

In this overview, Schneider Electric presents all the Medium Voltage and Low Voltage components you need to build your Medium Voltage switchgear.

Contents

Medium Voltage switching devices



Protection, Metering and Feeder Automation



Accessories



Services



Electricity is getting more Digital & Sustainable, are you ready?

With the combined benefits of digitalisation, the Internet of Things and improved interoperability, there is significant potential for improvement in energy management.

Increased versatility enables faster adaptation to customer needs and rapid product configuration, while operational data analysis optimises operating conditions, predicts maintenance needs and enables better asset management.

As part of our commitment to sustainable and efficient energy, we also offer our partners innovative, compact and SF_e-free solutions. This is in line with our aim to help companies gain a competitive advantage through smarter switchgear without compromising the environment.

AirPacT SF6-free switch and disconnector



Decarbonize

Our offerings provide highly sustainable switchboards that promise longer durations of life.

The use of Pure Air technology eliminates the use of SF₆ gas, a known high potential Global Warminggas (ban of SF₆), is starting January 2026 in Europe. Additionally, we continually strive to increase equipment efficiency and longevity with groundbreaking innovations such as the use of composite mechanisms, thereby promoting operational life extension.

PowerLogic P7 A major step forward for protection relays



Connect and monitore

Given the pressing regulatory mandates and evolving customer needs, the need for highly efficient and durable installations has never been more significant.

We provide the solutions that are engineered to boost the efficiency and optimize the operation service life of these installations.

Constant information regarding the health of the power installation is crucial in extending its operational lifetime.

Our service also significantly reduces downtime and intervention periods by foreseeing and managing potential failures.

EvoPacT HVX A revolutionary circuit breaker



Partner for the future

The wheels of Energy Transformation are now set in motion and we are prepared to extend our fullest support to our partners in this endeavor. The winners in this transformation will undoubtedly be the ones that are prepared and adaptable.

We offer a multitude of supports to our partners, such as a thoroughly refreshed MV portfolio, unwavering focus on sustainability, and fostering of

Moreover, our Pure Air technology, alongside connected devices, grants our panel builder partners a significant competitive edge.

They are equipped to meet their customers' increasing demands for more efficient and sustainable installations.

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Longlife partner for your customer

Support your customers to face the challenges of running efficient and durable electrical installation

For your end-user in industrial, commercial or infrastructure buildings power failure is the worst scenario that can happen. Business comes to a standstill, production and employees are idle.

Be informed 24/7 on health of your customer power installation

With digital services, as our partner you can leverage the power of connected equipment to effectively monitor electrical installations 24/7. This advanced approach enables to be informed proactively about any abnormal wear and tear.

Additionally, it also offers insights into the anticipated replacement of critical components, allowing to manage maintenance with improved efficiency and minimal disruption. Hence, digital services revolutionize equipment management, ensuring safety and prolonged operational lifespan.

Be your customer best advisor to maintain service continuity

As a trained and recognised partner of Schneider Electric, you will be able to recommend, sell or provide services to your customer to keep their installation operating at optimum levels for a long service life.

Become an expert in maintaining the availability and longevity of electrical distribution installations with field and digital services, you can now maximise revenue with additional service opportunities.

Gain more expertise and expand your business portfolio

- Differentiate from competitors with relevant services offerings
- Increase staff expertise with dedicated training
- Be the solution provider and trusted advisor your customer needs.

Discover more: Page D-2.







Schneider Electric's commitments

High quality components

Using our long experience in the design and manufacture of medium voltage cubicles, we ensure full interoperability of all components, tested in our own facilities.

Our industrialised processes and rigorous quality controls ensure the highest quality components to meet your most demanding requirements.



As an industrial manufacturer, we value simplicity, so we have made it a priority to ensure that your product knowledge continues to grow and that you can easily integrate our tools and training package to help you run your business more efficiently.

All the necessary installation and assembly information is supplied with each component or online in a dedicated area for partners.



We innovate to enhance our partners' and customers' equipment and installation value. Our durable, connected products improve safety and efficiency and offer modern remote monitoring for easy operation and maintenance. We also focus on staff and partner skill development through trainings and solution and product discovering.



Our purpose is to empower all to make the most of our energy and resources

- Act for a climate positive world
- Be efficient with resources
- Live up to our principles of trust
- Create equal opportunities
- Harness the power of all generations
- Empower local communities



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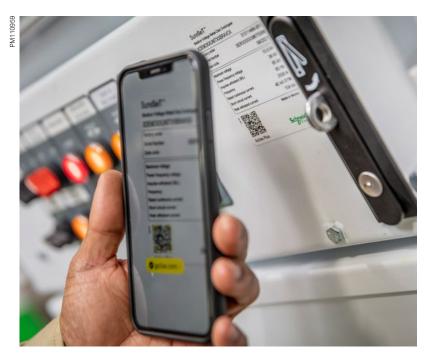
True Peace of Mind

Fully type-tested & compliant with international and local standards



We have a particular attention to safety and reliability of our products, thus during all the process from conception, and all along the manufacture, our components are following stringent tests and rigorous control routine. In addition, our devices undergo tests in laboratories across the world and are compliant with latest standards globally and locally.

Get you the tools to achieve more



Ease and secure your designs:

- CAD and drawings accessible from our Web and Partner Portal
- Access to product videos of installation

Share simply with your customers all technical documentations:

- Technical manuals (user guides, installation manuals, etc.)
- Products catalogs
- Maintenance guides and end-of-life manuals

Gain more autonomy and productivity using our suite of software EcoStruxure™ **Power Build:**

- Configure your projects simply and quickly
- Get a quick quotation
- Set up and share documentation
- Order automatically





Benefit from Schneider Electric brand image and know-how



The experience of a world leader in Medium Voltage

Schneider Electric has been manufacturing MV cubicles for more than half century and has an installed base of millions of products and devices.

A long history of innovation for a global offer

Based on this experience. Schneider Electric has developed an innovative and comprehensive range of Medium Voltage devices employing field proven and latest breaking technologies. You benefit from a long experience and know-how in electric distribution, automation and power and control.

Our components can easily benefit from advanced functionalities of communication and monitoring enabled by IoT to give final switchboard and installation valuable information and enhanced durability & operability of the complete system.

Quality certification: ISO 9001 and ISO 14001

Every unit of Schneider Electric has a quality operating organization, with stringent procedures:

- Uniform for all departments
- Recognized by numerous customers and official organizations

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Schneider Electric: A brand you can trust

Schneider Electric's policy has always been to provide its customers with very close support in their daily activities to enable them to achieve operational excellence.

There are always experts to support you!

Locally or on demand, our team of experts accompanies you during integration and discovering of our products.

We will add value:

- To **SPEED UP** adoption of our offers
- To SIMPLIFY components integration
- To **PROVIDE** technical knowledge/solutions

We will help you, by providing:

- Support on integration of Schneider Electric components
- Simulation of Panel Builder's cubicles into CAE tool by our core experts, before going for extensive type testing
- Support to prepare Panel Builder's switchgears for type testing
- Training on our products
- And welcome you in our factories!

- Local support all over the world
- **130,000** people in more than 100 countries
- Over 100 years of protection relay experience







Simplify your life at all steps of your business

Connect mySchneider

Register to mySchneider help you find what you need to create better and more efficient Low Voltage or Medium Voltage Switchboards, easily and in less time.

panel builders web page



You'll get:

- Productivity tools
- · Personalized resources
- Collaborative sales support
- Trainings



Get support anytime

- 24/7 self-service, mobile catalog and access to expert help
- · Off-line and on-line catalog
- Manage and track your orders
- Advanced support

MySchneider app





Discover, select and define

Experience our advanced WEB functionalities that help to:

- Select and compare components
- Build easily and automatically your technical documentation with ready to use tools

www.se.com



Select your location to get access to the Product Page available in your Country.



Order and check ordering information

A self-service ordering platform to access detailed information:

- · Check real-time price and availability information
- · Order online
- Check order status and tracking information
- · Get financial documentation

MySchneider app



Go Paperless

With Digital Logbook whether you are looking for a user manual, drawings or maintenance records, Digital Logbook makes access fast and simple.

Digital Log Book



With mySchneider Panel Builders Program

Get more done to grow!

Enhance your skills, boost customer satisfaction, and increase your business wins

Visit our page and get more:

panel builders web page



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Medium Voltage switching devices



Medium Voltage switching devices



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Vacuum circuit-breakers

Protection and operation of network



A revolutionary circuit breaker for MV distribution





EvoPacT HVX brings demanding applications into the future with IoT-enabled features that meet the needs of our all-digital, all-electric world.

By bringing us closer to the operation of our facilities than ever before, EvoPacT HVX improves the way we interact with electrical systems, ushering in the digital revolution.



Rated voltage (kV)

Max. rated short-circuit current		31.5 kA
Max. rated current		2 500 A
Versions	FixedWithdrawable	
Number of poles	3р	
Mechanical operations cycles (ON/OFF)	30 000	
Mounting	Frontal	
Mechanism	Conventional spring	
Standards	• IEC • GB (Chinese) • ANSI	

Longer service life

EvoPacT HVX is designed with more than 45 years of MV experience and manufactured using in-house, best-in-class components for a longer operational life.

