H** Operation counter (ComPact NSX400/630)

When equipped with a **motor-mechanism** module, ComPact NSX circuit breakers feature very high mechanical endurance as well as easy and sure operation:
- All circuit-breaker indications and information remain visible and accessible, including trip-unit settings and indications
- Suitability for isolation is maintained and padlocking remains possible
- Double insulation of the front face
- A specific motor mechanism is required for operation via the communication function. This **communicating motor mechanism** must be connected to the BSCM module to receive the opening and closing orders. Operation is identical to that of a standard motor mechanism

Applications
- Local motor-driven operation, centralised operation, automatic distribution control.
- Normal/standby source changeover or switching to a replacement source to ensure availability or optimise energy costs
- Load shedding and reconnection
- Synchrocoupling

Operation
The type of operation is selected using the manual/auto mode selection switch (**7**). A transparent, lead-seal cover controls access to the switch.

Automatic
When the switch is in the "auto" position, the ON/OFF (I/O) buttons and the charging lever on the mechanism are locked.
- Circuit-breaker ON and OFF controlled by two impulse-type or maintained signals
- Automatic spring charging following voluntary tripping (by MN or MX), with standard wiring
- Mandatory manual reset following tripping due to an electrical fault

Manual
When the switch is in the "manual" position, the ON/OFF (I/O) buttons may be used. A microswitch linked to the manual position can remote the information.
- Circuit-breaker ON and OFF controlled by 2 pushbuttons I/O
- Recharging of stored-energy system by pumping the lever 8 times
- Padlocking in OFF position

Installation and connections
All installation (fixed, plug-in/withdrawable) and connection possibilities are maintained.
Motor-mechanism module connections are made behind its front cover to integrated terminals, for cables up to 2.5 mm².

Optional accessories
- Keylock for locking in OFF position
- Operations counter for the ComPact NSX400/630, indicating the number of ON/OFF cycles. Must be installed on the front of the motor-mechanism module

Characteristics

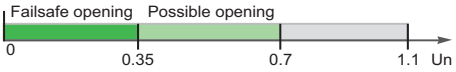
Motor mechanism			MT100 to MT630
Response time (ms)	opening		< 700
	closing		< 80
Operating frequency	cycles/minute max.		4
Control voltage (V)	DC		24/30 - 48/60 - 110/130 - 250
	AC 50/60 Hz		48 (50 Hz) - 110/130 - 220/240 - 380/440
Consumption *(1)*	DC (W)	opening	y 500
		closing	y 500
	AC (VA)	opening	y 500
		closing	y 500

[1] For NSX100 to NSX250, the inrush current is 2 In for 10 ms.

The Compact “PP4” NSX outgoing devices with remote opening



MX or MN voltage release.



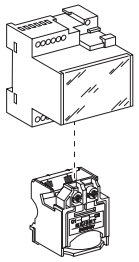
Closing conditions of the MN release.



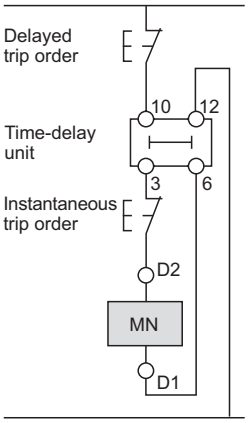
Opening conditions of the MN release.



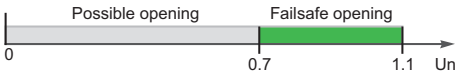
MN voltage release.



MN release with a time-delay unit.



Wiring diagram for emergency-off function with MN + time-delay unit.



Opening conditions of the MX release.

Note: circuit breaker opening using an MN or MX release must be reserved for safety functions. This type of tripping increases wear on the opening mechanism. Repeated use reduces the mechanical endurance of the circuit breaker by 50 %.

MX or MN voltage releases are used to trip the circuit breaker. They serve primarily for remote, emergency-off commands.
It is advised to test the system every six months.

MN undervoltage release

The MN release opens the circuit breaker when its supply voltage drops to a value below 35 % of its rated voltage Un.
Undervoltage tripping, combined with an emergency-off button, provides fail-safe tripping. The MN release is continuously supplied, i.e. if supply is interrupted:

- Either voluntarily, by the emergency-off button,
- Or accidentally, through loss of power or faulty wiring, the release provokes opening of the circuit breaker

Opening conditions

Circuit-breaker tripping by an MN release meets the requirements of standard IEC 60947-2.

- Automatic opening of the circuit breaker is ensured when the continuous voltage supply to the release U y 0.35 x Un
- If the supply voltage is between 0.35 and 0.7 Un, opening is possible, but not guaranteed. Above 0.7 Un, opening does not take place

Closing conditions

If there is no supply to the MN release, it is impossible to close the circuit breaker, either manually or electrically. Closing is ensured when the voltage supply to the release U u 0.85 x Un. Below this threshold, closing is not guaranteed.

Characteristics

Power supply	V AC	50/60 Hz: 24 - 48 - 100/130 - 200/240
		50 Hz: 380/415 60 Hz: 208/277
	V DC	12 - 24 - 30 - 48 - 60 - 125 -250
Operating threshold	Opening	0.35 to 0.7 Un
	Closing	0.85 Un
Operating range		0.85 to 1.1 Un
Consumption (VA or W)		Pick-up: 10 - Hold: 5
Response time (ms)		50

Time-delay unit for an MN release

A time delay unit for the MN release eliminates the risk of nuisance tripping due to a transient voltage dip. For shorter micro-outages, a system of capacitors provides temporary supply to the MN at U > 0.7 to ensure non tripping.
The correspondence between MN releases and time-delay units is shown below.

Power supply	Corresponding MN release
Unit with fixed delay 200 ms	
48 V AC	48 V DC
220 / 240 V AC	250 V DC
Unit with adjustable delay u 200 ms	
48 - 60 V AC/DC	48 V DC
100 - 130 V AC/DC	125 V DC
220 - 250 V AC/DC	250 V DC

MX shunt release

The MX release opens the circuit breaker via an impulse-type (u 20 ms) or maintained order.

Opening conditions

When the MX release is supplied, it automatically opens the circuit breaker.
Opening is ensured for a voltage U u 0.7 x Un.

Characteristics

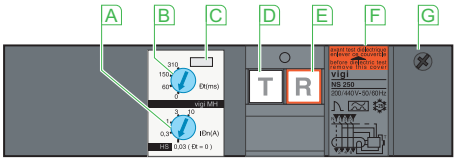
Power supply	V AC	50/60 Hz: 24 - 48 - 100/130 - 200/240
		50 Hz: 380/415 60 Hz: 208/277
	V DC	12 - 24 - 30 - 48 - 60 - 125 -250
Operating range		0.7 to 1.1 Un
Consumption (VA or W)		Pick-up: 10
Response time (ms)		50

Circuit breaker control by MN or MX

When the circuit breaker has been tripped by an MN or MX release, it must be reset before it can be reclosed. MN or MX tripping takes priority over manual closing.In the presence of a standing trip order, closing of the contacts, even temporary, is not possible. Connection using wires up to 1.5 mm² to integrated terminal blocks.

Residual earth leakage protection added onto the bottom of a CompacT NSX





- A Sensitivity setting
- B Time-delay setting (for selective earth-leakage protection)
- C Lead-seal fixture for controlled access to settings
- D Test button simulating an earth-fault for regular checks on the tripping function
- E Reset button (reset required after earth-fault tripping)
- F Rating plate
- G Housing for SDV auxiliary contact

Plug-in devices
The Vigi add-on can be installed on a plug-in base. Special accessories are required (see catalog number chapter).

ComPact NSX Vigi add-on

Addition of the Vigi add-on does not modify circuit-breaker characteristics:
- Compliance with standards
- Degree of protection, class II front-face insulation
- Positive contact indication
- Electrical characteristics
- Trip-unit characteristics
- Installation and connection modes
- Indication, measurement and control auxiliaries
- Installation and connection accessories

Vigi add-on fitting inside Powerpact 4 panelboards

Can be fitted inside Style D, E, G with advised side extension for cabling and shrouding kits.

Compliance with standards
- IEC 60947-2, annex B
- IEC 60755, Type A, immunity to DC components up to 6 mA
- Operation down to -25 °C as per VDE 664

Remote indications
Vigi add-on may be equipped with an auxiliary contact (SDV) to remotely signal tripping due to an earth fault.

Use of 4-pole Vigi add-on with a 3-pole ComPact NSX
In a 3-phase installation with an uninterrupted neutral, an accessory makes it possible to use a 4-pole Vigi add-on with connection of the neutral cable.

Power supply
Vigi add-on are self-powered internally by the distribution-system voltage and therefore do not require any external source. They continue to function even when supplied by only two phases.

Vigi add-on selection

Type	Vigi ME	Vigi MH	Vigi MB
Number of poles	3, 4 [1]	3, 4 [1]	3, 4 [1]
NSX100	◉	◉	-
NXS160	◉	◉	-
NSX250	-	◉	-
NSX400	-	-	◉
NSX630	-	-	◉
Protection characteristics			
Sensitivity IΔn (A)	fixed 0.3	adjustable 0.03 - 0.3 - 1 - 3 - 10	adjustable 0.3 - 1 - 3 - 10 - 30
Time delay	fixed	adjustable	adjustable
Intentional delay (ms)	< 40	0 - 60 [2] - 150 [2] - 310 [2]	0 - 60 - 150 - 310
Max. break time (ms)	< 40	< 40 < 140 < 300 < 800	< 40 < 140 < 300 < 800
Rated voltage V AC 50/60 Hz	200...440	200... 440 - 440...550	200...440 - 440...550

[1] Vigi 3P add-on may also be used on 3P circuit breakers used for two-phase protection
[2] If the sensitivity is set to 30 mA, there is no time delay, whatever the time-delay setting

Operating safety

The Vigi add-on is a user safety device. It must be tested at regular intervals (every 6 months) via test button.


Life Is On

PowerLogic™ PM5000 series

The PowerLogic™ PM5000 series power meters are the new benchmark in affordable, precision metering.

The value you want, the precision you need. Compact, affordable power meters with high-end cost capabilities and basic mobile energy management.

Applications:

Capable of essential cost management:

- Sub-billing/tenant metering (+1)
- Equipment sub-billing
- Energy cost allocation

Also ideal for electrical network management:

- Track real-time power conditions
- Monitor control functions
- Provide basic power quality values
- Detect and capture voltage sag and swell events
- Monitor residual current
- Analyse equipment and network status
- BACnet/IP, EtherNet/IP, and DNP3.0 protocol support



The solution for

Markets that can benefit from a solution that includes PowerLogic™ PM5000 series meters:

- Buildings
- Industry
- Healthcare
- Data Center and networks
- Infrastructure

Benefits

- System integrators' benefit
- Ease of integration
- Ease of setup
- Cost effectiveness

Panel builders' benefit

- Ease of installation
- Cost effectiveness
- Aesthetically pleasing
- Simplified ordering
- Low Voltage DC control power option
- Analog inputs options

End users' benefit

- Ease of use
- Precision metering & sub-billing (+2)
- Billing flexibility
- Comprehensive, consistent and superior performance
- Maximise uptime, eliminate faults, and enhance safety
- Cybersecurity features

Competitive advantages

- Easy to install and operate
- Easy for circuit breaker monitoring and control
- WAGES monitoring
- Data logging up to 16 parameters
- Power quality analysis up to 63rd harmonics
- Load management combined with alarm and timestamping
- High performance and accuracy
- Residual Current Monitoring (RCM) in PM56xx(+4) and PM57xx(+4)
- Voltage sag and swell detection with waveform capture
- MID ready compliance for legal billing application
- Onboard BACnet/IP, EtherNet/IP, and DNP3.0 protocol support
- PM5310R (+3) and PM5320R (+3) are enabled to connect with LVCT for faster installations

Power management solutions

Schneider Electric provides innovative power management solutions to increase your energy efficiency and cost savings, maximise electrical network reliability and availability, and optimise electrical asset performance.

Conformity of standards

- BS/EN/IEC 61557-12:2018/AMD1:2021
- BS/EN/IEC 62052-11:2020 edition 2
- IEC 62052-31:2015
- BS/EN/IEC 62053-22:2020 edition 2
- BS/EN/IEC 62053-23:2020 edition 2
- IEEE 802.3
- EN 50470-1:2006
- EN 50470- 3:2006
- CE and UKCA as per IEC/BS 61010-1 edition 3
- cULus as per UL 61010-1 edition 3
- BS/EN/IEC 61010-2-30:2017
- BS/EN/IEC 61326-1: edition 3
- FCC part 15 Class B
- EN 55022 Class B
- BACnet/IP - BTL listed (B-ASC)
- EtherNet/IP - ODVA certified
- ANSI C12.1-2008 (PM55xx)
- ANSI C12.20 Class 0.2 & 0.5
- Align with cyber security guidelines as per IEC 62443
- Type A as per IEC 62020 for RCM

Meets IEC 61557-12 PMD/[SD|SS]/K70/0.5 for PM5100 and PM5300
Meets IEC 61557-12 PMD/[SD|SS]/K70/0.2 for PM5500, PM5600, PM5700

- Legal billing compliance
  - MID compliance is compulsory for billing applications across Europe
  - In addition to billing applications, for facility managers responsible for energy cost
  - MID means same level of quality as a billing meter

MID Certified according to MID Directive, Annex "B" + Annex "D" for legal metrology relevant to active electrical energy meters (see Annex MI-003 of MID). Can be used for fiscal (legal) metrology.

