EcoStruxure™
Innovation At Every Level

PowerLogic™ A1 and A3

Catalog 2025
Arc Flash Mitigation devices

se.com

Life Is On Schneider Electric

Legal Information

The information provided in this Catalog contains description of Schneider Electric products, solutions and services (“Offer”) with technical specifications and technical characteristics of the performance of the corresponding Offer.

The content of this document is subject to revision at any time without notice due to continued progress in methodology, design and manufacturing.

To the extent permitted by applicable law, no responsibility or liability is assumed by Schneider Electric and its subsidiaries for any type of damages arising out of or in connection with (i) informational content of this Catalog not conforming with or exceeding the technical specifications, or (ii) any error contained in this Catalog, or (iii) any use, decision, act or omission made or taken on basis of or in reliance on any information contained or referred to in this Catalog.

SCHNEIDER ELECTRIC MAKES NO WARRANTY OR REPRESENTATION OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO WHETHER THIS CATALOG OR ANY INFORMATION CONTAINED THEREIN SUCH AS PRODUCTS AND SERVICES WILL MEET REQUIREMENTS, EXPECTATIONS OR PURPOSE OF ANY PERSON MAKING USE THEREOF.

Schneider Electric brand and any trademarks of Schneider Electric and its subsidiaries referred to in this Catalog are property of Schneider Electric or its subsidiaries. All other brands are trademarks of their respective owners.

Trademarks

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

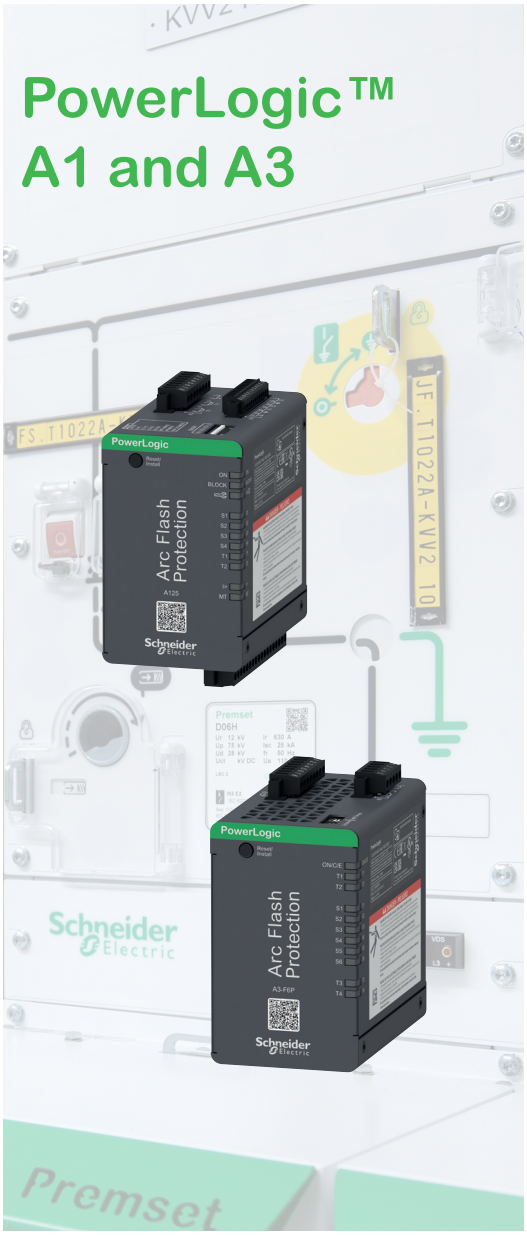
Note: Electrical power systems are dangerous, protection relays are defined and governed by international standards such as IEC 60255 “Measuring relays and protective equipment” and IEEE C37.97 “Protective relay applications to power systems buses”. Never attempt to install or operate protection relays or associated equipment without the necessary qualifications, training and tools. Exposure to electrical arc-flash incidents can be life threatening, no situation can ever be deemed fully safe. Standards such as NFPA 70E define important risk categorization and such standards identify both distance from, and energy of the arc incident to be important factors.