- Proven to last three times longer than the industry standard for MV circuit breakers
- Built to withstand up to 30,000 mechanical and electrical operations
- Tested according to all major international standards, including IEC, ANSI/IEEE and GB

Renefits

- Embedded pole for better dielectric and environmental pollution withstand
- Operate smarter with innovative technology
- Reduce operational risk
- Buil-in sustainability (Green Premium certified)
- Service enabler for Partners (see page 50/D2)
- See video







Vacuum circuit-breakers

Protection and operation of network







SF₆ Circuit-Breakers

Protection and operation of network









	EvoPa	ct LF		EvoPa	ct SF1		EvoPa	ct SF2 🥱
	PM109988			PW110000			PM109997	
Rated voltage (kV)	12	17.5	12	17.5	24	36	36	40.5
Max. rated short-circuit current	50 kA	40 kA	25 kA	25 kA	25 kA	25 kA	40 kA	31.5 kA
Max. rated current	3 1	50 A		1 25	50 A		3 150 A	2 500 A
Versions	FixedWithdrawab	le	FixedWithdrawa	able			FixedWithdrawable	
Number of poles	3р		3р				3p	
Mechanical operations cycles (ON/OFF)	10 000		10 000				10 000	
Mounting	Frontal		Frontal and	lateral			Frontal	
Mechanism	Conventional	spring	Conventiona	al spring			Conventional s	oring
Standards	• IEC • GOST		• IEC				• IEC	
Benefits								
	 Referenced Nuclear Pov Marine solu Seismic vers 	ver plants tions certified	power sup	l VIP trip unit (oply) in SFset of d for capacitor cations	up to 24 kV		 Particularly as voltage rating environment Well suited for bank and ind applications 	s and harsh



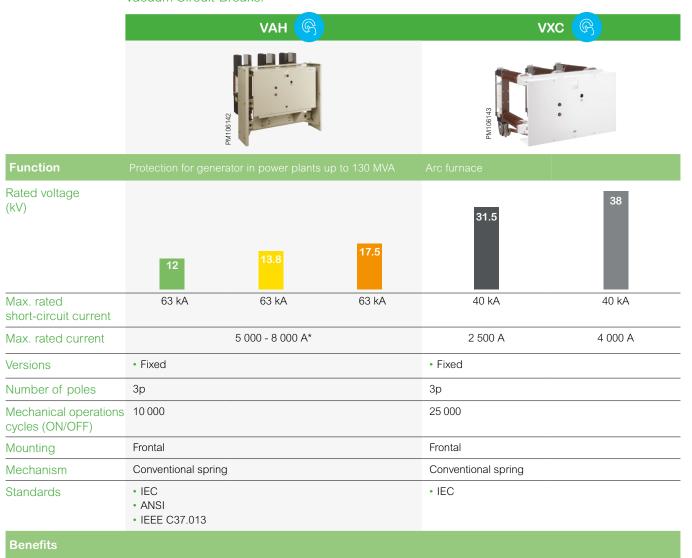
Specific Applications Circuit-Breakers

Protection and operation of network

Vacuum Circuit-Breaker

• Extremely robust design

Optimized maintenance





• Extremely robust and simple construction

• Designed for high operating cycles

• Minimum maintenance

capacity

• Extra high mechanical and electrical switching



Vacuum Contactor

Contactors

Vacuum and SF₆ contactors

Protection and control of network

SF₆ Contactor









	свх 🥞	cvx 🥝	Rollarc 🦃
	PM103784	PM103792	PM107151
Rated voltage (kV)	7.2	7.2	7.2
Max. rated short-circuit current	6 kA 4 kA	6 kA 4 kA (50 kA in (50 kA in conjunction with fuses) fuses)	10 kA 8 kA
Max. rated current	400 A (AC4) 315 A (AC4)	400 A (AC4) 315 A (AC4)	400 A (AC4)
Versions	• Fixed • Fixed	Withdrawable version equipped with DIN or BS fuses Optional on board auxiliary voltage transformer	BasicFixedWithdrawable
Number of poles	1p - 3p	3p 3p	3p 3p
Mechanical operations cycles (ON/OFF)	300 000 (mechanical latch)1 000 000 (magnetic held)	300 000 (mechanical latch)1 000 000 (magnetic held)	100 000 (mechanical latch)300 000 (magnetic held)
Mechanism	Magnetic holding or mechanical latch	Magnetic holding or mechanical latch	Magnetic holding or mechanical latch
Standards	• IEC • GB (chinese)	• IEC • GB	• IEC
Benefits			
	Version available for capacitor banks: 1 pole version available for neutral Earthing Specific version available for capacitor banks	 LV supply thanks to optional on board VT High short circuit breaking capacity in combination with fuses Cradle available (consult us) 	 Reference product in SF₆ contactor market Nuclear powerplant & Marine applications Soft breaking, suited for capacitor bank, power transformers and motors applications





Switches and Disconnectors

Indoor load break switch, disconnector and earthing switch

	SF₆-free switch & disconnector	SF ₆ switch & disconnect	& or	Earthin	g switch	٦				
	AirPacT 🕞	LBS			El	sc			ning s 7/24 k	
	(1) PM103001	PE56373		PM105560			6	PM108846		
Function	Indoor load break swit	tch, disconne	ctor	Earthir	ng switch	า		Earthir	ng swite	ch
Rated voltage (kV)	24	24	36	12	17.5	24	36	12	17.5	24
Max. rated short- circuit current	25 kA/1 s	25 kA/1 s	25 kA/1s	31.5 kA	31.5 kA	31.5 kA	25 kA	31.5 kA	50 kA	31.5 kA
Max. rated current	1 250 A	1 250 A	1 250 A							
Pole center distance				165	210	165	350	160	200-240	240
				175	,	210	370			
				210		215	400			
				215		250	460			
				250	,	275				
						300				
Mechanical operations cycles (ON/OFF)	10 000 operations	1 000 O/C cy (Class M1)	cles					1 000 cy	/cles	
Standards	• IEC	• IEC						• IEC 62	2271-10	2
Benefits										
	 Green Premium Insensitive to environment Reduced maintenance Easy & flexible integration See video 	 Insensitive environmer Reduced m 	nt		g switch fo voltages	or a wide	range	Simple a design of with a la options	easy to	adapt

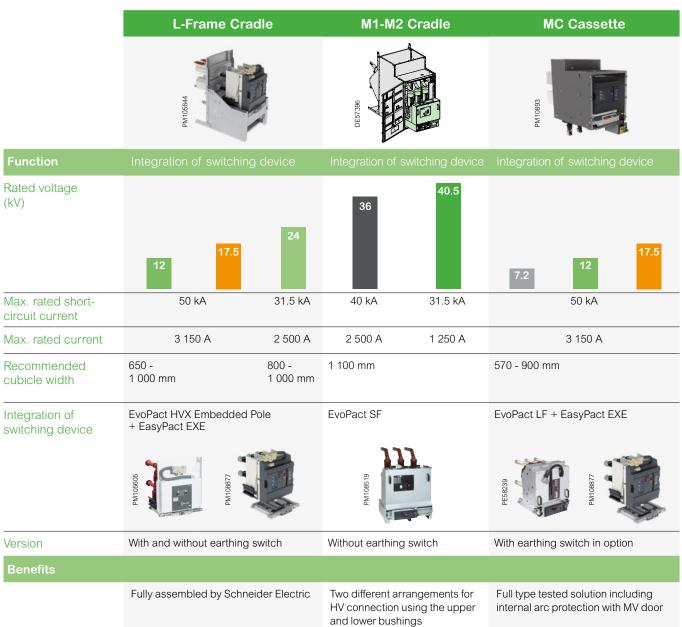




Cradle



Cradle

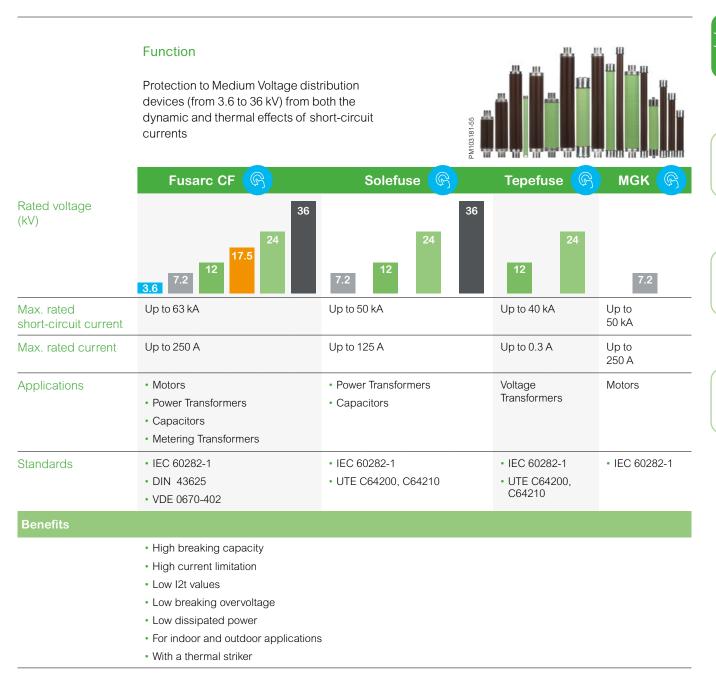






Fuses

Current limiting fuses



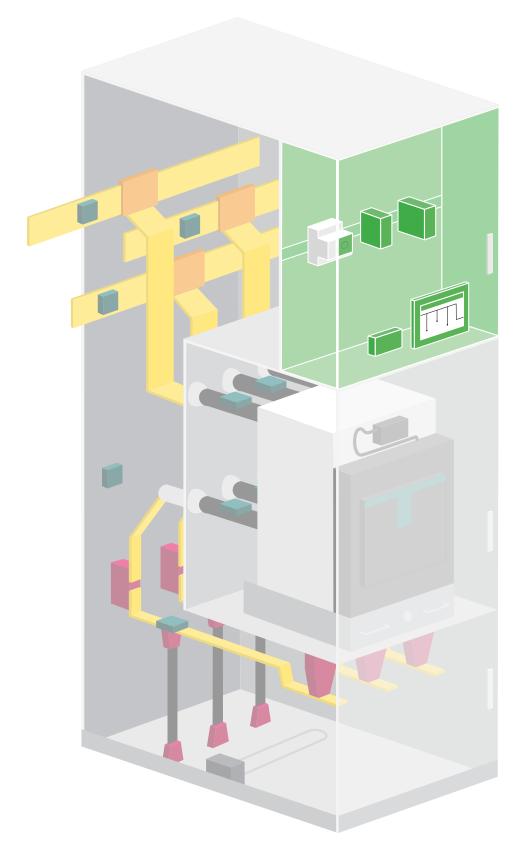
For additional information consult our MV fuses catalogue (ref: AC0479EN)





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Protection, Metering and Feeder Automation

Protection, Metering and Feeder Automation

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Maximise safety, reliability and operational efficiency.