MID ready compliance, EN 50470-1/3 – Class C

(+2) Subjected to local regulations.
(+3) PM5310R and PM5320R must be used with Schneider Electric's "Quick Click" 3-in-1 LVCTs.
(+4) PM5660, PM5661, PM5760, PM5761 must be used with Toroids.



In today's industry it is important to capture the energy efficiency of your premises.

Whether this is for operational reasons, energy cost analysis or both, you need a compact, reliable, easy-to-operate solution.

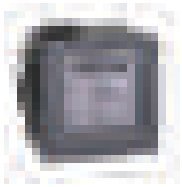
With PowerPact 4, you can include a compact digital solution to suit your personal requirements.

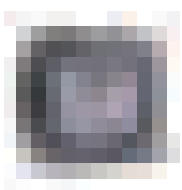
ON panel Digital monitoring

- Easily operated Powerlogic series metering to suit your network requirements
- MID approved for sub billing requirements
- Full network capture including KWH, Amps, Volts, Power Quality, Harmonics and more

For MCCB status and indication there is a remote display (FDM121 – part reference TRV00121) option that can display faults, energy data and tripping events without opening the door of the panel.









PowerLogic™ PowerTag Energy series

The PowerTag Energy is a wireless-communication energy sensor.

PowerTag Energy is designed specifically for Energy Management, Load Mentoring and Power Availability applications. Associated to a concentrator or a gateway, PowerTag Energy provides a full wireless class 1 solution 1 to monitor energy at any level of a distribution panel.

Applications:

- Monitors your electrical installation from main incomer down to load level
- Suitable for various business, buildings, industrial and residential applications with easy integration in upper systems
- Supports and enables Energy Efficiency programs and standards such as:
  - European Energy Directive (EED)
  - Energy Performance of Buildings Directive (EPBD)
  - IEC 60364-8-1 “Low Voltage Electrical installations - Energy Efficiency”
  - EN 17267 “Energy Measurement and monitoring plan”
  - ISO 5001 “Energy Management System”



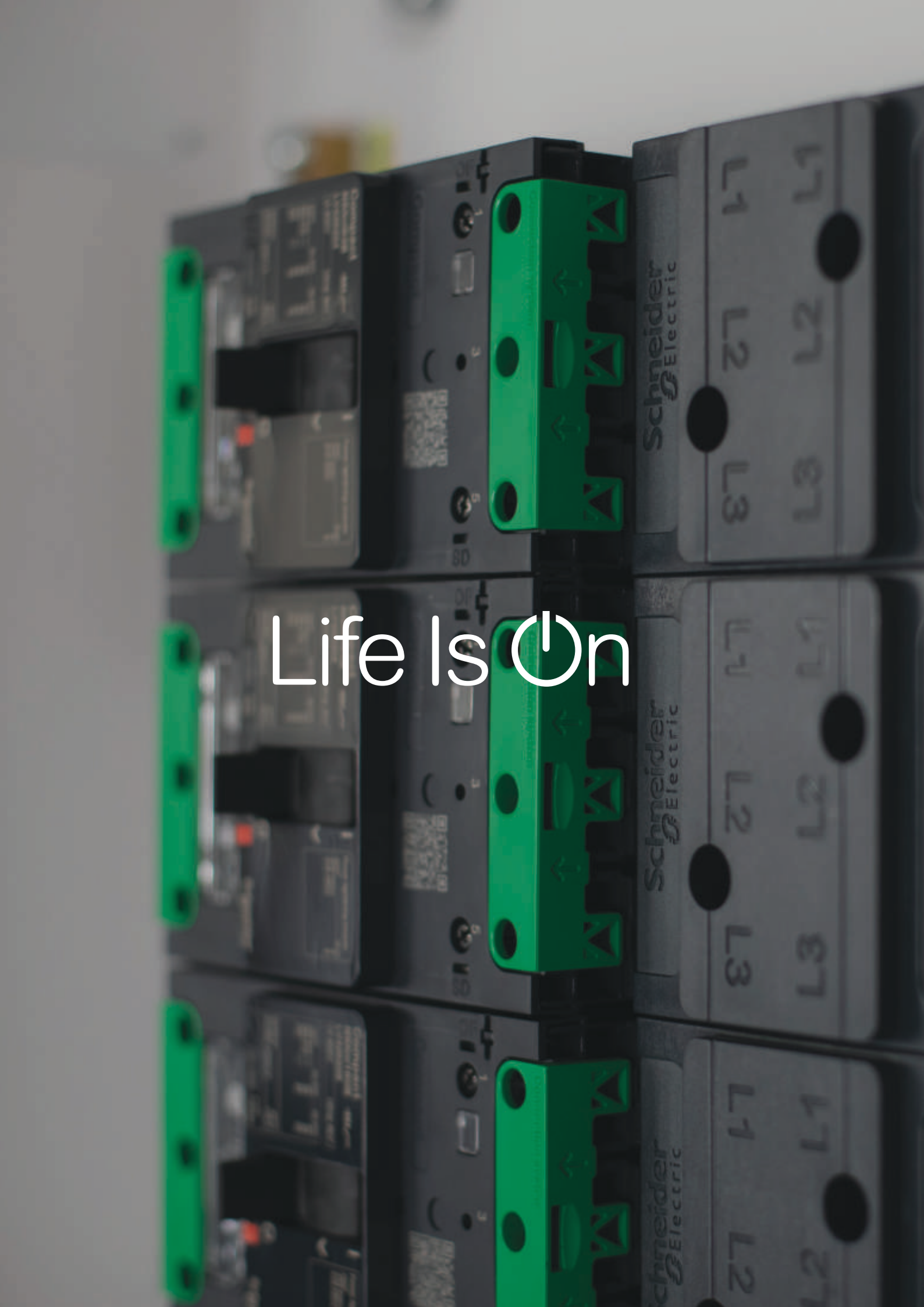
On-site

- Full site wide connection and data capture
- Energy / status analytics on Schneider Electric portfolio
- Dashboard displays of captured data
- Analyse and make corrections on energy inefficiencies / asset health conditions
- Architecture and size of solution is scale-able
- Full lifetime software solution built into architecture price



Remote

- Upload key loads and / or sections of a premise into the Energy Hub cloud platform
- Visualise the data from these loads anywhere in the world 24/7
- Use Energy Hub to compare loads across the site or even across multiple sites
- Receive alarm notifications for upcoming threats and or ongoing critical events
- Create automated reports to suit individual or organisational needs
- Reduced cloud access pricing vs market alternatives thanks to hybrid solution


Life Is On

iPRD surge arresters



Improved continuity of service and safety of your equipment

With exclusive features, Acti9 iPRD DIN rail surge protection devices are geared to protect your equipment from indirect lightning strikes and improve the continuity of service. The use of surge protection devices is recommended in the case of non-critical power installations. To ensure secondary protection, they should be installed in the secondary panel board as soon as the distance from the incoming surge arrester is more than 10 metres.

- The iPRD1 12.5r surge arrester protects 3P+N installations against direct and indirect transient overvoltages
- The type 1+2 device is auto protected by an additional circuit breaker
- Recommended for high risk level in incoming panelboard
- Prewired surge arrester allows quick replacement of withdrawable cartridges when they are damaged
- iPRD1 is compatible with TT, TNC-S and TN-S earthing systems
- Associated with NSX TM100D the breaking capacity is 70kA

iPRD withdrawable surge arresters allow quick replacement of damaged cartridges.

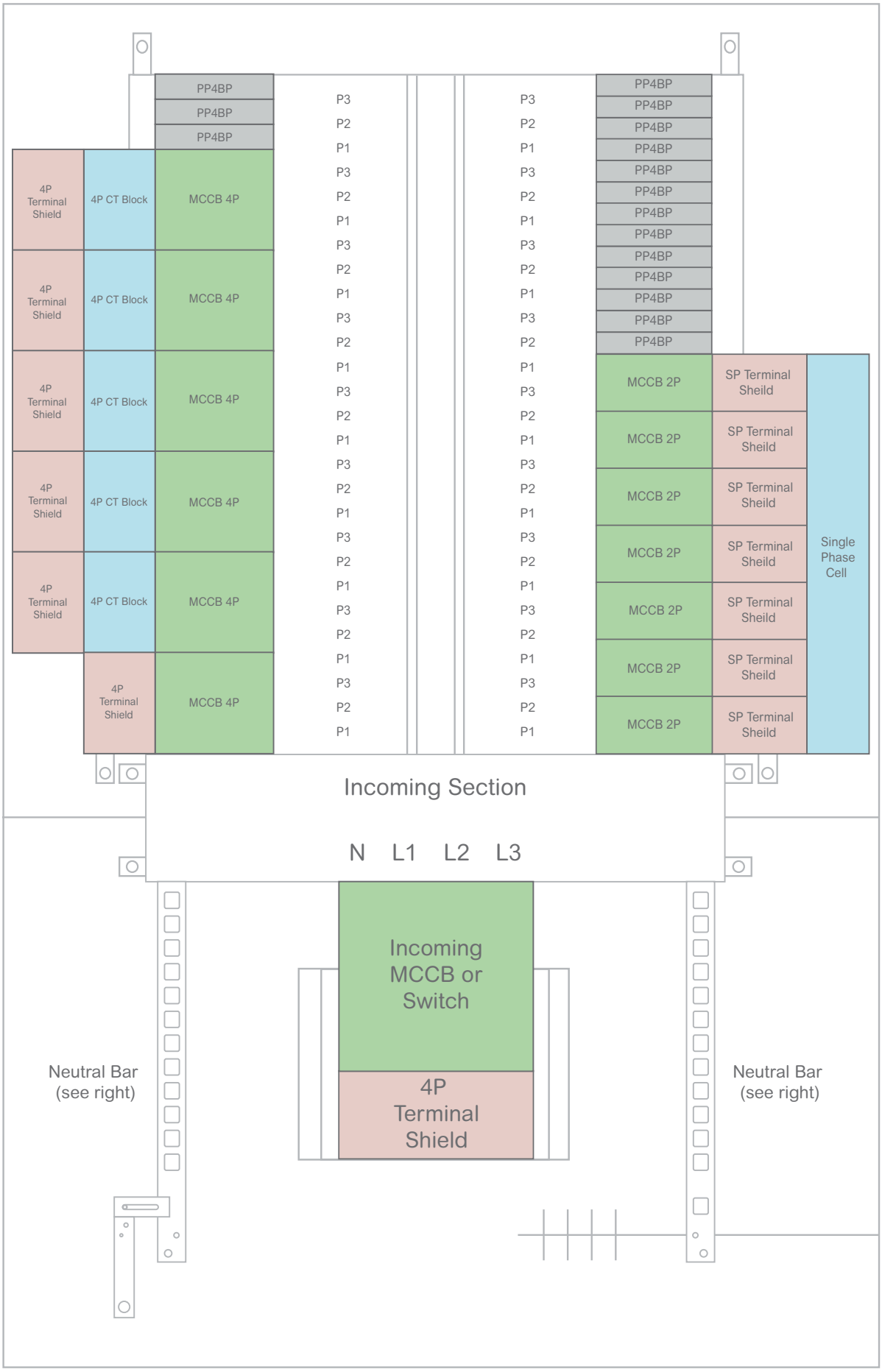
- Type 1 surge arresters meet the normative withstand capability of current wave type 10/350 µs.
- Type 2 surge arresters meet the normative withstand capability of current wave type 8/20 µs.
- Type 3 surge arresters meet the normative withstand capability of combined wave type 1.2/50 µs and 8/20 µs

Dependant on requirements, to incorporate surge protection devices into the PowerPact 4 range, a surge protection device is required, a 4-pole incomer, and a 4-pole MCCB are also recommended.

Where a metering option has already been chosen for the panelboard and a free metering slot is available, a surge protection device can be incorporated into the metering extension by installing a 4 x 18mm module of din rail and a viewing window.

If a metering option has not been chosen, a surge protection device can be mounted on din rail or into a din rail enclosure next to the panel, ensuring the correct standards are met for the length of the cable used.




PP4BP
PP4BP
PP4BP
4P Terminal Shield
4P CT Block
MCCB 4P
P3
P2
P1
MCCB 2P
SP Terminal Sheild
Single Phase Cell
Incoming Section
N L1 L2 L3
Incoming MCCB or Switch
4P Terminal Shield
Neutral Bar (see right)

As standard, most PowerPact 4 panels meet Form 3B Type 2 (see page 128)

The example on the left shows a general configuration to suit form 4 Type 2 & 6 alongside a breakdown of all critical zones required for achieving these forms of separation.

Denotes MCCB / NA devices, for Form 4 to be achieved, 4P or 2P (or Neutral link) MUST be used. See below for options.

Terminal Shields for incoming and outgoing devices, ALL devices MUST use terminal shields in order to achieve Form 4.

Metering devices, such as CT's and digital metering devices.

Blanking devices and shrouds to suit busbar stack and/or extension cut outs.

FORM 4
Type 2 & 6

Can be achieved by use of individual disconnectable neutral links adjacent to breakers or using 2/4 pole breakers (left). Outgoing terminals MUST be shrouded with long terminal shields. The neutral bar on both sides of the main incomer needs to be removed and disposed of along with the connecting copper bar.

The incoming breaker must be a 4-pole breaker (Style A - G only).

Connection accessories			
Bare cable connectors capacity	Breaker	Part number Set of 3	Part number Set of 4
1.5 - 95mm^2	160	LV429242	LV429243
10 - 185mm^2	250	LV429259	LV429260
35 - 300mm^2	630	LV432479	LV432480
2 x 95 - 240mm^2	630	LV432481	LV432482

Circuit breaker installation & removal



The 4-pole busbar system ready to accept the PowerPact 4 circuit breaker.