Take the protection of your end users' electrical systems to new levels of safety, reliability and operational efficiency with the next generation of digital protection relays and a full range of monitoring devices that provide 24/7 information on the health of your MV installations.





Help protect people and assets



Optimize business reliability and continuity



Maximize operational lifecycle efficiency



Sustainability by design





PowerLogic P7 Range

PowerLogic I Two main devices,	P7 contains each with specific functions to	PowerLogic P7			
	s in a one-box design, regardless Next Generation	PM110668	PM110889		
Application					
Feeder		•	-		
Motor Differential		•	-		
Generator Differentia	al	•	-		
Transformer Differer	ntial 2/3 Windings	•	-		
Stand-alone Merging	g Unit	-	•		
НМІ					
7" Color Touchscreen		•	-		
Characteristics					
Case size		40T	40T		
Flush/Rack mounting		•/•	-		
Wall mounting		-	SAMU		
Binary inputs (max.)		40	40		
Binary outputs (max.)		36	36		
Hardware dimensions (W/H/D)	205/180/280 mm 8/7/11 in				
External modules	8 RTD Temperature sensors	0-1	0-1		
External modules	IRIG-B	•	•		
Moscuring inputs	Current	5-12	5-12		
Measuring inputs	Voltage	3-8	3-8		
	24-34 VDC	•	•		
Power supply range	48-125 VDC	•	•		
	110-250 VAC/DC	•	•		
Communication					
	RS485, serial	1	1		
	RJ45 Ethernet	1	1		
Rear ports	Redundant Ethernet port (SFP RJ45 or FO)	0-1	0-1		
	Extension port	1	1		
Front ports	Mini-USB for configuration	1	-		
	RSTP/PRP/HSR/Failover	•/•/•/•	•/•/•/•		
0	IEC 61850 Ed. 2.1	•	•		
Communication protocols	Modbus Ethernet/RS485	•/•	•/•		
1	DNP3 Ethernet/RS485	•/•	•/•		
	IEC61869-9	-	SAMU		
	IEEE 1588 (PTP)	•	•		
Time synchronization	SNTP	•	•		
THITE SYNCHIONIZALION	IRIG-B	•	•		
	Protocol	•	•		













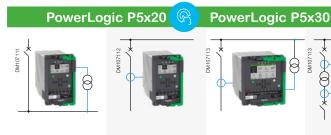
PowerLogic P5 range



PowerLogic P5 contains

Two main devices, each with specific functions to address your needs in a one-box design, regardless of application.

Phase current



1/5 A CT (x3) or LPCT (x3) (1)

1/5 A CT (x3) or LPCT (x3)

-40 to 70°C (-40 to 158°F)

1/5 A CT (x6)









Measuring inputs	Residual current	-	1/5 A CT & 1 A CT or CSH core balance CT	1/5 A CT & 1 A CT or CSH core balance CT	1/5 A CT (x2)	
	Voltage	VT (x4)	LPVT (x4) (1)	VT (x4) or LPVT (x4)	VT (x1)	
Arc-flash sensor inp	outs		-		nt sensors	
Digital	Inputs	4 t	4 to 16		4 to 40	
Digital	Outputs	3 to 8 + Wa	3 to 8 + Watchdog (WD)		3 to 18 + Watchdog (WD)	
Temperature sensor input		-	0 to 16 (external modules)		nal modules)	
Front ports			1 USB for configuration 1 USB for USB key		onfiguration USB key	
Power supply		24-250 VDC	24-250 VDC ; 100-230 VAC		VDC or 100-230 VAC	

Communi	ication

Ambient temperature, in service

	Extension ⁽²⁾ + Backup memory	•	•
Hardware modules	Serial	•	•
rialdware modules	Ethernet	•	•
	2 nd Ethernet	-	•
	IEC 61850 Ed.1 & Ed.2	•	•
	IEC 60870-5-103 & 101	•	•
	DNP3 Ethernet	•	•
Protocols	DNP3 serial	•	•
	Modbus Ethernet	•	•
	Modbus serial	•	•
	EtherNet IP	•	•
Redundancy	RSTP	•	•
protocols	PRP / HSR	•	•
Time synchronization	Pulse, IRIG-B ⁽³⁾	•	•
Time synchronization	SNTP, PTP IEEE 1588 v2 ⁽⁴⁾	•	•

-40 to 70°C (-40 to 158°F)

Control	6 controlled + 2 monitored objects Mimic	6 controlled + 2 monitored objects Mimic
Logic (Matrix + Programmable logic)	•	•
Optional Advanced Logic Engine	•	•
Cybersecurity	Basic or Advanced	Basic or Advanced
Draw-out device (withdrawability)	•	•
Hardware dimensions (W/H/D)	102 / 176 / 219 mm	152 / 176 / 219 mm
()	4.01 / 6.93 / 8.62 in	6.0 / 6.93 / 8.62 in

- (1) In case P5U20 is choosen for cooperation with low power sensors, it contains LPCT (x3) and LPVT (x4) channels
- (2) for connection of RTD module and IRIG-B module
- (3) IRIG-B module is a separate accessory
- (4) PTP IEEE 1588 v2 is available with HSR/PRP communication board



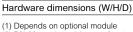




PowerLogic P3 Range

PowerLogic Easergy PowerLogic P3 contains PowerLogic Easergy Two main devices, each with specific P3 Standard P3 Advanced functions to address your needs in a one-box design, regardless of application. **Application** P3**F**30 with directional Feeder P3L30 line diff. & distance P3**T**32 P3**U**30 **Transformer** P3**U**10 P3**U**20 with directional O/C with differencial with voltage protection P3M32 Motor P3M30 with differencial P3**G**32 Generator P3**G**30 with differencial 1/5 A CT or LPCT (x3) (5) Phase current 1/5 A CT or LPCT (x3) (5) 1/5 A CT (x6) 2 x (1/5 A+0.2/1 A) CT, (1/5 A+0.2/1 A) CT Measuring inputs Residual current 1/5 A CT or 0.2/1 A CT or CSH 2 A/20 A (1/5 A + CSH 2/20 A) 1 x (1/5 A) CT VT (x4) or LPVT (x4) (5) VT (x4) or LPVT (x4) (5) Voltage VT (x4) Loop sensor: 1 Loop sensor: 1 Arc-flash sensor input Point sensor: 2, 4 or 6 (1) (2) Point sensor: 2, 4 or 6 (1) 2 10/8 14/16 6 to 36 6 to 16 Input Digital 10 to 21 + SF Output 5 + SF5/8 + SF11/8 + SF 10 to 13 + SF 0 or 4 (1) 0 or 4 (1) Input Analogue 0 or 4 (1) 0 or 4 (1) Output Temperature sensor input 0 or 8 or 1 $\overline{2}^{\,(1)}$ 0 or 8 or 12 (1) USB type B USB type B Front port 24 VDC or 24-48 VDC or 38.4-265 VDC 24 to 48 VDC or or 38.4-265 VDC Nominal power supply or 48-230 VAC (4) or 110-240 VAC -40 to 60°C (-40 to 140°F) -40 to 60°C (-40 to 140°F) Ambient temperature, in service Rear ports RS232, IRIG/B, RS485, Ethernet IEC61850 ed1 & ed2 IEC 60870-5-101 & 103 • • • DNP3 over Ethernet • DNP3 serial Protocols Modbus serial • • • • Modbus over Ethernet • • Ethernet IP (6) Profibus DP • • • • **SPAbus** • • • Redundancy protocols (RSTP/PRP) • • • • **Others** 1 object 4 objects 4 objects 8 objects Control 4 display 8 display 3-8 display 1 display Logic (Matrix + Logic equation) Withdrawable CT connector with shorting Remote HMI

171 x 176 x 214⁽³⁾ mm / 6.73 x 6.93 x 8.43 in



⁽²⁾ P3L30 can have 1 loop or 2 point sensors only (3) 226 mm (8.90 in) with ring-lug connectors



264 x 177 x 208 mm / 10.39 x 6.97 x 8.19 in





⁽⁴⁾ Check the available power supply range from the device's serial number label (5) P3U30, P3F30, P3M30 relays only. Consult us for other models

⁽⁶⁾ Consult us for availability

VIP, PowerLogic & MiCOM ranges









VIP Relays VIP40/45 VIP400/410	PowerLogic P1 P1F/P1V	MiCOM P115 / P116
11000M	PM107263	minu mi
•	•	•
	•	
	•	•
CSH (0.2 A to 2 In) LPCT	CT (1 or 5 A) or VT	CT (1 or 5 A)
VIP 40/45: 4 digits display VIP 400/410: Gaphical LCD	Graphical LCD	16 characters LCD 2 lines
Self/Dual Powered		Withdrawable hardware Self/Dual Powered
1/3	8/6	6/6
Screw type	Screw type	Screw type
 Modbus RTU-RS485 (plug and play with T300) IEC 60870-5-104 IEC 60850 DNP3 	• Modbus RTU • IEC 60870-5-103	• Modbus RTU • IEC 60870-5-103
	IEC, EAC, UKSA	IEC, EAC
	• DNP3	





Sepam & Easergy MiCOM ranges

Sepam series 60	Sepam series 80	Easergy MiCOM P30	Easergy MiCOM P40
PM105661	PM105662	PM108873	8587098
•	•	•	•
•	•	•	•
		•	•
		•	•
•	•	•	•
•	•	•	•
	•	•	•
•	•	•	•
•	•	•	•
	•		•
•	•		•
•	•		•
	•		•
			•
07.(4 5.4) 1.007	OT (4 5 A) LPOT	OT (4 5 A)	OT (4 5 A)
• CT (1 or 5 A) or LPCT • VT	• CT (1 or 5 A) or LPCT • VT	• CT (1 or 5 A) • VT	• CT (1 or 5 A) • VT
Standard UMI Remote UMI Mimic based UMI	Standard UMI Remote UMI Mimic based UMI	 Large color LCD type display with single-line diagram (mimic) Remote UMI 	Standard UMI
Removable SW cartridge	Removable SW cartridge	 Multifunction; integrated Bay controller High firmware/hardware variability 	
28/16	42/23	80/45	32/32
Screw type Ring lug	Screw type Ring lug	Screw type Ring lug	Ring lug
8 to 16	8 to 16	10	10
 Modbus RTU IEC 60870-5-103 DNP3 Modbus TCP/IP IEC 61850 with GOOSE RSTP 	 Modbus RTU IEC 60870-5-103 DNP3 Modbus TCP/IP IEC 61850 with GOOSE RSTP 	 Modbus RTU IEC 60870-5-101/103 DNP3 IEC 61850 with GOOSE RSTP PRP / HSR / DUAL-IP IEC 6870-5-104 	 Modbus RTU IEC 60870-5-103 DNP3 serial/DNP3oE IEC 61850 with GOOSE RSTP/SHP/DHP HSR/PRP
Comprehensive logic equations	Control logic by ladder diagram	Comprehensive logic equations	Comprehensive logic equations
UL, CSA, EAC, ATEX	IEC 61508-SIL2, UL, CSA, EAC, ATEX	Cyber security IEC, EAC, ATEX	Cyber security (IEC 62351) IEC, UL, CSA, EAC, ATEX





Protection, Metering & Feeder Automation

Arc fault detection and protection

PowerLogic Arc protection range



Function

The arc protection unit detects an arc flash in an installation and trips material damage caused by arc faults.



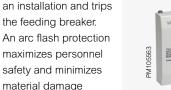


PowerLogic Arc A1



PowerLogic Arc A3













System features

- · Operation on light only
- Up to 10 sensors arc or smoke sensors
- · Single trip contact
- · Straight-forward installation
- Typical operation time 9 ms (including the output relay)
- · Cost efficient solution
- Self-supervision
- · Binary input for blocking or resetting (programmable) the unit
- · Possibility for double arc channel activation trip criteria
- · BIO light transfer possibility to other Vamp device

Stand-alone arc flash protection light detection for typical configurations:

- 4 Arc inputs (point sensors)
- Integrated 48...230 VAC/DC power supply
- High speed trip output (1 to 2 ms operation time)
- 1 self supervision output
- · D-rail or flush mounting
- Master trip I/O for simple arc selectivity
- Direct installation with basic comissioning
- Front status LEDs

Stand-alone and small system arc flash protection light detection for typical configurations supported by 4 commercial references:

- 6 or 12 Arc inputs (point sensors)
- Integrated 48...230 VAC/DC power supply
- · High speed trip output (1 to 2 ms operation time)
- 1 self supervision output
- · D-rail or flush mounting
- · High speed bus to support selective protection between devices
- · Direct installation with basic comissioning
- Front status LEDs

Sensors

Point sensor - Surface

- · Arc detection from compartments
- · Self-monitored
- 6 m and 20 m cable lengths available

Arc detection from compartments

- Self-monitored
- 6 m and 20 m cable lenghts available, shielded or not shielded
- Arc detection from compartments
- Self-monitored
- 6 m and 20 m cable lenghts available, shielded or not shielded

Point sensor - pipe

- · Self-monitored
- 6 m and 20 m cable lengths available
- Self-monitored
- 6 m and 20 m cable lenghts available, shielded or not shielded
- · Self-monitored
- 6 m and 20 m cable lenghts available, shielded or not shielded

Portable sensor

- · Snap-in connection to I/O unit
- · Enhanced work safety

Loop sensor (fibre)

Standards

IEC

IEC

IEC

- · Personnel safety
- Reduces production losses
- Extended switchgear life cycle
- · Reduced insurance costs
- · Low investment costs and fast installation
- Reliable operation









Arc fault detection and protection

Easergy Arc protection range

Easergy Arc V221 (+ I/O units)* VAM 3L VAM 10L

VAM 4C

Easergy Arc V321 (+ I/O units)*

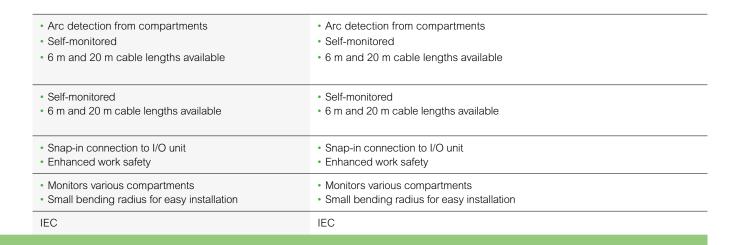






- · Current and light tripping criteria (possibility of tripping by light only)
- Typical operation time 7 ms (electromechanical contact)
- Accurate location of arc fault utilizing point sensors
- · Four selective protection zones per system
- Self-supervision of the entire system
- Up to 160 sensors (with I/O modules)
- · Easy interconnect using VX001 cables
- · Phase current measuring
- · Earth fault current measuring
- · Personal portable sensor option
- · Panel or rail mount I/0 units
- · Circuit breaker fail protection (CBFP)

- · Three phase current, zero sequence voltage and current
- · Event logs, disturbance recording and real time clock
- · Operation on simultaneous current and light or light only
- Informative display LCD (single line diagram)
- · Up to four fast trip contacts
- · Direct light sensors and fiber optic up
- Support up to 170 arc flash point sensors (with I/O modules)
- One normally open and one change over alarm contact
- Typical operation time: less than 7 ms (including the output relay)
- Optionally 2 ms typical operation time when semi-conductor outputs are used
- · Programmable operation zones
- · Continuous system self supervision
- PC configurable
- Communication ports supporting a wide range of communication protocols which are intended for a SCADA interface



- · Personnel safety
- Reduces production losses
- · Large scale installation like substation
- Reduced insurance costs
- · Low investment costs and fast installation
- Reliable operation

The choice is to be made according to the needs of type and number of sensors. Please contact us.







^{*} I/O units: 4 ref. available (VAM 3L, VAM 10L/LD, VAM 12L/LD, VAM 4C/CD).

MV-LV substation remote control & monitoring

PowerLogic T300



Advanced Supervision and Control of Medium Voltage & Low Voltage Distribution system

PowerLogic T300: A modular RTU solution for any kind of applications







Developed according to IEC 62443-4-2, PowerLogic T300 has been designed with a cyber security package. This shall help reduce exposure to cyber threats and improved operational security. It includes important features such as password management, firmware signature, port hardening, and secured communication compliant to the latest international standards.

Main functions

MV network remote control of All UG and OH equipment: Fault Location Isolation system and restoration for all neutral system - centralized and decentralized network management



MV and LV power and quality measurement

Voltvar optimisation support

Thermal monitoring and asset management

- Main modules
- · HU250 Head unit communication/gateway
- SC150 MV Switch controller
- LV150 Transformer and LV monitoring
- PS100/PS50 Wide range of backup power supply
- SC160 Switchgear Controller

Protocols

- IEC 60870-5-101/104 slave and master (standard and secure)
- DNP3 serial and TCP slave and master
- Modbus serial and TCP slave and master (standard and secure)
- IEC 61850 slave and master

Transmission system

- Two flexible communication ports accommodated with modem boxes:
- RS232/RS485 modem box for WAN or LAN communication
- 2G/3G modem box for WAN communication
- 4G European and US standard modem box with GPS clocks for accurate time synchronization
- Two Ethernet ports (for WAN and LAN communication)
- 1 Ethernet port for WAN communication
- 1 Ethernet port for LAN communication with third party devices
- 1 serial RS232/RS485 for Modbus LAN communication
- Zigbee Modem for communication with thermal sensors
- · Secure WiFi for local connection

Standards

IEC

- PowerLogic T300 adress the follow customer challenges:
- Evolve with the grid: manage bidirectional and intermittent power flow
- Increase availibility: improve SAIDI and optimise MV networks
- Maintain power quality
- Manage the costs: reduce installation, operation and maintenance expenditures
- Deliver efficiency: optimise network to manage growing consumption
- Improve Cybersecurity: help defend against malicious software and unauthorised access
- PowerLogic T300 is a modular FRTU platform, hardware, firmware. Modular approach ensures T300 will be configurable to your exact needs e.g. packaged solutions, embedded solutions, open solutions
- This open architecture supports different applications, from a single communication gateway to large substation management
- · Built-in web server for commissioning and maintenance with local and remote access, compatible with PC, tablet and smartphone devices
- High availability back up power supplies range PS100/50/25 for control and monitoring applications