The PowerPact 4 circuit breaker is placed in the panel board and pushed up to the busbars. 1-pole, 2-pole, 3-pole and 4-pole circuit breakers may be mixed in any order on the busbars.



The PowerPact 4 circuit breaker fixing screw is fitted and tightened to retain the circuit breaker in the panel board.



The connections to the busbars are tightened until the tops of the connection bolts shear off. This ensures that the correct torque has been applied to the connections.



The PowerPact 4 circuit breaker is now mechanically and electrically connected in the panel board. The circuit breaker cassette fully shrouds the busbars and is now ready for the outgoing cables.

To remove the PowerPact 4 circuit breaker, a 17mm bi-hexagonal socket is required.

When re-fitting an MCCB with PP4 cassette
20NM – 100/160/250
28NM – 400/630
(12-point bi hex 17mm socket)

Outgoing standard cable lug torque
100 M6 10Nm
160/250 M8 15Nm
400/630 – M10 50Nm

ComPacT NSXm Circuit Breakers from 16A to 160A

Connections			
Pitch (mm)		Standard	27
		With spreaders	36
EverLink lug CU or Ai(2) cables	Cross-section(mm^2)	Rigid	95
		Flexible	70
Crimp lugs cu or Al	Cross-section(mm^2)	Rigid	120
		Flexible	95

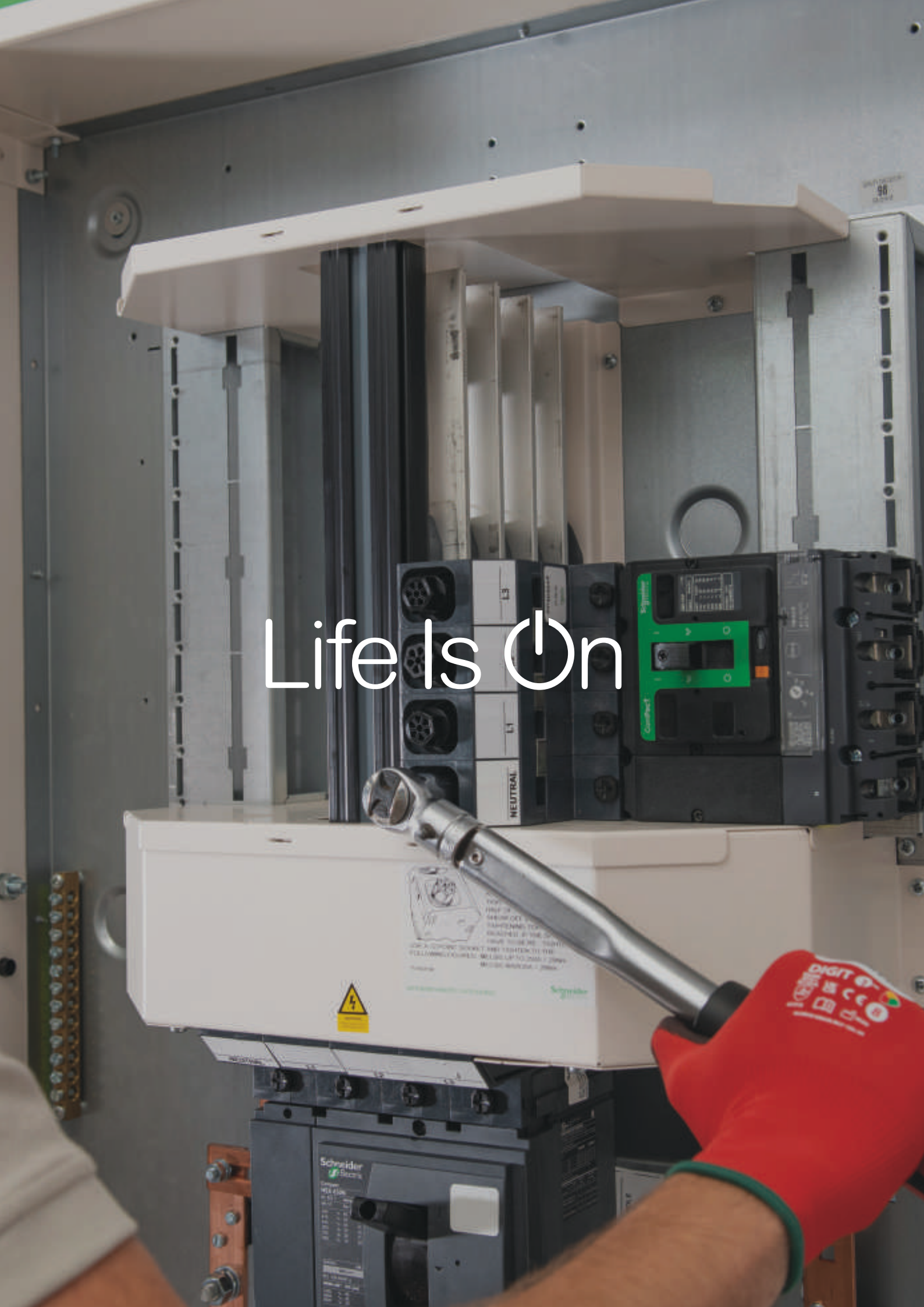
ComPacT NSX Circuit Breakers from 100A to 250A

Connections			
Connection terminals	Pitch	With/without spreaders	35/45mm
Large CU or Al cables	Cross-section	(mm^2)	300

ComPacT NSX Circuit Breakers from 400A to 630A

Connections			
Connection terminals	Pitch	With/without spreaders	45/52.5mm 45/70mm
Large CU or Al cables	Cross-section	(mm^2)	4x240



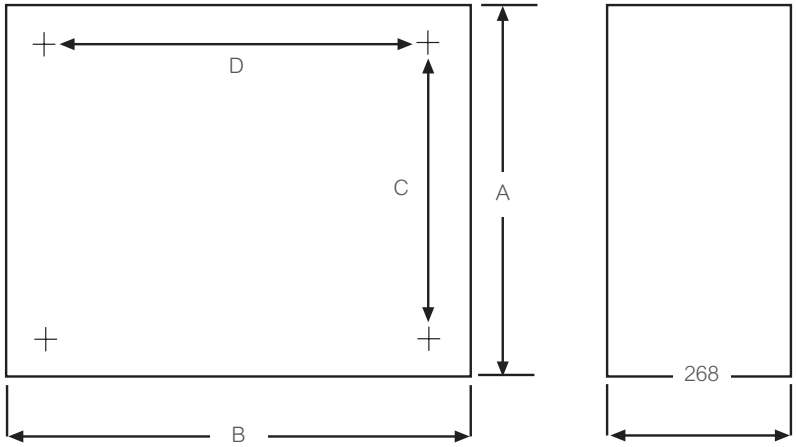

Life Is On
L3
L1
NEUTRAL
DIGIT

PowerPact 4 Panelboard Dimensions



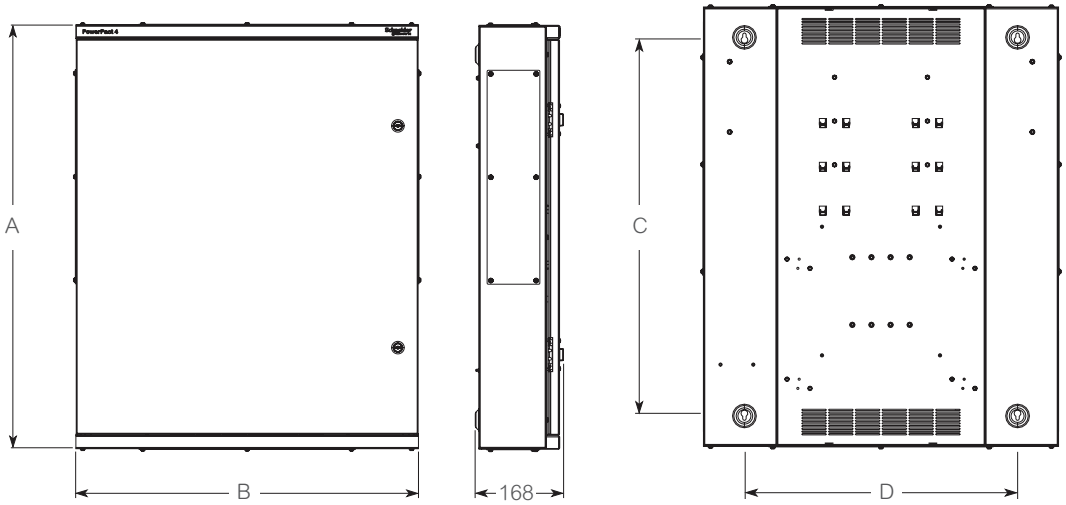
Style A 250A Powerboard

All dimensions are in mm



Reference	A	B	C	D
MG25C2 & MG25C2M	650	600	442	306
MG25C4 & MG25C4M	650	778	442	484
MG25EXC	650	600	442	306
C and D are the fixing dimensions about the centre line				

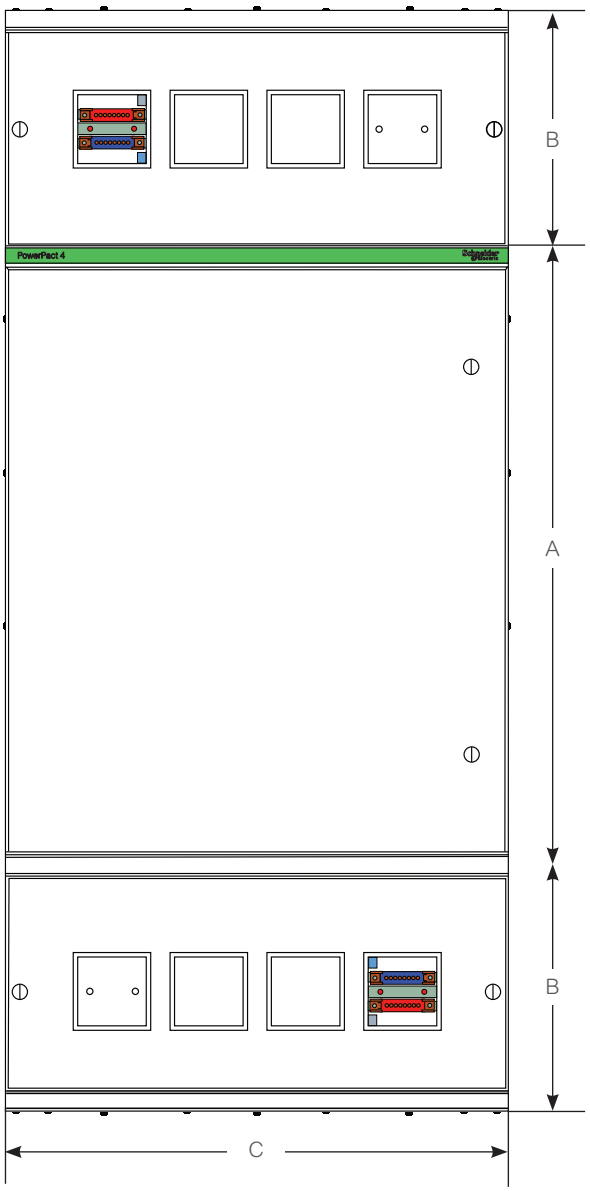
Style B 250A Powerboard



Reference	A	B	C	D
PP4NB26/SM	813	650	710	500
PP4NB28/SM	894	650	791	500
PP4NB212/SM	1056	650	953	500

Style B 250A Powerboard with extension

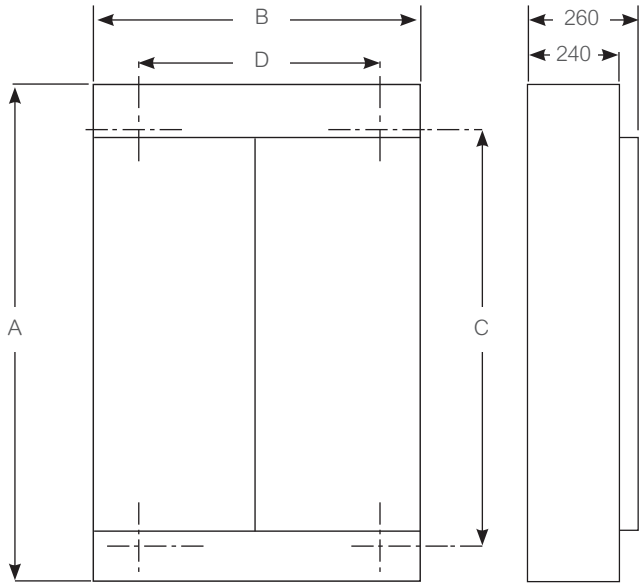
All dimensions are in mm



Reference	A	B	C
PP4NB26SM	813	305	650
PP4NB28SM	894	305	650
PP4NB212SM	1056	305	650

Style C 250A Powerboard

All dimensions are in mm

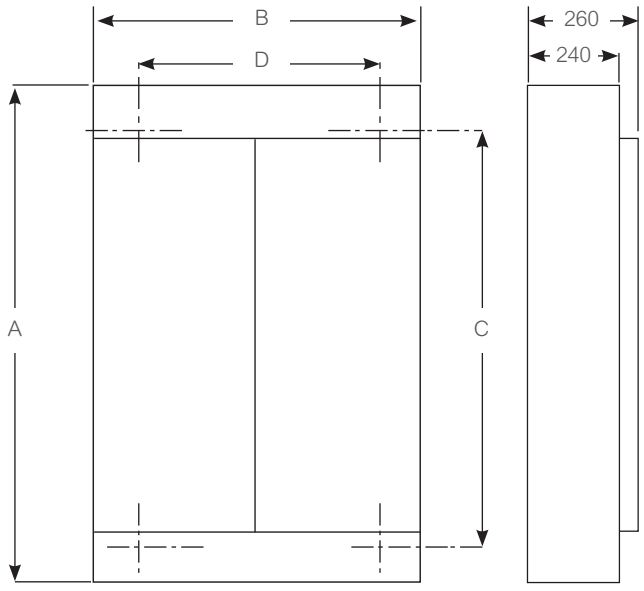


Reference	A	B	C	D
MG2C5	679	850	541	670
MG2C7	784	850	646	670
MG2C9	889	850	751	670
MG2C13	1074	850	920	670
C and D are the fixing dimensions about the centre line				