MV-LV substation remote control & monitoring

PowerLogic T300

PowerLogic HU250 Head unit communication - Gateway



PowerLogic SC150 **MV** Switch controller











- · Flexible communication to control centre and other customers' IT applications
- Open peer-to-peer communication for self-healing applications*
- · Open to third-party devices with many protocol capabilities
- Embedded IEC 601131-3 PLC for automation design
- · Cyber security management: Compliance to the security standards/regulations (IEC 62351/IEEE 1686)
- · Configurable Sequence of Events (SOE) for data logs
- · Software integrity with firmware signature on all modules:
- Secure communication between Easergy T300 and associated webserver tool with local or remote connections using HTTPS,
- User identification and authentication according to IEC 62351-8
- User access management according to IEC 62351-8
- Communication authentication according to IEC62351-5 when using DNP3 and IEC60870-5-104 protocols
- Port hardening management.
- IP communication filter
- Security events log storage and transmission according to Syslog protocol

Easergy SC150 - Switchgear controller

- · Control and monitoring of all switchgear types
- · Advanced Fault Passage Indicator (FPI) algorithms:
- Phase-phase and phase-ground detection ANSI 50/51, 50N/51N
- Directional phase-phase and phase-ground detection ANSI 67/67N
- Broken conductor detection (one phase lost) ANSI 47
- MV Voltage monitoring ANSI 27, 59, 59N
- MV Current monitoring ANSI 37
- · Directional active overpower detection ANSI 32P
- · Large current and voltage measurement capabilities: standard CT for current, LPVT, VT and from capacitor divider and voltage presence indicator (VDS, VPIS) for voltage
- Power measurement according to IEC 61557-12
- Power quality according to IEC 61000-4-30 class S
- · Specific application automation: sectionalizer
- · Disturbance recording

* Consult us for availability

PowerLogic LV150 Transformer and LV monitoring



PowerLogic SC160 Switchgear controller





Functions

- · Current and voltage measurements according to IEC 61557-12
- Broken conductor detection 47BC
- · Power quality according to IEC 61000-4-30, Class S
- · Transformer temperature monitoring

Easergy SC160 is a modular switchgear controller configurable as protection with Circuit Breaker (CB) use or Fault current indicator with Low Break Switch

- Control and monitoring of all switchgear types
- Protection or fault passage indication function:
 - Phase overcurrent (ANSI 50/51)
 - Ground/earth fault overcurrent (ANSI 50N/51N)
 - Directional phase overcurrent fault (ANSI 67)
 - Directional ground/earth fault overcurrent (ANSI 67N)
 - Cold load pickup
 - Inrush restraint





Substation power supply

PowerLogic PS100 and PS50







PowerLogic PS50 Monitoring







Functions

The PowerLogic PS100/PS50 power supplies, associated with a backup battery, are designed to maintain control and monitoring of the entire MV substation during long power supply interruptions (up to 48 hours). They are designed to supply:

- MV switchgear motor mechanism and circuit-breaker coils
- · Transmission equipment (e.g. radio)
- · Electronic modules of T300
- All other devices in MV/LV substations (Protection relays, Fault Passage Indicators or others IEDs, low voltage breakers, PLC concentrators, etc.)

Power supply outputs

- 12 VDC, 18 W permanent and 100 W/20 s (for modem, radio, RTU, etc.)
- 12 VDC, 18 W permanent for telecom equipment
 12 VDC, 36 W permanent for IEDs
- 48 VDC or 24 VDC 10

Modbus RS485

- 48 VDC or 24 VDC 90 W permanent (for protection relays, electronic devices, etc.) and 300 W/1min. (for switchgear operating mechanism motors)
- 48 VDC or 24 VDC 10 W permanent (for protection relays, electronic devices, etc.) and 300 W/1min (for switchgear operating mechanism motors).

Protocols

Standards IEC 60255-5 (10 kV level)

Modbus RS485

IEC 60255-5 (10 kV level)

- High availability due to the separate voltage output for telecom and motor
- High availability due to the separate voltage output for IEDs, telecom and motor
- · High efficiency and high energy backup autonomy
- Designed for severe environment with higher insulation (10 kV)
- Easy maintenance with only one battery, 24 Ah or 38 Ah robust life span (> 10 years)
- · Modbus communication for battery monitoring to allow optimised maintenance operations
- · Battery charging and monitoring for longer battery life
- · Battery end-of-life monitoring and anticipated maintenance
- Designed for long outage time





Voltage presence relay

Easergy VD23

Easergy VD23







Functions

- Indicates presence or absence of voltage through 1 or 2 relays
- For MV networks from 3 kV to 36 kV
- Associated with VPIS-VO V2 (see next page)

Technical specifications

- Self-adapted to network voltage
- Displays the voltage in % of nominal
- Output contacts behaviour configurable according to various combinations of phase and unbalance voltage status
- DIN format
- Allows to address various applications:
- Automatic transfer systems
- Alarms on voltage loss
- Automation on voltage loss
- Earth locking on voltage presence
- Alarms on voltage presence

Reference numbers

- Voltage presence relay (VD23): ref. EMS58421
- Combined voltage presence relay + Fault Passage Indicator (Flair 23DM): ref. EMS58355

Standards

IEC

- Fits all MV network neutral systems
- Compact (DIN format)
- Output contact behavior highly configurable according to application needs











Voltage Presence Indicators

PowerLogic VPIS* Range







PowerLogic VPIS V3



Phase Concordance Unit VPI62421











Functions

- Self-powered Voltage Presence Indicator System (VPIS)
- Including voltage output version (VPIS-VO) for connection to:
 - Flair 2xD, VD23 voltage presence relay (VPIS V2)
 - T300 (VPIS V3)
- Needs phase concordance unit for phase concordance checking (reference VPI62421)



- Plugs on the front panel allowing to use a phase concordance unit. A colored removable rubber joint (black for VPIS V2 and green for VPIS V3) closes these plugs to prevent penetration of humidity, salted spray, ...
 - · Light indication using LEDs
 - Made in 2 parts: surge protection part, always connected and voltage presence indication part, replaceable for maintenance
 - VPIS V2 voltage sensing to Flair 22D, 23D or 23DM for fault detection on compensated and isolated networks and voltage sensing for VD23 or Flair 23DM Voltage presence relay functions
 - VPIS V3 voltage sensing to T300 for voltage presence/absence detection, phase and earth directional fault detection and basic measurement

Reference numbers

- 18 VPIS variants of each VPIS version (9 variants each for VPIS & VPIS-VO):
- without Voltage Output: VPI62401 to VPI62409 for VPIS V2 variants VPI62601 to VPI62609 for VPIS V3 variants
- With Voltage Ouptut: VPI62411 to VPI62419 for VPIS V2 variants VPI62611 to VPI62619 for VPIS V3 variants
- These are selected based on:
- Network nominal voltage
- Value of capacitive sensor used inside the MV cubicle
- Network frequency

Standards

IEC 62271-206

- · High reliability thanks to:
- Harsh environment design
- LED indication: extended lifetime
- · Provides Voltage sensing for basic (Voltage relay) to advanced (directional detection) functions





^{*} VPIS: Voltage Presence Indicator System

Fault Passage Indicators

PowerLogic Flair range

PowerLogic Flair 21D-22D-23D-23DM









Functions	 Provides phase and earth fault local indication on MV-LV underground network
	Ammetric FPI, self powered by measurement sensors, integrated in MV switchgear or in wall-mounted box
Detection	Phase and earth fault
Setting	By dip switches or menu on LCD display
Installation	Embedded in the switchgear
Earthing system	Direct, impedant, compensated, isolated
Supply	Self powered by current sensor and 3 backup supply solutions when network is dead:
	Super capacitor (Flair 21D)
	• Li battery (Flair 22D)
	External VDC supply (Flair 23D/23DM)
Measurement	Ammeter
	Maxmeter
Communication	Dry output contact (Flair 21D-22D-23DM)
	• Modbus RS485 (23DM)
Standards	IEC
Benefits	
	All-In-One device:
	Reliability
	Single configuration and diagnostic tool
	Opens the door to the most advanced Smart grid monitoring needs





Energy management and control

Basic and advanced meters







	Basic panel meters	Basic energy meters	Basic panel meters	Advanced meters
	AMP/VLT	IEM3200 series	PM5100/5300/ PM5500/5600/5700	PM8000 (S)
	PB101118	PB115488	415.90 *** 415.90 *** 10.296 *** 10.305 ** 10.305 ** 10.305 ** 10.305 *** 10.305 ** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.305 *** 10.3	119.98 (c) Sagarda
Function		kW/h meters	Metering and sub-metering	Energy and intermediate power quality meter
		• IEC 62053-22 Class 0.5S • IEC 62053-21 Class 1 • IEC 62053-23 Class 2 • IEC 61557-12 • EN 50470-1/3	IEC 62053-22 Class 0.5S IEC 62053-22 Class 0.2S (PM55xx) IEC 62053-23 Class 2 IEC 61557-12 EN 50470-1/3 ANSI C12.20 Class 0.2 & 0.5	• IEC 61557-12 • IEC 62053-22 Class 0.2S • IEC 61000-4-30 Class A • IEC 62856-1 • ANSI C12.20 Class 0.2 • PMD /Sx/K70/0.2
Applications				_
Panel instrumentation	I/U	I, U, F, P, Q, S, PF, E alarm, I/O, enegy	I, U, F, P, Q, S, PF, E min/max, harm., alarm, I/O (I, U, unbalance, demand, clock/cal)	I, U, F, P, Q, S, PF, E, THD min/max, harm., alarm, I/O (I, U, unbalance, demand, clock/cal)
Energy efficiency and	cost			
Sub-billing & cost allocation	•	•	•	•
Demand and load management				•
Billing analysis				•
Power availability and	reliability			<u> </u>
Harmonics	,		•	•
Dip/swell, transient				•
Compliance monitoring				•
Revenue metering				
Characteristics				
Measurement accuracy (active energy)	• Class 1.5	Class 0.5S/Class 1	Class 0.2S (PM55xx)Class 0.5S	• IEC 61053-22 Class 0.2S • ANSI 12.20 Class 0.2S
Installation	• Flush mounted 72 x 72 mm 96 x 96 mm	• DIN rail 5 or 7 x 18 mm modules	 Flush mounted 96 x 96 mm. Remode display option in PM55xx 	• Flush & DIN rail mounted 96 x 96 mm
Voltage measurement	VLT: 500 VAC direct or external VT	50 V to 330 V (Ph-N)80 V to 570 V (Ph-Ph)Up to 1 MVAC (ext VT)	 20V L-N/35V L-L to 400V L-N/690V L-L Up to 1 MVAC (ext VT) 	• 57-400 VAC L-N 3P (100-690 VAC L-L)
Current measurement	AMP: external CT	External CT	External CT	External CT
Communication ports		Modbus serial BACnet IP M-bus LON works	 Modbus serial Modbus TCP/IP Ethernet IP BACnet IP DNP 3.0 	Modbus RTU Modbus TCP ION DNP 3.0 HTTPS SFTP
Inputs/Outputs		• 2 I/O	4 I/O, Relay Option6 I/O (PM55xx)	• Up to 27 DI, 9 DO • Up to 16 AI, 8 AO
Memory capacity			256 kB & 1.1 MB (PM55xx)	Advanced: 512 MB (64 DR) Standard: 512 MB (50 DR) Essential: 64 MB (10 DR)



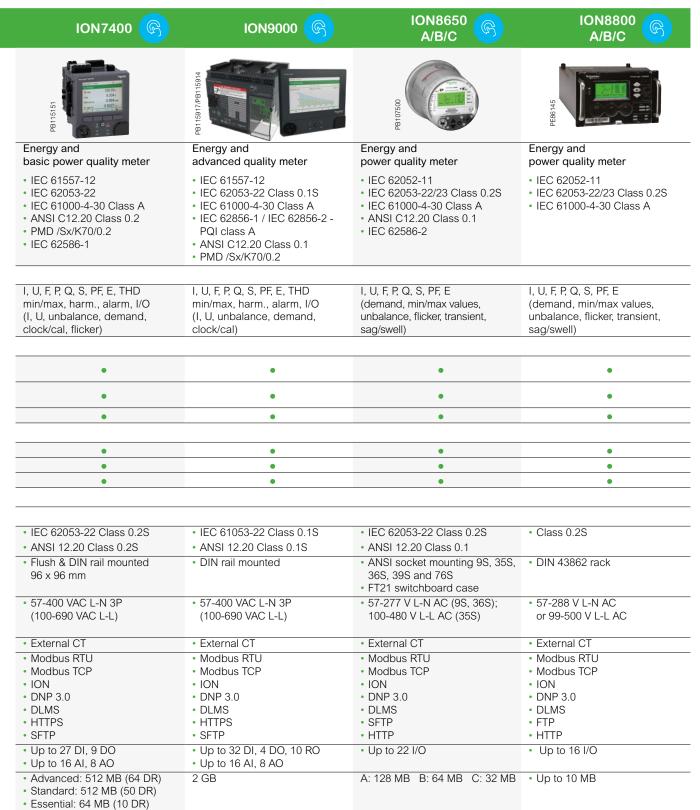


Energy management and control

Advanced and utility meters

Advanced meters

Utility meters







Energy management and control

EcoStruxure Panel Server







Function

Function All-in-one gateway devices concentrator with wireless and/or Modbus RS485 to Modbus TCP platform, capable of connecting multiple, simultaneous edge control or cloud applications.

- 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 cloud applications such as Facility Expert or Asset Advisor





Characteristics				
Power Input Storage temperature Operating temperature		110-277 VAC/DC	110-277 VAC/DC, 110-240 VAC/DC, 24 VDC, POE (Power over Ethernet)	
		-40°C to +85°C	-40°C to +85°C	
		-25°C to +60°C	-25°C to +70°C	
Humidity		≤ 93%	≤ 93%	
Pollution degree		Class II	Class II Class III: PAS600L	
Number of devices	Total	20	85 ⁽²⁾	
	PowerTag Energy & Ambient ⁽¹⁾	20	85 ⁽²⁾	
	Other types of devices ⁽¹⁾	20	85 ⁽²⁾	
External IEEE 802.15.4	Antenna		???	
Modbus RS485 Master	Max. number of devices w/o repeater	N.A.	32	
	Max. number of devices with repeater	N.A.	128	
	Maximum Length	N.A.	1000 m	
	Baudrate	N.A.	1200; 4800; 9600; 19200; 38400; 57600; 115200	
Communication		Ethernet 10/100base T; Wi-Fi; TCP/IP; IP V4 / IP V6; DPWS; DHCP; Modbus/TCP Server; Modbus/TCP Client ⁽³⁾ ; Schneider Cloud Services; HTTPS; External Wi-Fi/ Bluetooth Antenna ⁽³⁾ ; GPRS/3G/4G; PPoE (PAS800P)		
Standards		IEC 61010; IEC 61010-1; IEC 61010-2-201; UL 61010; UL 61010-1;		

UL 61010-2-201; CSA C22.2 No 61010-1-12; CSA C22.2 No 61010-2-201; IEC 62974-1; IEC 62443-4-1: IEC 61326-1; EN 301-489-1; EN 301-489-17; EN 55032; CISPR 11; EN 300-328; IEEE 802.15.4; IEEE 802.11b/g/n; IEEEE802.3 af/at (PAS600P, PAS800P)

Benefits

- Easy installation
- Easy commissioning with EcoStruxure Power Commission, a single tool that auto discovers, configures, tests and maintenance
- · Embedded web pages for real time, complete and accurate views into power network energy and operations efficiency
- Enhanced cybersecurity design at every phase of the product life cycle
- (1) Consult the User Manual or other documentations to check the limit applicable to your wireless device
- (2) Lower limits may apply depending the firmware version, consult the User Manual, Release Notes or other documentations
- (3) Only Universal PAS600 and Advanced PAS800
- (4) Only Advanced PAS800







Energy management and control

EcoStruxure Panel Server

Universal Wired by Design PAS600WD



Advanced PAS800











Function All-in-one gateway devices concentrator with wireless and/or Modbus RS485 to Modbus TCP platform, capable of connecting multiple, simultaneous edge control or cloud applications.

- 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 cloud applications such as Facility Expert or Asset Advisor

24 VDC, POE (Power over Ethernet)	110-277 VAC/DC, 24 VDC, POE (Power over Ethernet)
-45°C to +85°C	-40°C to +85°C
-25°C to +85°C	-25°C to +70°C
≤ 93%	≤ 93%
Class II: PAS600PWD Class III: PAS600LWD	Class II: PAS800P, PAS800 Class III: PAS800L
-	85 ⁽²⁾
-	85 ⁽²⁾
-	85 ⁽²⁾
-	PASA-ANT1
32	32
128	128
1000 m	1000 m
-	1200; 4800; 9600; 19200; 38400; 57600; 115200
Ethernet 10/100base T; PPPoE (PAS600PWD)TCP/IP; IP V4 / IP V6; DPWS; DHCP; Modbus/TCP Server; Modbus/TCP Client(3); Schneider Cloud Services; HTTPS; External	Ethernet 10/100base T; Wi-Fi; TCP/IP; IP V4 / IP V6; DPWS; DHCP; Modbus/TCP Server; Modbus/TCP Client ⁽³⁾ ; Schneider Cloud Services; HTTPS; External Wi-Fi/Bluetooth Antenna ⁽³⁾ ; GPRS/3G/4G; PPoE (PAS800P)
IEC 61010-2; UL 61010-2; CSA C22.2; IEC 62974-1; IEC 62443-4-1; IEC 61326-1; EN 301-489; EN 55032; CISPR 11; EN 300-328; IEEE 802.15.4; IEEE 802.11 a/b/g/n; IEEE 802.3 af/at (PAS800P)	IEC 61010; IEC 61010-1; IEC 61010-2-201; UL 61010; UL 61010-1; UL 61010-2-201; CSA C22.2 No 61010-1-12; CSA C22.2 No 61010-2-201; IEC 62974-1; IEC 62443-4-1: IEC 61326-1; EN 301-489-1; EN 301-489-17; EN 55032; CISPR 11; EN 300-328; IEEE 802.15.4; IEEE 802.11b/g/n; IEEEE802.3 af/at (PAS600P, PAS800P)

- · Easy installation
- · Easy commissioning with EcoStruxure Power Commission, a single tool that auto discovers, configures, tests and maintenance
- · Embedded web pages for real time, complete and accurate views into power network energy and operations efficiency
- · Enhanced cybersecurity design at every phase of the product life cycle
- PAS800 only: 3 Years Data historization, energy monitoring and trending capabilities







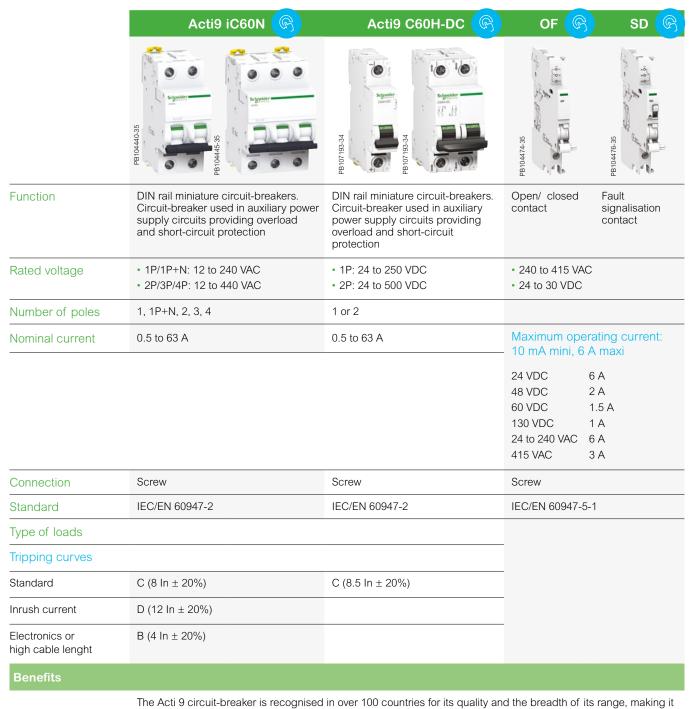


Low Voltage protection

Acti9 range







an indispensable component for your Low Voltage cabinet with complete peace of mind.