Material thickness
1.2mm cover
1.6mm enclosure

Style D 400/630A Panelboard

All dimensions are in mm

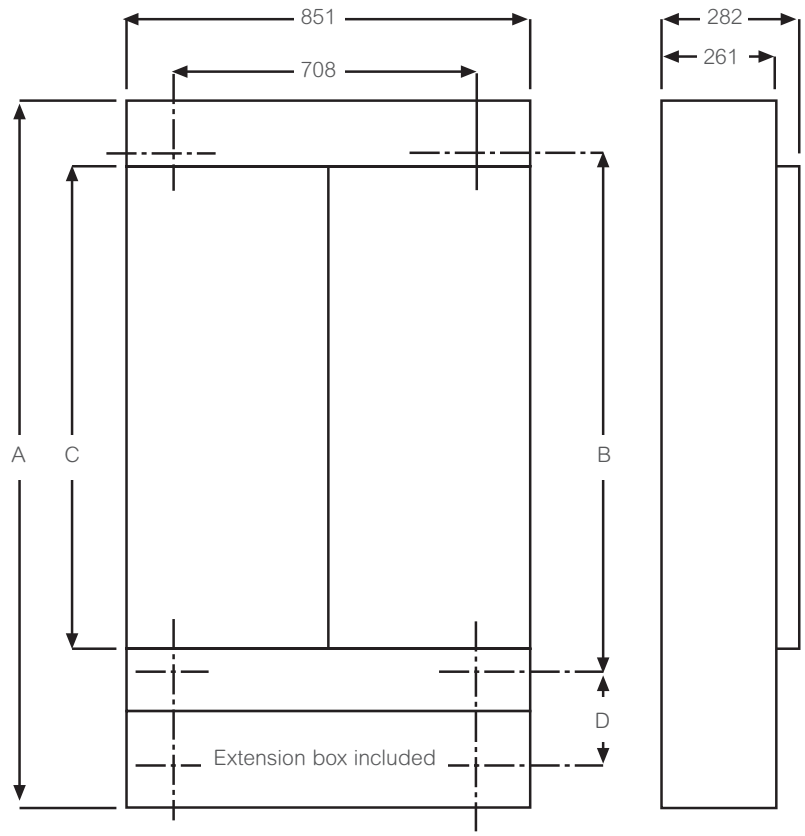


Reference	A	B	C	D
MG6C6	1178	850	1035	708
MG6C12	1493	850	1350	708
MG6C18	1808	850	1665	708
C and D are the fixing dimensions about the centre line				

Material thickness
1.2mm cover
1.6mm enclosure

Style E 800A Panelboard

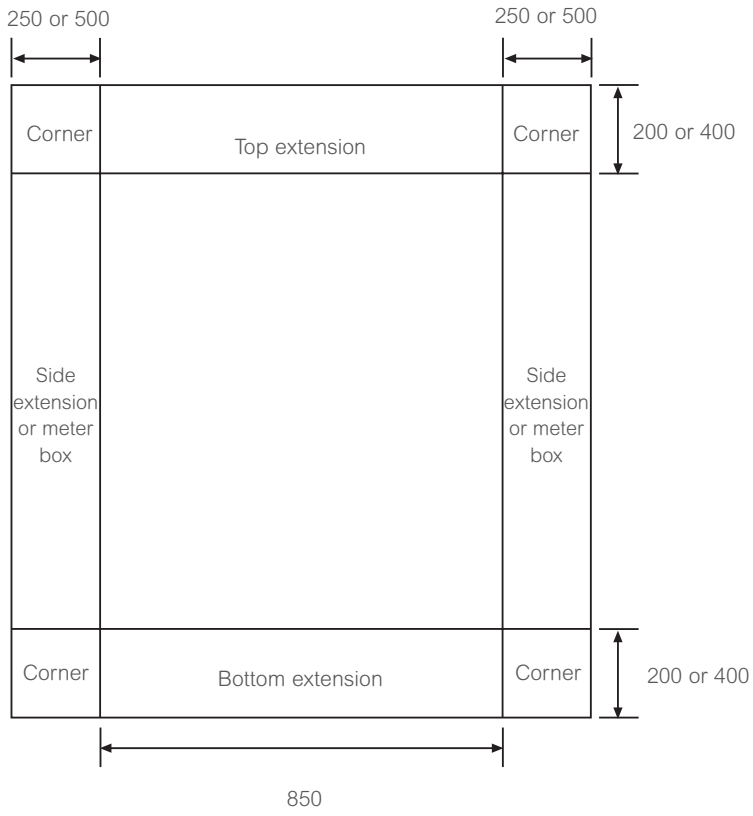
All dimensions are in mm



Reference	A	B	C	D
MG8C6	1581	1043	939	264
MG8C12	1896	1358	1254	264
MG8C18	2212	1665	1569	264

Material thickness
1.2mm cover
1.6mm enclosure

PowerPact4 Extension Boxes



All dimensions are in mm

All extension boxes are the same depth as the main board - 240mm.

* 400mm extension box is fitted as standard at the incoming end of the 800A panelboard.

Corner units are available to suit all combinations of top/bottom and side extension boxes.

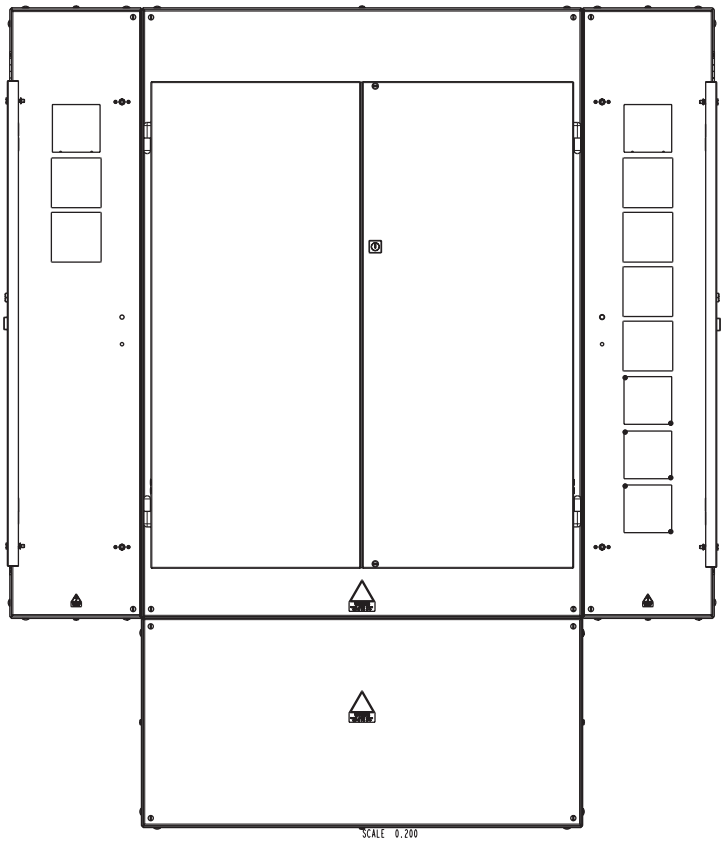
Overall dimension table

Panelboard part number		MG25C2	MG25C2M	MG25C4	MG25C4M	MG2C5	MG2C7	MG2C9	MG2C13	MG6C6	MG6C12	MG6C18	MG8C6	MG8C12	MG8C18
Height	Standard	650	650	650	650	679	784	889	1074	1178	1493	1808	1583	1898	2213
	With 1 top or bottom ext box					883	988	1093	1278	1382	1697	2012	1787	2102	2417
	With top & bottom ext box					1087	1192	1297	1482	1586	1901	2216	1991	2306	2621
Width	Standard	600	600	778	778	850	850	850	850	850	850	850	850	850	850
	With 1-250mm side ext box									1105	1105	1105	1105	1105	1105
	With 1-500mm side ext box									1360	1360	1360	1360	1360	1360
	With 1-600mm side ext box	1200	1200	1378	1378										
	With 1-250 & 1-500mm side ext box								1615	1615	1615	1615	1615	1615	
	With 2-250mm side ext boxes									1360	1360	1360	1360	1360	1360
	with 2-500mm side ext boxes									1870	1870	1870	1870	1870	1870
Depth		263	263	263	263	263	263	263	263	263	263	263	263	263	263

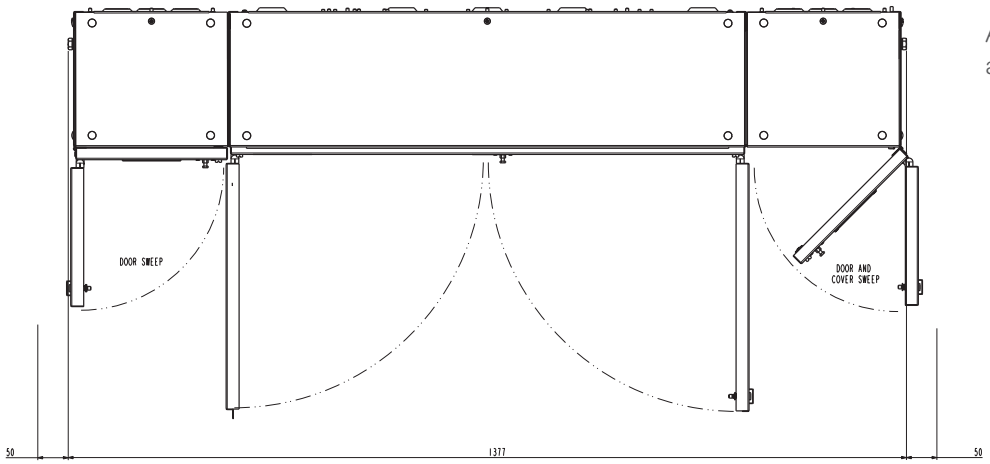
Style E 800A Panelboard

All dimensions are in mm

The side extensions with metering are dimensionally the same as standard 250mm side extensions.



1360

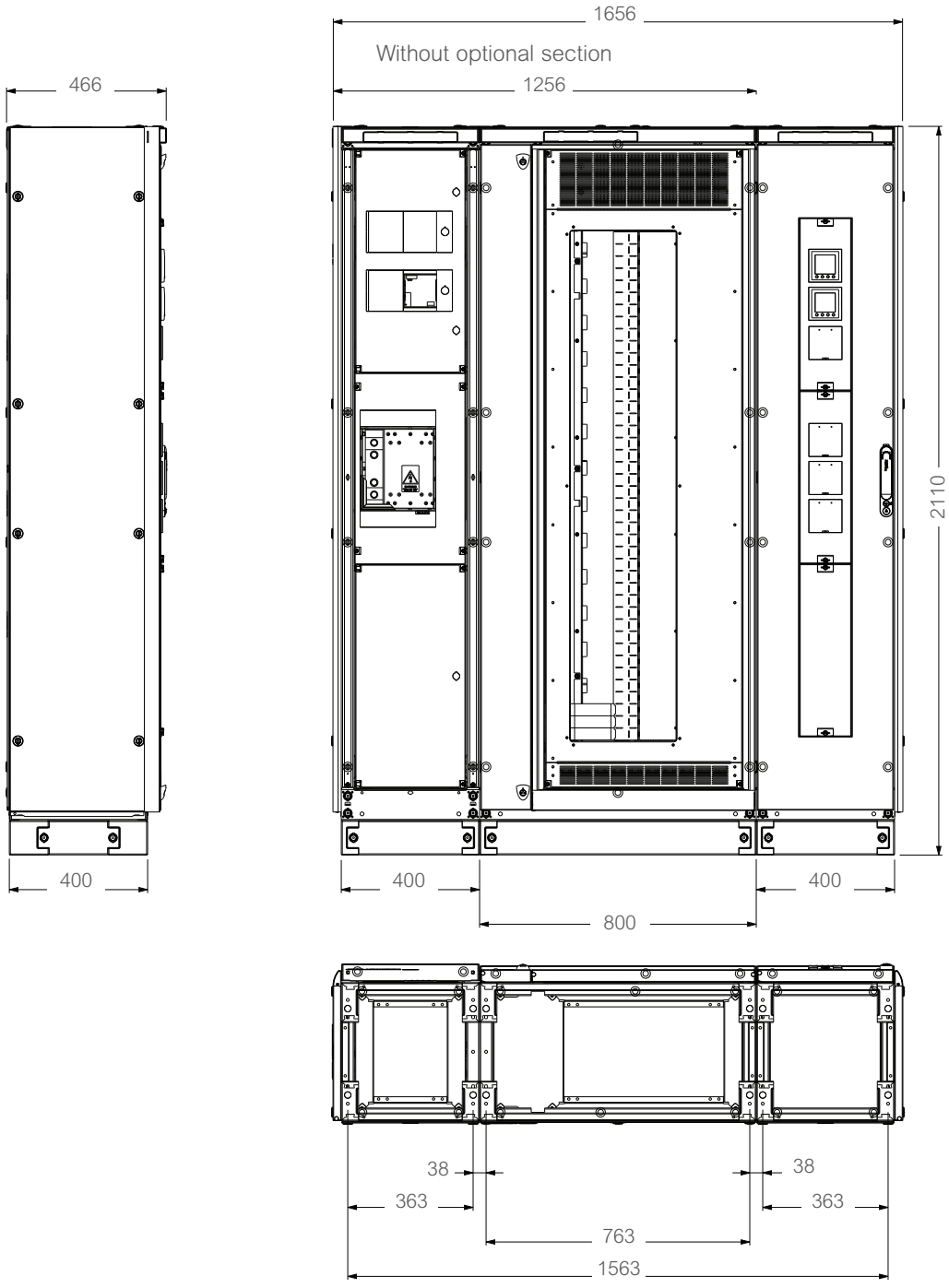


1377

All apertures are 92mmsq. to accept standard 96 x 96 meters.

Style G 1600A Panelboard

All dimensions are in mm



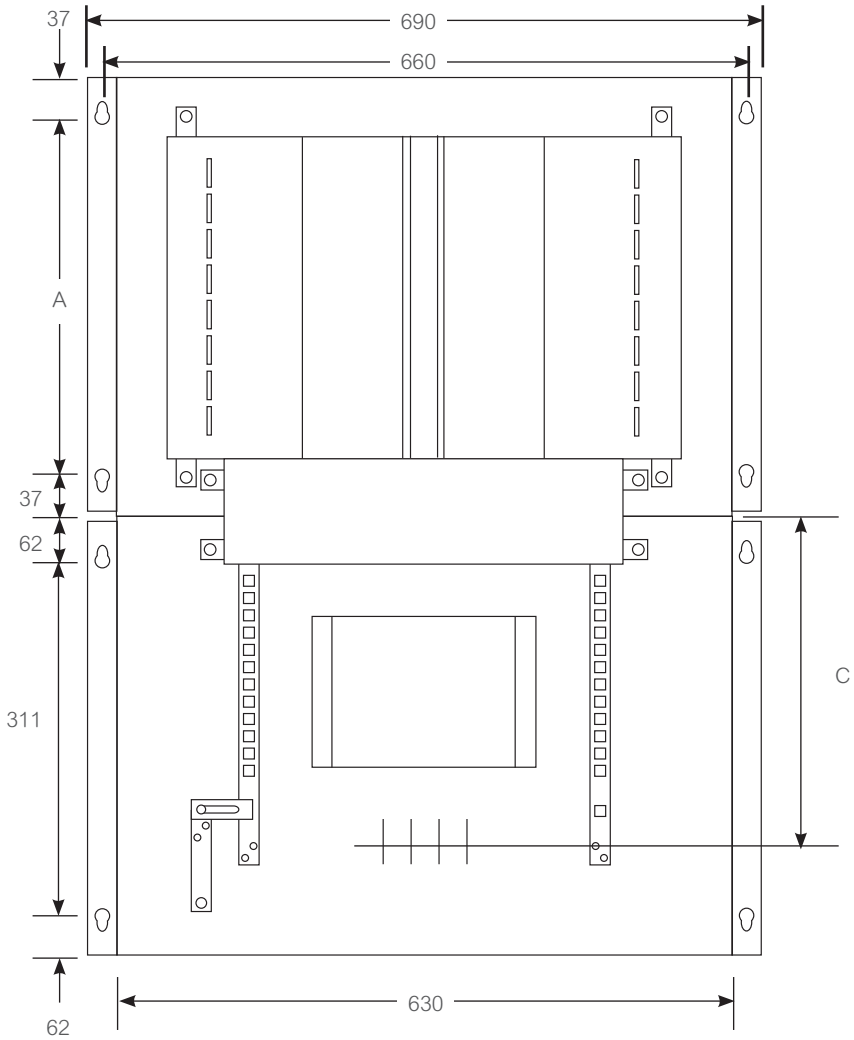
PowerPact 4 pan assembly and incoming MCCB

All dimensions are in mm

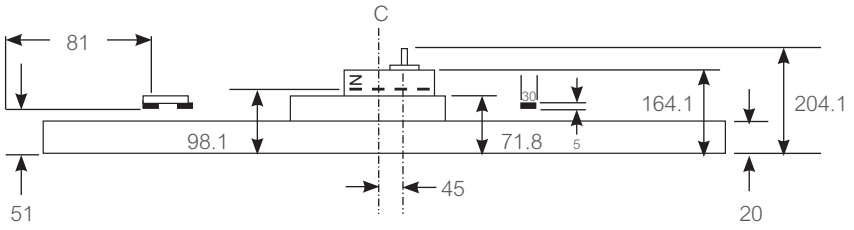
Reference	A
6 way	346
12 way	661
18 way	976
24 way	1291
30 way	1606

Reference	C
NS800	475
NSX630	330
NSX250	228

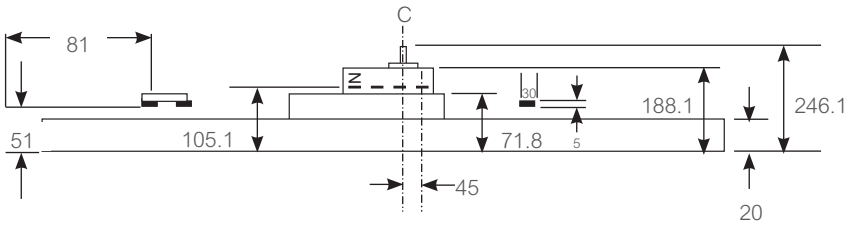
Dimension C = centre line of incoming breaker terminals (plan view).



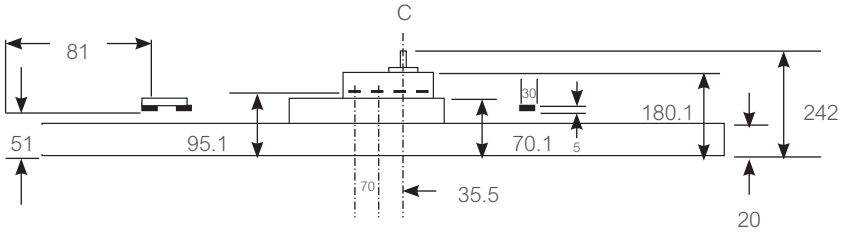
NSX250 incoming MCCB connections



NSX630 incoming MCCB connections



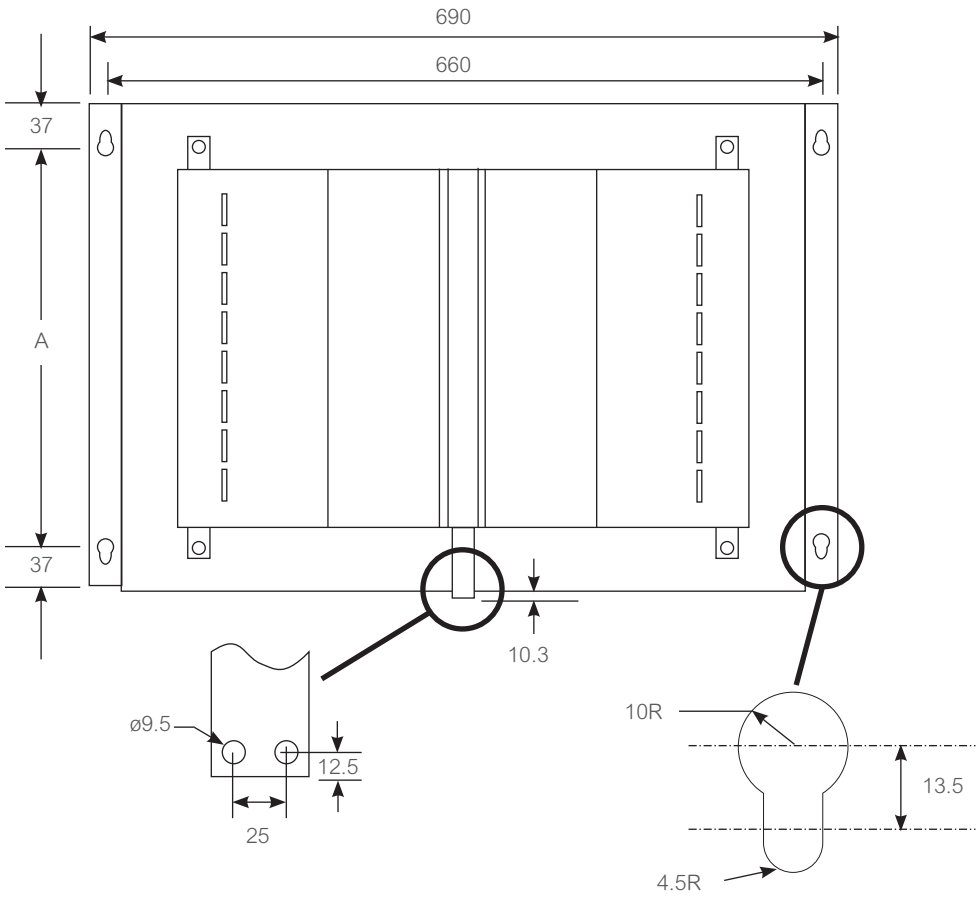
NS800 incoming MCCB connections



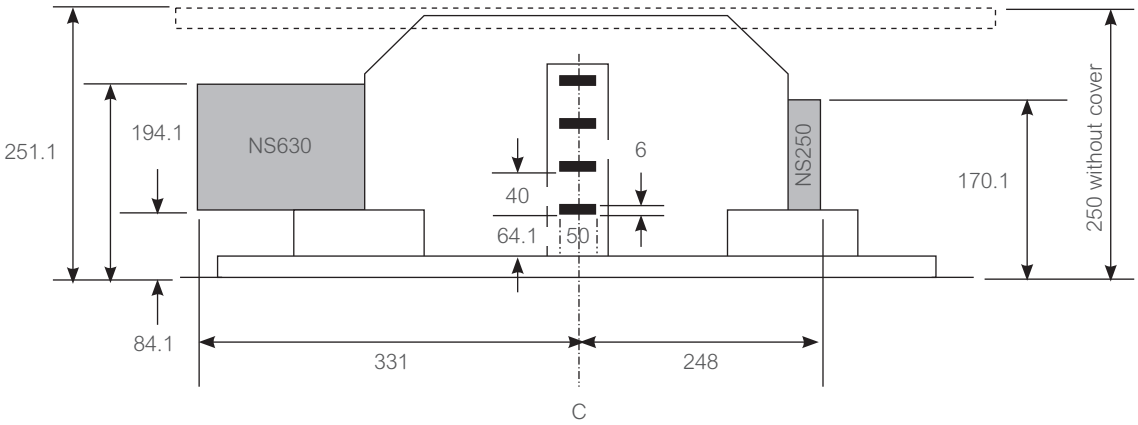
PowerPact 4 outgoing pan assembly (630A only)

All dimensions are in mm

Reference	A
6 way	346
12 way	661
18 way	976
24 way	1291
30 way	1606



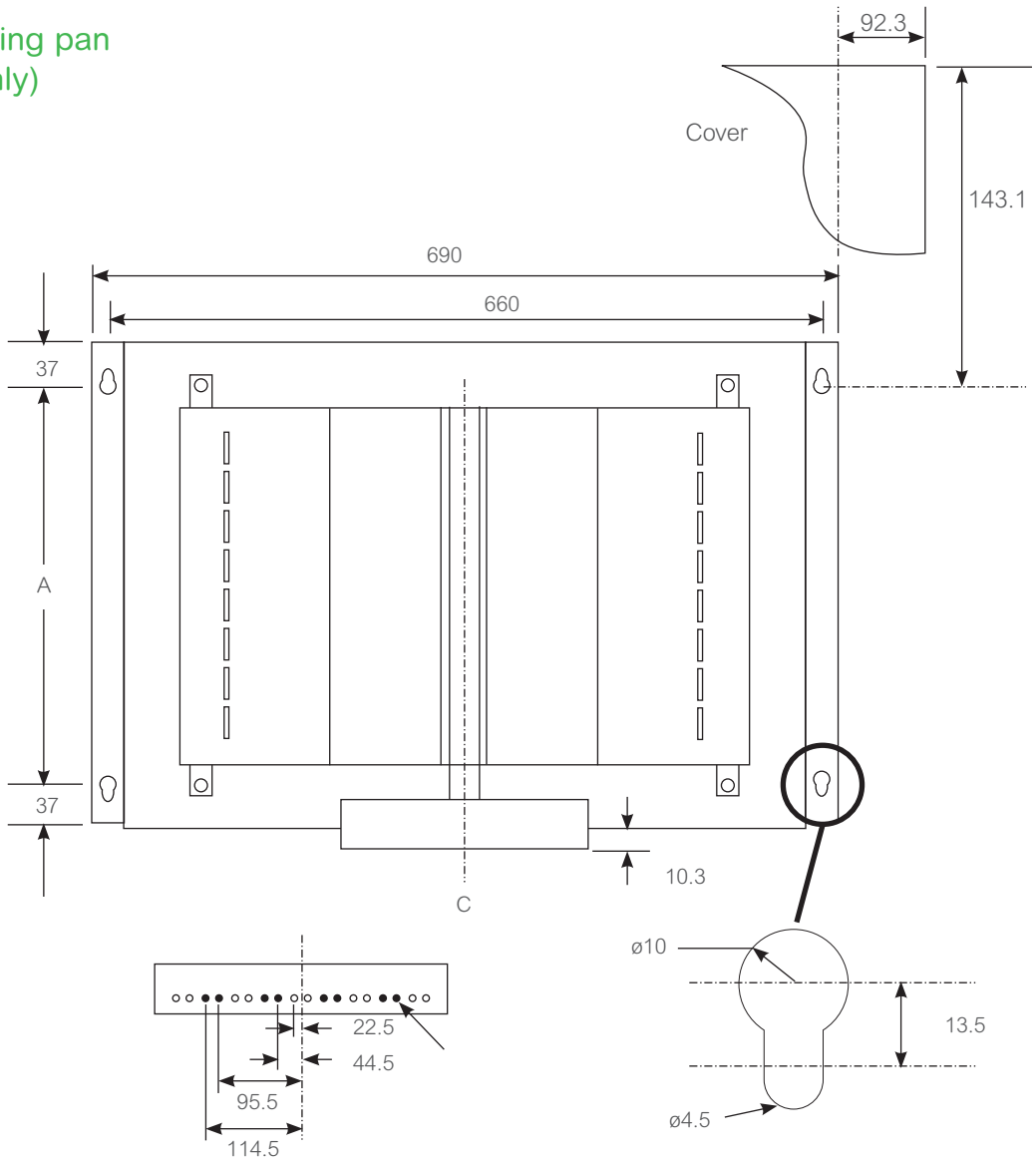
Incoming busbar connections direct to outgoing pan assembly