Low Voltage relays

Zelio relays



• Clear indication of the contact status by mechanical flag, and power on coil by LED

· Lockable test button to close manually the contacts and test the application during commissioning or debugging

• Standardization of relay pin arrangement on its socket















Low Voltage control and signalling

Pushbuttons & Switches









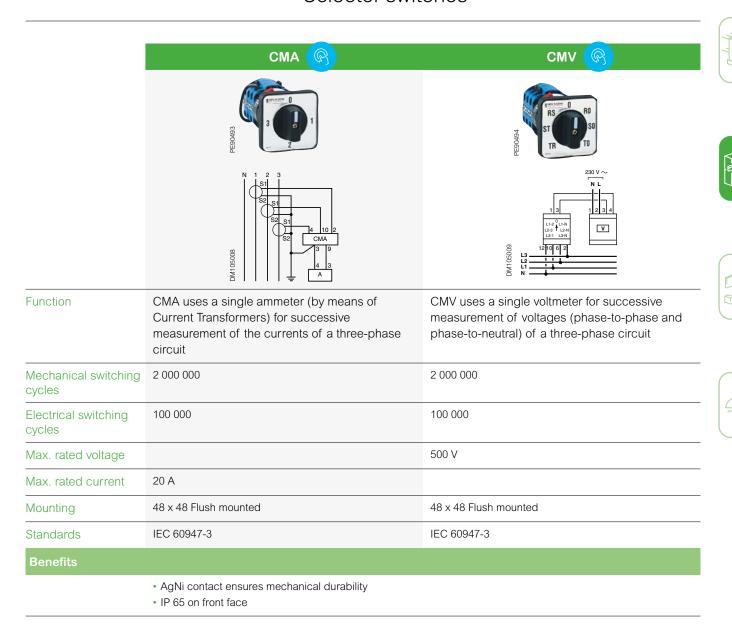
	хв7 🕞	ZB5/XB5 🥞	ZB4/XB4 🥝	K1/K2 🕞
Standard version				
Function: Enables operation of the Low Voltage circuits of the Medium Voltage cubicle	PM105576 PM105575	PM105578 PM105577 PF094400 PM105579 PM108874	PM105583 PM105582 PM105584 PF589141 PM105584 PF589141	PM110798 PM110799
Illuminated version:	Pushbuttons/Pilot light	s/Switches		
Function: Provides status information and enables control of Low Voltage circuits	PF100400	PM105581 PM105580	PM105586 PM105885 PF669150 PF106192 PF106192 PM108876	
Mounting hole	22	22/30	22/30	16/22
Material	Plastic	Plastic	Metallic	Plastic or metallic
Head shape	•	•	•	
Composition type	Unibody	Modular	Modular	Modular
Panel fixing	Plastic nut	Plastic nut	3 points metal	Plastic nut or 4 screws
Degree of protection	IP65	IP66, IP67, IP69, IP69K	IP66, IP67, IP69, IP69K	IP40/IP65
Rated insulation voltage	250 V	600 V	600 V	690 V
Standards	250 V	600 V	600 V	690 V
Standard & Illuminated versions	• UL/CSA, IEC, CCC, UAC	UL/CSA, IEC, CCC, EAC Marine: BV, LROS, DNV, GL	UL/CSA, IEC, CCC, EAC Marine: BV, LROS, DNV, GL	• UL/CSA, IEC
Benefits				
Standard version	 Easy to select and install A wide choice of functions Robustness and mechanical durability High protection degree Excellent aesthetics and ergonomics 			
Illuminated version	 Long life resistance (LED technology) True colors and excellent brightness A wide choice of voltages High protection degree Easy mounting 			

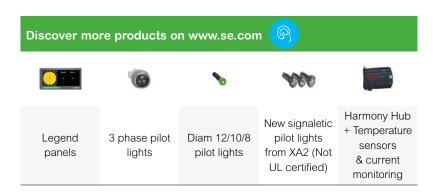




Low Voltage control and signalling

Selector switches









Low Voltage control and signalling

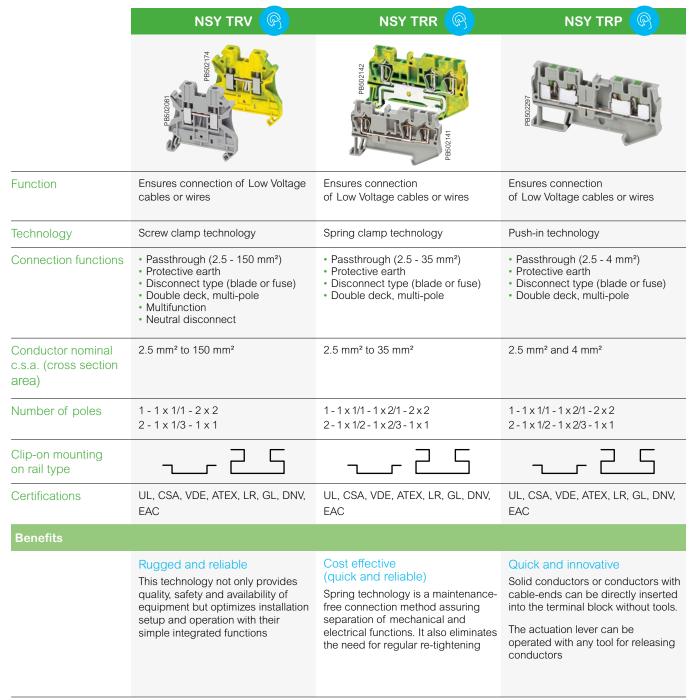
Linergy TR - Terminal blocks















Low Voltage control and signalling

Linergy TR - Terminal blocks

	Cable ends
	PE90496 PM105689
Function	 Facilitates the insertion of wires into the terminals and assures the insulation between adjacent connection Allows the identification of the wires
Technology	Insulated cable ends
Connection functions	Four available versions: • Single conductor cable ends • Single conductor markable cable ends • Uninsulated cable ends • Twin conductor cable ends
Conductor nominal c.s.a. (cross section area)	0.25 mm² to 50 mm²
Certifications	UL, CSA
Benefits	
	Fast and reliable wiring Use the AZ5 and DZ5 ranges of cable ends to simplify wiring and provide optimum electrical continuity between wire and terminal block.







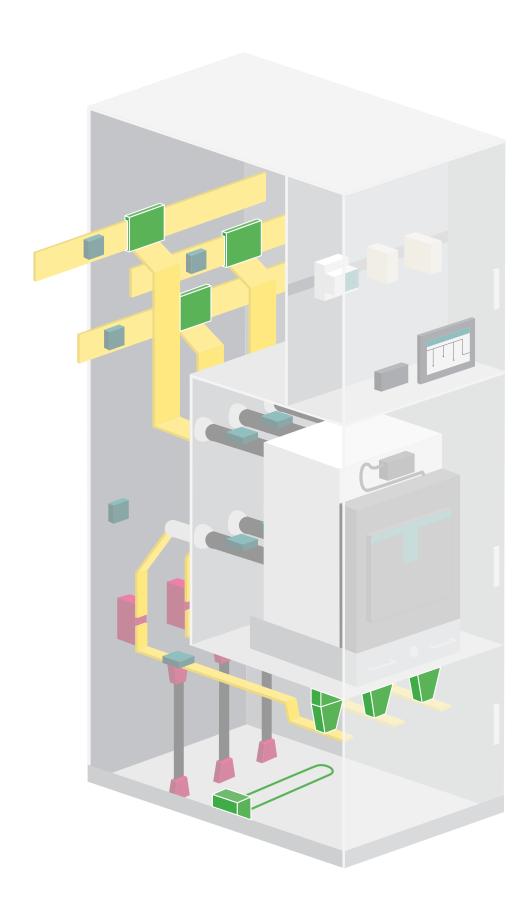












Insulating holder with or without capacitive divider	C-2
Anti-condensation heating element	C-2
Insulation busbar cover	C-2
High resistance plastic window	C-3
Cubicle compartment handle	C-3



Characteristics and references

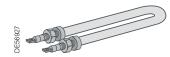


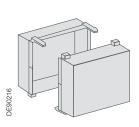












Insulating holder with or without capacitive divider

Function

- Without capacitive divider: Provides mechanical support and insulation through their rigid fin arrangement; used to support busbars and cable ends
- With capacitive divider: Provides mechanical support and insulation. The embedded capacitors in this insulating holder provide voltage output to indicate the voltage presence, up to 24 kV

Technical specifications	•	Height: 175 mm
	•	Capacitive divider: ISO 35 pf

Reference numbers

 3 insulating holders: 	3 insulating holders with capacitive divider:
- 17.5 kV ref. 59431	- 17.5 kV ref. 59430
- 24 kV ref. AAA10075	- 24 kV ref. AAA10074
Standards	IEC
Benefits	Dielectric withstand Mechanical robustness

Anti-condensation heating element

And condensation reading clement		
Function	Heating the inside of the cubicle when the ambient temperature is too low	
Technical specifications	 220 VAC 150 W Length: 432 mm Supplied with its support without thermostat 	
Reference numbers	59280	
Benefits	Avoid condensation in the cubicle	

Insulation	busbar cover

Function	Set of three insulating covers which enables improved dielectric withstand at the busbars connections in the cubicle
Technical specifications	For 1 to 4 busbars (100 mm x 800 mm each)
Reference numbers	59420
Benefits	Can be adjusted according to number of busbars





Characteristics and references



High resistance plastic window		
Function	Located on the panel or the door, allows you to see inside a cubicle	
Technical specifications	3 mm thick transparent polycarbonate window Dimensions: 138 mm x 85 mm	
Reference numbers	59105	
Benefits	Internal arc withstand up to 31.5 kA	







Cubicle compartment handle		
Function	Enables the front panel door of the cubicle to be closed	
Technical specifications	Material: ZamakA version with key is available	
Reference numbers	59270 (handle)59271 (handle with key)	
Benefits	Robustness	













Services

Services

Services for Panel Builders	D-2
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Services for Panel Builders

Increase your business



Business opportunities don't stop after your product is delivered. Be identified as a trusted partner throughout your product's entire life cycle.