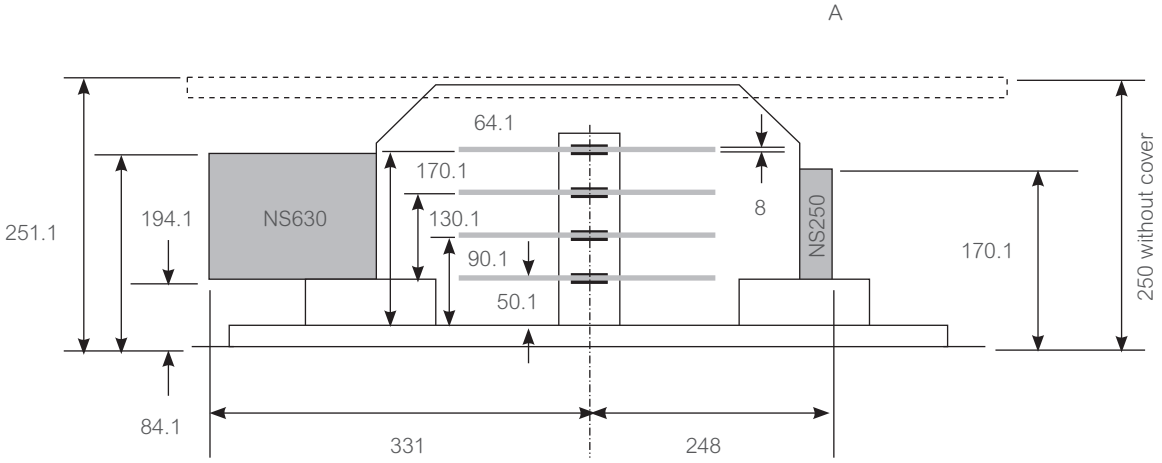
PowerPact 4 outgoing pan assembly (800A only)

All dimensions are in mm

Reference	A
6 way	346
12 way	661
18 way	976
24 way	1291
30 way	1606



Incoming busbar connections direct to outgoing pan assembly




Life Is On



Step 1: Select your required powerboard

Description	Number of ways (Including incomer)	Single pole terminal connections	Reference
250A 4 way powerboard	3P/4P incomer + 3 TP Ways	12	MG25C2
250A 5 way powerboard	3P/4P incomer + 4 TP Ways	12	MG25C4
250A 4 way metered powerboard, includes 4 meter slots	3P/4P incomer + 3 TP Ways	12	MG25C2M
250A 5 way metered powerboard, includes 4 meter slots	3P/4P incomer + 4 TP Ways	12	MG25C4M



PP41003X

Step 2: Select your incoming device

Current rating	Number of poles	Reference
MCCB		
100A	3	PP41003X
160A	3	PP41603X
250A	3	PP42503X
100A	4	PP41004X
160A	4	PP41604X
250A	4	PP42504X
Switch disconnector		
100A	3	PP41003NAX
160A	3	PP41603NAX
250A	3	PP42503NAX
100A	4	PP41004NAX
160A	4	PP41604NAX
250A	4	PP42504NAX
Direct connection		
250A	3	PP42503LUG
250A	4	PP42504LUG

Protection must be provided upstream by a suitably rated breaker.



Step 1: Select your required powerboard

Description	Number of ways	Single pole terminal connections	Reference
250A NSXm powerboard	6 TP Ways	18	PP4NB26SM **
250A NSXm powerboard	8 TP Ways	24	PP4NB28SM **
250A NSXm powerboard	12 TP Ways	36	PP4NB212SM **

**Launching 2025

Step 2: Select your incoming device



Triple pole

	Description	Reference
Switch		
160A	NSX160NA 160A 3P Switch Disconnecter	C163160S
250A	NSX250NA 250A 3P Switch Disconnecter	C253250S
MCCB		
200A	NSX250F 3P 36kA Frame	C25F3
	NSX250 200A 3P TMD TU	C253TM200
250A	NSX250F 3P 36kA Frame	C25F3
	NSX250 250A 3P TMD TU	C253TM250
Micrologic		
250A Frame	NSX250F 3P 36kA Frame	C25F3
5.2E Trip	NSX250 250A 3P ML 5.2 E TU	C2535E250

Four pole

	Description	Reference
Switch		
160A	NSX160NA 160A 4P Switch Disconnector	C164160S
250A	NSX250NA 250A 4P Switch Disconnector	C254250S
MCCB		
200A	NSX250F 4P 36kA Frame	C25F4
	NSX250 200A 4P TMD TU	C254TM200
250A	NSX250F 4P 36kA Frame	C25F4
	NSX250 250A 4P TMD TU	C254TM250
Micrologic		
250A Frame	NSX250F 4P 36kA Frame	C25F4
5.2E Trip	NSX250 250A 4P ML 5.2 E TU	C2545E250

Step 3: Select your outgoing device

Single pole or triple pole devices available for Style B

Single pole

	Description	Reference
16A	NSXm PP4 16A 1P TMD	PP41P016
20A	NSXm PP4 20A 1P TMD	PP41P020
25A	NSXm PP4 25A 1P TMD	PP41P025
30A	NSXm PP4 30A 1P TMD	PP41P030
50A	NSXm PP4 50A 1P TMD	PP41P050
63A	NSXm PP4 63A 1P TMD	PP41P063
80A	NSXm PP4 80A 1P TMD	PP41P080
100A	NSXm PP4 100A 1P TMD	PP41P100
125A	NSXm PP4 125A 1P TMD	PP41P125

Triple Pole

	Description	Reference
16A	NSXm 3P 25kA TMD 16A	C11B3TM016L
25A	NSXm 3P 25kA TMD 25A	C11B3TM025L
32A	NSXm 3P 25kA TMD 32A	C11B3TM032L
40A	NSXm 3P 25kA TMD 40A	C11B3TM040L
50A	NSXm 3P 25kA TMD 50A	C11B3TM050L
63A	NSXm 3P 25kA TMD 63A	C11B3TM063L
80A	NSXm 3P 25kA TMD 80A	C11B3TM080L
100A	NSXm 3P 25kA TMD 100A	C11B3TM100L
125A	NSXm 3P 25kA TMD 125A	C12B3TM125L
160A	NSXm 3P 25kA TMD 160A	C12B3TM160L



Step 1: Select your required panelboard

Description	Number of ways (Including 3P incomer)	Single pole terminal connections	Reference
250A 5 way panelboard	5 TP Ways	15	MG2C5
250A 7 way panelboard	7 TP Ways	21	MG2C7
250A 9 way panelboard	9 TP Ways	27	MG2C9
250A 13 way panelboard	13 TP Ways	39	MG2C13



PP41003X

Step 2: Select your incoming device

Current rating	Number of poles	Reference
MCCB		
100A	3	PP41003X
160A	3	PP41603X
250A	3	PP42503X
100A	4	PP41004X
160A	4	PP41604X
250A	4	PP42504X
Switch disconnector		
100A	3	PP41003NAX
160A	3	PP41603NAX
250A	3	PP42503NAX
100A	4	PP41004NAX
160A	4	PP41604NAX
250A	4	PP42504NAX
*Direct connection		
250A	3	PP42503LUG
250A	4	PP42504LUG

*Protection must be provided upstream by a suitably rated breaker.



Step 1: Select your required panelboard

Description	Number of ways (Number of modules available including 3P/4P incomer)	Single pole terminal connections	Reference
630A 6 way panelboard	6 TP Ways	11	MG6C6
630A 12 way panelboard	12 TP Ways	17	MG6C12
630A 18 way panelboard	18 TP Ways	23	MG6C18



PP41003X

Step 2: Select your incoming device

Current rating	Number of poles	Bottom entry	Top entry
MCCB			
100A	3	PP41003X	
160A	3	PP41603X	PP41603TX
250A	3	PP42503X	PP42503TX
400A	3	PP44003X	PP44003TX
630A	3	PP46303X	PP46303TX
100A	4	PP41004X	
160A	4	PP41604X	PP41604TX
250A	4	PP42504X	PP42504TX
400A	4	PP44004X	PP44004TX
630A	4	PP46304X	PP46304TX
Switch disconnector			
100A	3	PP41003NAX	
160A	3	PP41603NAX	PP41603NATX
250A	3	PP42503NAX	PP42503NATX
400A	3	PP44003NAX	PP44003NATX
630A	3	PP46303NAX	PP46303NATX
100A	4	PP41004NAX	
160A	4	PP41604NAX	PP41604NATX
250A	4	PP42504NAX	PP42504NATX
400A	4	PP44004NAX	PP44004NATX
630A	4	PP46304NAX	PP46304NATX
*Direct connection			
250A	3		PP42503LUG
250A	4		PP42504LUG
630A	4		MGPCIN

*Protection must be provided upstream by a suitably rated breaker.



Step 1: Select your required panelboard

Description	Number of ways (Number of modules available including 3P/4P incomer)	Single pole terminal connections	Reference
Bottom Entry			
800A 6 way panelboard	6 TP Ways	11	MG8C6
800A 12 way panelboard	12 TP Ways	17	MG8C12
800A 18 way panelboard	18 TP Ways	23	MG8C18
Top Entry			
800A 6 way panelboard	6 TP Ways	11	MG8C6T
800A 12 way panelboard	12 TP Ways	17	MG8C12T
800A 18 way panelboard	18 TP Ways	23	MG8C18T



Step 2: Select your incoming device

Current rating	Number of poles	Bottom entry / Top entry
MCCB - Micrologic 5.0		
800A	3	C080N350FM + LV433638 + 33646
800A	4	C080N450FM + LV433638 + 33646
Switch disconnector		
800A	3	C080S3NAFM + LV433638 + 33646
800A	4	C080S4NAFM + LV433639 + 33646
Micrologic 2.0		
800A	3P	C080N320FM + LV433638 + 33646
800A	4P	C080N420FM + LV433639 + 33646



Step 1: Select your required panelboard

Description	Number of ways (Outgoing only)	Single pole terminal connections	Reference
Bottom Entry			
1600A 14 way panelboard	14 TP Ways	Copper bar with 57 x 8.5 mm holes	PP416C14
1600A Additional +14 TP Way	28 TP Ways		PP416CE14
Top Entry			
1600A 14 way panelboard	14 TP Ways	Copper bar with 57 x 8.5 mm holes	PP416C14T
1600A Additional +14 TP Way	28 TP Ways		PP416CE14T



Step 2: Select your incoming device

Current rating	Number of poles	Bottom entry / Top entry
MCCB - Micrologic 5.0		
1250 1600	3	C125N350FM C160N350FM
1250 1600	4	C125N450FM C160N450FM
Switch disconnector		
1250 1600	3	C125S3NAFM C160S3NAFM
1250 1600	4	C125S4NAFM C160S4NAFM
Micrologic 2.0		
1250A 1600A	3	C125N320FM C160N320FM
1250A 1600A	4	C125N420FM C160N420FM

Step 3: Select your outgoing devices



PP40161L1



PP40162L1N



PP40162L12

Rating	Module width (35mm)	Reference		
Single pole				
Breaking capacity 25kA at 230V				
		L1	L2	L3
16	1	PP40161L1	PP40161L2	PP40161L3
25	1	PP40251L1	PP40251L2	PP40251L3
30	1	PP40301L1	PP40301L2	PP40301L3
40	1	PP40401L1	PP40401L2	PP40401L3
50	1	PP40501L1	PP40501L2	PP40501L3
63	1	PP40631L1	PP40631L2	PP40631L3
80	1	PP40801L1	PP40801L2	PP40801L3
100	1	PP41001L1	PP41001L2	PP41001L3
125	1	PP41251L1	PP41251L2	PP41251L3
160	1	PP41601L1	PP41601L2	PP41601L3
Two pole phase to neutral				
Breaking capacity 25kA at 230V				
		L1 - N	L2 - N	L3 - N
16	2	PP40162L1N	PP40162L2N	PP40162L3N
25	2	PP40252L1N	PP40252L2N	PP40252L3N
30	2	PP40302L1N	PP40302L2N	PP40302L3N
40	2	PP40402L1N	PP40402L2N	PP40402L3N
63	2	PP40632L1N	PP40632L2N	PP40632L3N
80	2	PP40802L1N	PP40802L2N	PP40802L3N
100	2	PP41002L1N	PP41002L2N	PP41002L3N
125	2	PP41252L1N	PP41252L2N	PP41252L3N
160	2	PP41602L1N	PP41602L2N	PP41602L3N
Two pole phase to phase				
Breaking capacity 25kA at 415V				
		L1 - L2	L2 - L3	L3 - L1
16	2	PP40162L12	PP40162L23	PP40162L31
25	2	PP40252L12	PP40252L23	PP40252L31
30	2	PP40302L12	PP40302L23	PP40302L31
40	2	PP40402L12	PP40402L23	PP40402L31
50	2	PP40502L12	PP40502L23	PP40502L31
63	2	PP40632L12	PP40632L23	PP40632L31
80	2	PP40802L12	PP40802L23	PP40802L31
100	2	PP41002L12	PP41002L23	PP41002L31
125	2	PP41252L12	PP41252L23	PP41252L31
160	2	PP41602L12	PP41602L23	PP41602L31



PP40163X



PP41004X

Rating	Module	Reference
	width (35mm)	
Three pole		
Breaking capacity 36kA at 415V		3 phase
16	3	PP40163X
25	3	PP40253X
32	3	PP40323X
40	3	PP40403X
50	3	PP40503X
63	3	PP40633X
80	3	PP40803X
100	3	PP41003X
125	3	PP41253X
160	3	PP41603X
200	3	PP42003X
250	3	PP42503X
400	4 (1) (2)	PP44003X
630	4 (1) (2)	PP46303X
Four pole		
Breaking capacity 36kA at 415V		3 phase + neutral
16	4	PP40164X
25	4	PP40254X
32	4	PP40324X
40	4	PP40404X
50	4	PP40504X
63	4	PP40634X
80	4	PP40804X
100	4	PP41004X
125	4	PP41254X
160	4	PP41604X
200	4	PP42004X
250	4	PP42504X
400	6 (1) (2)	PP44004X One PP4BB25 also required
630	6 (1) (2)	PP46303X One PP4BB25 also required
Disconnectable neutral links		
250	1	PP4250NL
630	2	PP4630NL One PP4BP25 also required

(1) If fitted in 630A or 800A panelboard, a shrouding kit and side extension box is required. See pages 181 and 182 if adding a side extension box to a 800A Style E board, a corner piece is also required.

(2) Breaking capacity 50kA at 415V.



PP40403X36ML2



PP40404X36ML5

Description	Reference
Three pole	
PP4 100A 3P 36kA NSX FRAME ONLY	PP41003XFO36K
PP4 100A 3P 50kA NSX FRAME ONLY	PP41003XFO50K
PP4 160A 3P 36kA NSX FRAME ONLY	PP41603XFO36K
PP4 160A 3P 50kA NSX FRAME ONLY	PP41603XFO50K
PP4 350A 3P 36kA NSX FRAME ONLY	PP42503XFO36K
PP4 250A 3P 50kA NSX FRAME ONLY	PP42503XFO50K
PP4 400A 3P 50kA NSX FRAME ONLY	PP44003XFO50K
PP4 630A 3P 50kA NSX FRAME ONLY	PP46303XFO50K
Four pole	
PP4 100A 4P 36kA NSX FRAME ONLY	PP41004XFO36K
PP4 100A 4P 50kA NSX FRAME ONLY	PP41004XFO50K
PP4 160A 4P 36kA NSX FRAME ONLY	PP41604XFO36K
PP4 160A 4P 50kA NSX FRAME ONLY	PP41604XFO50K
PP4 250A 4P 36kA NSX FRAME ONLY	PP42504XFO36K
PP4 250A 4P 50kA NSX FRAME ONLY	PP42504XFO50K
PP4 400A 4P 50kA NSX FRAME ONLY	PP44004XFO50K
PP4 630A 4P 50kA NSX FRAME ONLY	PP46304XFO50K
Frame-only devices require an additional trip unit to be fitted	
Three pole MicroLogic 2.2 trip unit	
PP4 MCCB 3P 40A (ML2.2)	PP40403X36ML2
PP4 MCCB 3P 100A (ML2.2)	PP41003X36ML2
PP4 MCCB 3P 160A (ML2.2)	PP41603X36ML2
PP4 MCCB 3P 250A (ML2.2)	PP42503X36ML2
Three pole MicroLogic 5.2/5.3 trip unit	
PP4 MCCB 3P 40A (ML5.2)	PP40403X36ML5
PP4 MCCB 3P 100A (ML5.2)	PP41003X36ML5
PP4 MCCB 3P 160A (ML5.2)	PP41603X36ML5
PP4 MCCB 3P 250A (ML5.2)	PP42503X36ML5
PP4 MCCB 3P 400A (ML5.3)	PP44003X50ML5
PP4 MCCB 3P 630A (ML5.3)	PP46303X50ML5
Four pole MicroLogic 2.2 trip unit	
PP4 MCCB 4P 40A (ML2.2)	PP40404X36ML2
PP4 MCCB 4P 100A (ML2.2)	PP41004X36ML2
PP4 MCCB 4P 160A (ML2.2)	PP41604X36ML2
PP4 MCCB 4P 250A (ML2.2)	PP42504X36ML2
Four pole MicroLogic 5.2/5.3 trip unit	
PP4 MCCB 4P 40A (ML5.2)	PP40404X36ML5
PP4 MCCB 4P 100A (ML5.2)	PP41004X36ML5
PP4 MCCB 4P 160A (ML5.2)	PP41604X36ML5
PP4 MCCB 4P 250A (ML5.2)	PP42504X36ML5
PP4 MCCB 4P 400A (ML5.3)	PP44004X50ML5
PP4 MCCB 4P 630A (ML5.3)	PP46304X50ML5

For additional trip unit options, please see catalogue reference LVPED221001EN.
https://www.se.com/uk/en/download/document/LVPED221001EN/

Step 4: Select your optional incoming metering solution

Panelboard style		Description	Meter included?	Reference
Style A		See step 1 for Style A powerboard with metering options	N	N/A
Style B		Incoming & outgoing 4 way Meter Extension Kit inc. 4 blanking plates	N	PP4NBMETEXTKIT **Launching 2025
Style C		Incoming & outgoing 5 way extension box inc. 4 blanking plates	N	MG6CEXM
Style D	400A incomer	Incoming extension box inc. 1 x METSEPM5110 + CT's as standard to suit incomer selection	Y	MG64M
	400A incomer	Incoming extension box without meter, includes looms	N	MG64MX
	630A incomer	Incoming extension box inc. 1 x METSEPM5110 + CT's as standard to suit incomer selection	Y	MG66M
Style E		Incoming extension box inc. 1 x METSEPM5110 + CT's as standard to suit incomer selection	Y	MG88M
		Incoming extension box without meter, includes looms	N	MG88MX
Style G		Incoming meter 1 x METSEPM5110 fitted as standard in the panelboard	Y	

**Launching 2025, only compatible with new board references with suffix 'SM'.



MG64M, Style D



MG6CEXM Style C

Step 5: Select your optional outgoing metering solution

*When the board is inverted for top entry cables, the side extensions fit on the other side of the board.

All part references on this page do not include meters, these must be purchased separately,

All metering extensions include wiring looms.

Metering cut outs in the PowerPact 4 range measure 96 x 96mm



PP416CEM4, Style G



MGPCM12R, MGPCM6R, Style D&E

Panelboard style	Description	Reference
Style A	See step 1 for Style A powerboard with metering options	
Style B	Incoming & outgoing 4-way meter extension kit inc. 4 blanking plates for meter cut outs	PP4NBMETEXTKIT **Launching 2025
Style C	Incoming & outgoing 5 way extension box inc. 4 blanking plates. More than one extension can be added if more than 5 meters are required.	MG6CEXM
Style D & E	Side meter extension left hand side for 6 way panelboard 3 meter positions	MGPCM6L*
	Side meter extension right hand side for 6 way panelboard 7 meter positions	MGPCM6R*
	Side meter extension left hand side for 12 way panelboard 6 meter positions	MGPCM12L*
	Side meter extension right hand side for 12 way panelboard 9 meter positions	MGPCM12R*
	Side meter extension left hand side for 18 way panelboard 9 meter positions	MGPCM18L*
	Side meter extension right hand side for 18 way panelboard 11 meter positions	MGPCM18R*
Style G	14 way 1600A side metering extension	PP416CEM4***

*** 6 meter positions as standard, can have a total of 9 meter positions when LVS03911 panel meter face plate is also used.

For Style G, maximum of one side metering extension on the right, and one side metering extension on the left to be used.

**Launching 2025, only compatible with new board references with suffix ‘SM’.



Step 5.1: Select metering CT for each MCCB to be monitored

Metering facility

- 3 phase currect transformer module with voltage measurement outputs
- Fits directly on the terminals of the breaker
- The voltage measurement outputs have inbuilt protection with automatic reset
- Suitable for use with the PowerLogic range of meters

Breaker size	CT ratio	VA output	Class at VA output	Reference	
				3-pole	4 Pole
100	125/5	1.1	1.0	LV429461	LV429462
160	150/5	1.1	1.0	LV430561	LV430562
250	250/5	1.1	0.5	LV431569	LV431570
400	400/5	2.0	0.5	LV432653	LV432654
630	600/5	2.0	0.5	LV432861	LV432862

Internal profile type	Cables (mm)	Rating Ip/5A (A)	Reference	Dimensions W x H x D (mm)
	21	40	METSECT5CC004	44 x 65 x 30
		50	METSECT5CC005	
		60	METSECT5CC006	
		75	METSECT5CC008	
		100	METSECT5CC010	
		125	METSECT5CC013	
		150	METSECT5CC015	
		200	METSECT5CC020	
		250	METSECT5CC025	

Fastening mode

- Adapter for DIN rails
- Mounting



Accessories Cylinder

METSECT5CYL1

Sealable cover

Included



Step 5.2: Select PowerLogic meters for each circuit to be measured

Reference	
METSEPM5100	PM5100 Meter, without communication, up to 15h, 1DO 33 alarms
METSEPM5110	PM5110 Meter, modbus, up to 15h, 1DO 33 alarms
METSEPM5111	PM5111 Meter, modbus, up to 15h, 1DO 33 alarms, MID
METSEPM5310	Basic metering with up to 31st individual harmonic measurement, 256KB data logging, two digital inputs, two digital output and one RS485 port for Modbus communication
METSEPM5320	Basic metering with up to 31st individual harmonic measurement, 256KB data logging, two digital inputs, two digital output and one Ethernet port for Modbus TCP/IP communication
METSEPM5331	Same function as PM5330, plus MID certified
METSEPM5340	Same function as PM5320, plus two relay outputs
METSEPM5341	Same function as PM5340, plus MID certified
METSEPM5560	Basic metering with up to 63rd individual harmonic measurement, 1.1MB data logging, four digital inputs, two digital outputs, one RS485 port for Modbus and two Ethernet port for Modbus TCP/IP communications, embedded webpages
METSEPM5561	Same function as PM5560, plus MID certified
METSEPM5563	Same function as PM5560, but DIN rail mounted without display

Step 5.3: Select Metering Accessories, PowerTag, Panelserver



LVS03908

Reference	
MGPCML	Cable loom - 2m for metering 3P/4P load
LVS03908	Meter blanks 96mmx96mm
LVS03911	Metering cut-out front plate (Style G only)
PP4NBCABKIT* *Launching 2025	Style B 250A Powerboard NSXm Meter cable kit
LV434020	250A 3P PowerTag Energy Monoconnect
LV434021	250A 3P+N PowerTag Energy Monoconnect
LV434022	630A 3P PowerTag Energy Monoconnect
LV434023	630A 3P+N PowerTag Energy Monoconnect
PAS400	Panel Server Entry 110-277 V AC/DC
PAS600	Panel Server Universal with 110-277 AC/DC power supply
PAS800	Panel Server Advanced with 110-277 AC/DC power supply

(For more information on PowerTag and Panel Servers please see catalogue PLSED310126EN.)

Step 6: Select your optional surge protection



A9L16482

For 250A, 400A and 630A panelboards:

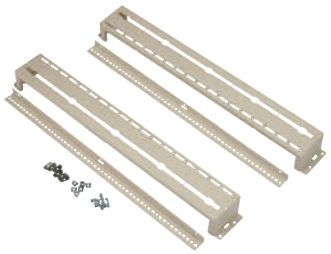
Surge protection where metering is also required on the panelboard and a metering extension enclosure is added:	
A9L16482	iPRD1 3PN SPD
PP41004X	100A 4P 36kA NSX MCCB
LV429518	4P long terminal shield
MGPMW	Viewing window
Surge protection where metering is NOT required on the panelboard:	
A9L16482	iPRD1 3PN SPD
PP41004X	100A 4P 36kA NSX MCCB
LV429518	4P long terminal shield
14599	4 SP way G9 IP30 steel enclosure

For 800A and 1600A panelboards:

Surge protection where metering is also required on the panelboard and a metering extension enclosure is added:	
A9L16482	iPRD 3PN SPD
PP41004XFO50K	100A 4P 50kA NSX Frame Only
C104TM100	NSX100-250 4P4d TMD 100A Trip unit
LV429518	4P long terminal shield
MGPMW	Viewing window
Surge protection where metering is NOT required on the panelboard:	
A9L16482	iPRD1 3PN SPD
PP41004XFO50K	100A 4P 50kA NSX Frame Only
C104TM100	NSX100-250 4PDd TMD 100A Trip unit unit
LV429518	4P long terminal shield
14599	4 SP way G9 IP30 steel enclosure

For 1600A, a surge device can be mounted in the metering extension if there is a spare metering cut out.