The equipment has a long lifespan and your customer will need trusted partners and manufacturers like you to make their operations safe, reliable, efficient and sustainable. Take a step-by-step look at the world of Services and learn the advantages of becoming a Schneider Electric Services partner.



Resell an Innovative Services Plan to increase your business

EcoStruxure Service Plan is a personalized service contract that combines continuous environmental and asset health monitoring with advanced analytics, 24/7 remote technical support and uses expert consultants' advice in fire prevention, asset management and manufacturer field services execution.



Best of field services



On-site services are carried out by highly qualified technicians:

- Preventive and corrective manufacturer maintenance
- Proprietary diagnostics with ProDiag tools
- 24/7 emergency support



Optimize equipment's lifespan

Best of digital services



Digital services are available using the EcoStruxure Asset Advisor platform:

- Continuous asset monitoring with advanced analytics and alerts
- Expert recommendations from our Connected Services Hub
- Dynamic condition-based maintenance to optimize maintenance cycles



Anticipate any actions and investment

Peace of mind



Service plans boost your peace of mind:

- Reduce the risk of electrical failure by up to 75%
- Extend the asset's lifetime by up to 25%



Reduce risk of unscheduled downtime

Discover EcoStruxure Service Plan





Services for Panel Builders

Diversify your activity

Perform maintenance services to diversify your activities

Upgrade electrical equipment with simple smart sensors kits

For existing installed base panels and future installations

EcoFit™ Life Extension Essential offers upgrade solutions that use smart sensors to transform your non-communicating equipment into connected assets and captures information on your electrical installation's health.





Gain field expertise by becoming an EcoXpert Power Services partner

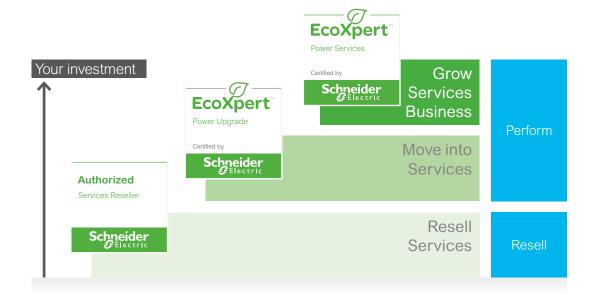


EcoXpert Power Services partners are trained on our field and digital services offers and use diagnostic tools to maintain optimal services continuity on electrical MV and LV installations. Partners have the expertise to modernize brownfield installations and implement connected equipment with digital capabilities and a remote cloud platform for monitoring.

- Enhanced expertise: Receive training on Schneider Electric offers, procedures and tools
- Maintenance and modernization of equipment and devices: Receive training on how to assess LV and MV installed base to increase life duration

















EcoStruxure[™] Connected solutions

What is EcoStruxure™?



500 00

EcoStruxure[™] has been deployed in almost 500 000 sites with the support of some 20 000 developers, 650 000 service providers and partners, and 3 000 utilities, and connects over 2 million assets under management.

EcoStruxure™ is our open, interoperable, IoT-enabled system architecture and platform. EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers. EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level. This includes Connected Products, Edge Control, and Apps, Analytics & Services, which are supported by Customer Lifecycle Software.

EcoStruxure[™] Connected



Efficient asset management Greater efficiency with predictive maintenance helping to reduce downtime.





Real-time data everywhere anytime to make better informed decisions.



Increased protection

Proven design and experience combined with internal arc designs to enhance people and equipment protection.

Turn data into action

EcoStruxure™ architecture lets customers maximize the value of data. Specifically, it helps them:

- Translate data into actionable intelligence and better business decisions
- Take informed decisions to secure uptime and operational efficiency thanks to real-time control platforms
- Gain visibility to their electrical distribution by measuring, collecting, aggregating, and communicating data

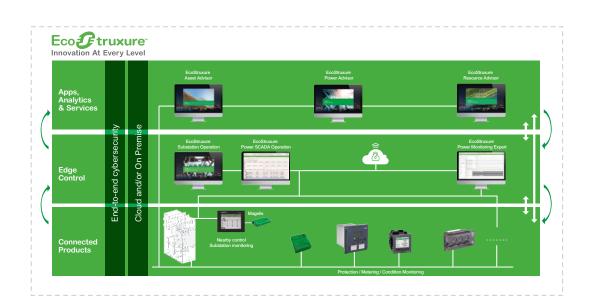








CLOSE THE LOOP







F-Lab Laboratory

Expertise at your side



Experienced F-lab Volta and Amplitude laboratories cooperates with several Schneider Electric entities throughout the world supporting development of quality and safety (robustness and reliability) of products and systems in conformity with various standards covering most of the global market.























Power laboratory

The power laboratory has acquired extensive experience in short-circuit tests on low and medium voltage products. The tests are conducted in compliance with standards IEC, IEEE, ANSI, UL, HN, etc. and others depending on the specifications of our customers.

The laboratory is equipped with 3 power alternators (2 x 600 MVA and 1 x 2500 MVA).

Medium Voltage tests

- Bench to conduct make and break tests under MV downstream load: up to 36 kV - 3 phases (inductive, resistive and capacitive loads)
- Bench to conduct MV short-circuit make and break tests: up to 18 kV - 80 kA - 3 phases
- Bench to conduct tests on arc due to MV internal fault: 31.5 kA - 1s; 40 kA - 0.5 s; 50 kA - 0.25 s.



Functional laboratory

Functional laboratory check behavior of the devices under their normal and specific operating conditions.

It provides support throughout all the development, checking and certification phases, including quality sampling to monitor performance.

Functional tests

This laboratory proposes a wide range of test services (heating, triggering, dielectric, etc.) at high performance levels and using unique means such as tests on the energy measuring devices.

- Temperature rises up to 15 kA AC and 7 kA DC climatic chamber up to 100 m³
- Triggering of overload and short-circuit
- LV and MV dielectric
- Aging tests
- Specific 230 m³ climatic chamber for dielectric, water and ice.







Sustainability

Green Premium™











An industry leading portfolio of offers delivering sustainable value

More than 75% of our product sales offer superior transparency on the material content, regulatory information and environmental impact of our products:

- RoHS compliance
- REACh substance information
- Industry leading # of PEP's*
- Circularity instructions



Discover what we mean by green Check your products!

*PEP: Product Environmental Profile (i.e. Environmental Product Declaration)

The Green Premium program stands for our commitment to deliver customer valued sustainable performance. It has been upgraded with recognized environmental claims and extended to cover all offers including Products, Services and Solutions.

CO₂ and P&L impact through... Resource Performance

Green Premium brings improved resource efficiency throughout an asset's lifecycle. This includes efficient use of energy and natural resources, along with the minimization of CO_2 emissions.

Cost of ownership optimization through... Circular Performance

We're helping our customers optimize the total cost of ownership of their assets. To do this, we provide IoT-enabled solutions, as well as upgrade, repair, retrofit, and remanufacture services.

Peace of mind through... Well-being Performance

Green Premium products are RoHS and REACh compliant. We're going beyond regulatory compliance with step-by-step substitution of certain materials and substances from our products.

Improved sales through... Differentiation

Green Premium delivers strong value propositions through third-party labels and services. By collaborating with third-party organizations we can support our customers in meeting their sustainability goals such as green building certifications.





Complementary litteratures

Learn more on our Medium Voltage products and technology





Helping you design MV products according to IEC standards

· Our talented electrical distribution experts share their industry-leading knowledge of technological developments and evolving medium-voltage standards.

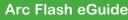






Helping protect people and systems from arc flash in medium voltage equipment

· Easy to understand approach on arc flash systems installed in MV switchgear







Improving your business with digital self-service

· Digital self-service helps your business improve flexibility and productivity, allowing you to quickly adapt to customer needs in changing times.





Schneider Electric EcoFit™ Life Extension Essential Catalog

 Discover in a single catalog all assets and services to modernize existing MV and LV installations by adding sensors and communication capabilities.









Leaflet EcoExpert Cerfified basic

• We offer Panel Builders an easy way to get into Medium Voltage business.

Pre-assembled MV Switchgear





Power Services Catalogues

 Download EcoXpert Power Services catalog: Enhance your portfolio, strengthen customer loyalty, and drive your business forward by leveraging our specialized services that complement your expertise as a Panel Builder.

Power Services Catalog







Green Premium™ ecolabel product -Sustainable performance, by design