Surge Protection option for Style B 250A powerboard	
PP4NBSPDKIT* *Launching 2025	Style B NSXm SPD Kit



Step 7: Select your optional accessories

Shrouding kit (400/630A and 800A panelboards only)

Provides additional support for the device and shrouding for the front cover. One shrouding kit must be used per side when fitting either an outgoing 400/630A MCCB and/or earth leakage protection, and/or bolt on current transformers. In addition to the shrouding kit, a 25mm filler piece is required when 4-pole 400A or 630A circuit breakers are fitted on the outgoing pan assembly:

Panel Board Style	Description	Part number
Style D & Style E ONLY	6 way shrouding Kit	MGPCH6
	12 way shrouding Kit	MGPCH12
	18 way shrouding Kit	MGPCH18
	25mm filler piece blanking plate	PP4BP25

Accessories

Panel Board Style	Terminals	Part number
Style D & Style E ONLY	630A 6 Way Extra E&N	MG6ENK6
	630A 12 Way Extra E&N terminals	MG6ENK12
	630A 18 Way Extra E&N	MG6ENK18
	800A 6 Way Extra E&N	MG8ENK6
	800A 12 Way Extra E&N	MG8ENK12
	800A 18 Way Extra E&N	MG8ENK18

Pan assembly style D & style E only

630A Pan assembly 6 way	MG6PAC6
630A Pan assembly 12 way	MG6PAC12
630A Pan assembly 18 way	MG6PAC18
630A Pan assembly 24 way	MG6PAC24
630A Pan assembly 30 way	MG6PAC30
630A Pan assembly incoming	MG6PACN
800A Pan assembly 6 way	MG8PAC6
800A Pan assembly 12 way	MG8PAC12
800A Pan assembly 18 way	MG8PAC18
800A Pan assembly 24 way	MG8PAC24
800A Pan assembly 30 way	MG8PAC30

Earth & neutral bolt kits

630A Earth & neutral bolt kit	MGP6ENBK
800A Earth & neutral bolt kit	MGP8ENBK



MGPXC206

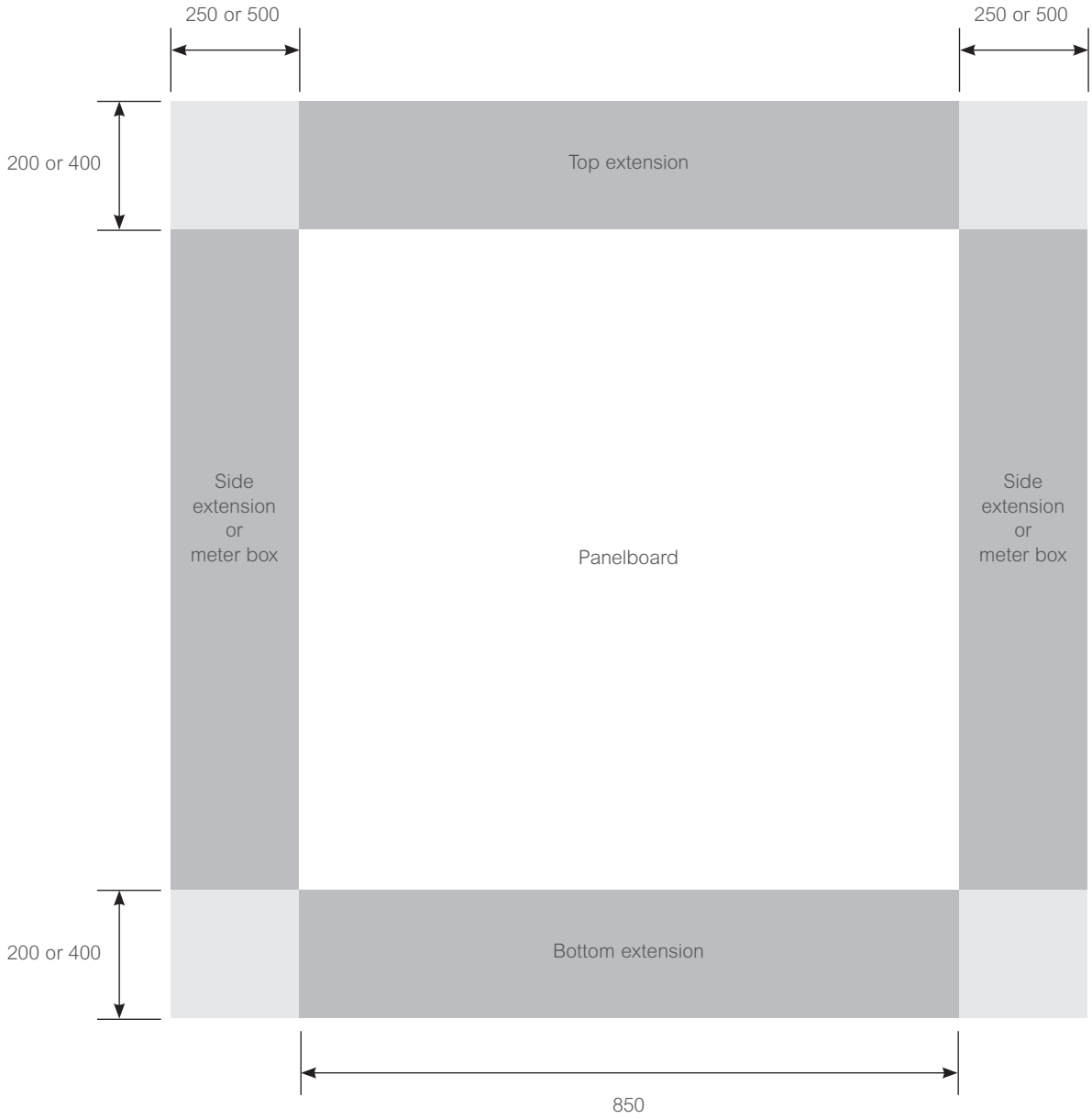
Extension enclosures		
Panelboard style	**Description**	**Reference**
Top/bottom extension enclosures:		
Style A	N/A	N/A
Style B	Top/Bottom extension 6,8,12 TP way powerboard W650	PP4NBCABEXKIT * Launching 2025
Style C	Top/Bottom extension 5,7,9,13 TP way powerboard H200	MG6CEX
Style D	Top/Bottom extension 6,12,18 way panelboard H200	MG6CEX
Style E	Top/Bottom extension 6,12,18 way panelboard H200	MG6CEX
Style G	N/A	
More than one extension can be added if required.		
Side extension enclosures:		
Style A	Side extension for 3&4 TP way powerboard H650	MG25EXC
Style B	N/A	N/A
Style C	N/A	N/A
Style D & Style E	Side extension for 6 way panelboard W250	MGPXC206
	Side extension for 12 way panelboard W250	MGPXC212
	Side extension for 18 way panelboard W250	MGPXC218
	Side extension for 6 way panelboard W500	MGPXC506
	Side extension for 12 way panelboard W500	MGPXC512
	Side extension for 18 way panelboard W500	MGPXC518
Style G	Side extension for 14 way panelboard W400	PP416CEX4
Side extensions are recommended when 400A and 630A outgoing devices are fitted or when outgoing devices have earth fault protection.		

For Style D & E panelboards only - When using a side extension and a top/bottom extension, corner units are required for squaring off the panelboard:



Panelboard style	Description	Reference
Coner Units:		
Style D & E	Corner unit W250 x H200	MGPC2025
	Corner unit W500 x H200	MGPC2050
	Corner unit W250 x H400	MGPC4025
	Corner unit W500 x H400	MGPC4050

All dimensions are in mm





Residual current protection modules

Using 4-pole residual current add-on modules (Vigi block) for incoming or outgoing ways (requires a 4-pole MCCB)

Frame rating	Current rating MCCB	Earth leakage tripping current options (A)	Vigi module part number
Up to 160A	0.03 - 0.3 - 1 - 3 - 10*	NSX100/160	LV429489
200 - 250A	0.03 - 0.3 - 1 - 3 - 10*	NSX250	LV429493
400 - 630A	0.03 - 0.3 - 1 - 3 - 30*	NSX400/630	LV432465

*Time delay settings (ms) 0 - 60 - 150 and 310 (30mA - instantaneous only).
(i) For combinations of items of RCD's, metering and remote metering please contact us for further information.

Rotary handles with inbuilt padlocking facilities

Current rating	Part number Black	Red/yellow
Up to 250A	LV429337T	LV429339T
400/630A	LV432597T	LV432599T



Toggle padlocking attachments Locking in OFF position

Current rating	Part number Removable	Fixed
250A	29370	LV429371T
630A	29370	LV432631
800A	44936	LV432631

Motor operator module

3-pole and 4-pole breakers up to 250A frame can be fitted with a motor operator mechanism (excluding 250A Style B Powerboards) allowing remote opening and closing of the circuit breaker.

Operating voltages		
50Hz	a.c.	220-240V
	d.c.	24-48V

Further options available - see NSX catalogue ref: LVPED221001EN



Auxiliary switch for 3 or 4 pole devices only

- For all MCCBs
- Used to indicate open, closed or tripped status
- SDE adaptor required for trip unit devices up to 250A TM or MA (to indicate trip on overcurrent). Two auxiliary switches will be needed to indicate open, closed and tripped status

	Reference
Auxiliary changeover switch	29450
SDE adaptor	LV429451



Voltage releases to fit all MCCBs for 3 or 4-pole devices only

AC 50/60Hz Voltage (V)	Part number Shunt trip (MX)	Undervoltage release (MN)
200/240	LV429387	LV429407
380/415	LV429388	LV429408

Other voltages available - refer to Compact NSX catalogue reference - LVPED221001EN



Terminal shields

Current rating (A)	Reference
Up to 160A single pole and 250A neutral link	LV438320
Up to 160A 2-pole	LV429320 x 2
Up to 250A 3-pole (single) long	LV429517
Up to 250A 4-pole (single) long	LV429518
Up to 400/630A 3-pole (single)	LV432593
Up to 400/630A 4-pole (single)	LV432594
For shielding a TP MCCB with Neutral link use the 4-pole terminal shield	



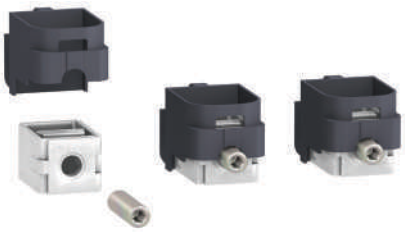
Single pole shrouding plates

PP4BP	PP4BP25
Single pole shrouding plates are required for each unoccupied outgoing way.	A 25mm shrouding plate is always required when 4-pole 400A or 630A circuit breakers are mounted on the outgoing pan assembly.



Blanking plates for Style B 250A powerboard

SEA9BP3	SEA9BP25N
3 Pole Front Cover Filler	Pack of 25 x 3 Pole Front Cover



Connection accessories

Bare cable connectors

Capacity	Breaker	Part number	
		Set of 3	Set of 4
1.5 - 95mm2	≥160	LV429242	LV429243
10 - 185mm2	≥250	LV429259	LV429260
35 - 300mm2	≥630	LV432479	LV432480
2 x 95 - 240mm2	≥630	LV432481	LV432482

For the full range of cable connections available, refer to NSX catalogue LVPED221001EN



Crimp cable lugs supplied with phase barriers (for use with NSX MCCBs and switch disconnectors)

	Breaker	Set of 3	Set of 4
120mm2 copper	≥250	LV429252	LV429256
150mm2 copper	≥250	LV429253	LV429257
185mm2 copper	≥250	LV429254	LV429258
240mm2 copper	≥630	LV432500	LV432501
300mm2 copper	≥630	LV432502	LV432503
150mm2 aluminium	≥250	LV429504	LV429505
185mm2 aluminium	≥250	LV429506	LV429507
240mm2 aluminium	≥630	LV432504	LV432505
300mm2 aluminium	≥630	LV432506	LV432507



Spreaders for incomers

Pole pitch (mm)	A	Quantity	Reference
45	250	Set of 3	LV431563
45	250	Set of 4	LV431564
52.5	630	Set of 3	LV432490
52.5	630	Set of 4	LV432491

Accessories for Style B 250A Powerboard

NSXm din rail kit	PP4NBDIN * Launching 2025

Extra/replacement items



MG6FCC12



MGPGPC8



MGPP4S007

Replacement items		
Door and cover assembly		Reference
250A powerboard Style A	9 way	MG25FCC2
	13 way	MG25FCC4
	9 way + metering	MG25FCC2M
	13 way + metering	MG25FCC4M
400/630A panelboard Style D	18 way	MG6FCC6
	36 way	MG6FCC12
	54 way	MG6FCC18
800A panelboard Style E	18 way	MG8FCC6
	36 way	MG8FCC12
	56 way	MG8FCC18
Gland plate for 400/630/800A panelboard		MGPGPC8
Door lock kit up to 800A		MGPP4S007
Door lock kit inc. handle	1600A Style G	LVS01219
Touch up paint RAL9003	Spray	LVS08962
	Brush	LVS08961
Adhesive drawing pocket	RAL9003	LVS08963
630A Style D 18 way neutral bar kit		MG6PANKIT
Pan Assembly front cover		Reference
400A/630A panelboard Style D	6 way	MG6PAFC6
	8 way	MG6PAFC12
	12 way	MG6PAFC18

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Schneider Electric

United Kingdom
Stafford Park 5,
Telford
Shropshire
TF3 3BL
Tel: 0330 587 8030 (local call rate)
www.se.com/uk

Ireland
Head office, Block A
Maynooth Business Campus
Maynooth, Co. Kildare
W23 Y7X0
Tel: 1800 83 23 60 (freephone)
www.se.com/ie

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