This catalog does not replace the user manual of PowerLogic A1A3. For further information please see the user manaul or contact your local Schneider Electric sales account.

General Contents

General Contents

998-20723358



PowerLogic™ A1 and A3 at a glance

PowerLogic A1 and A3 are designed to mitigate the Arc fault inside electrical cubicles. That will reduce the Arc flash damages and impacts.
Arc flash fault is an electrical phenomenon that occurs when electricity passes through an air gap between two conductors. This develops an arc of electrical current resulting in a powerful release of energy, usually in the form of heat, light, and sound. The arc flash fault can be caused by many factors, which includes improper installation, loose or corroded connections, or a fault in the electrical system. That can be very dangerous, as it releases tremendous amount of energy quickly.

The PowerLogic™ Arc range allows to mitigate the Arc flash fault in MV and LV electrical distribution.

- Electricians must be aware of the risks associated with arc flash faults and take the necessary precautions to protect themselves and others. Whenever working on or near high voltage equipment, electricians should always wear the appropriate Personal Protective Equipment (PPE), such as safety glasses, hard hats, and flame-retardant clothing. They should also be aware of the proper procedure for dealing with an arc flash fault.
- Arc flash mitigation by optical detection is a process used to identify and mitigate the risk of arc flash incidents. It involves the installation of optical sensors around electrical equipment and machinery. These sensors detect any changes in the light emitted by the arc, which can indicate that a fault has occurred or is about to occur.
- Installation of arc optical sensors allows to survey different zones in case of arc ignition. The arc detection will allows to take appropriate protection actions. This is especially useful in environments with high levels of electrical activity, such as manufacturing plants and power plants. Optical detection is a valuable tool that can help electricians and engineers identify and mitigate the risk of arc flash incidents. It can provide early warning of potential hazards and can create a safer work environment and reduce accident risks.

PowerLogic™ A1 and A3 are designed to adapt to small to medium size installation. The mechanical design, installation possibilities, simple wiring, and adapted configuration modes make the PowerLogic™ A1 and A3 to adapt to different users during the life cycle of this range.

Secured and Fast Connection

PowerLogic™ A1 and A3 are designed to simplify all the steps of the product life cycle.

1 **Design**

The PowerLogic™ modular design helps the solution designer to allocate each device per cubicle or group of cubicles, that makes the solution structure easier and faster to design.

2 **Order**

The PowerLogic™ modular approach makes easier to order different pieces and build, while reducing ordering errors and simplifying the management of product stocks.

3 **Install**

By multiple installation possibilities and product optimized sizes, PowerLogic™ A1 and A3 can be installed in different environment in new or existing cubicles. A3 modules can operate as extension modules for PowerLogic A5.

4 **Configure**

PowerLogic™ A1 and A3 can be easily configured by using dip switches or rotary switches and cover all basic applications. In case of complex installation, PowerLogic™ A3 can be configured by Easergy Pro configuration tool. For most applications, a screwdriver is enough.

5 **Operate**

During operation, PowerLogic™ Arc range provide easy LED indication on error information, trips or sensors detection or defects. An operator can easely identify and operate on the Arc flash devices.

6 **Maintain**

During periodic maintenance, PowerLogic™ Arc range allows to move product on test mode to check sensors without tripping.

Smart Design for Easy Installation

- Arc flash protection is required for both LV and MV cubicle.
  Cubicle constructions are different depends on voltage levels, electrical distribution structure, national standards, and habits.
  It makes installation constraints different for each cubicle.
- The Arc flash protection could be installed in newly constructed panels or undated panels in existing cubicles in case of retrofit.
  In retrofit, electrical panels are generally fulfilled with other equipment and in this case, a newly added device should be compact to fit inside available rooms.
- PowerLogic™ A1 and A3 range provide several installation possibilities.
  All devices can be fixed on back DIN rail mounting.
  With a total depth of 120 mm, devices could be installed easily in LV panels.
- If the panel depth is lower, PowerLogic™ Arc devices could be installed with on the side DIN rail mounting.
  That makes the depth 70 mm for A125 or A3-F devices, and 35 mm for A3-S devices. The modification of the DIN rail mounting fixation from back to side is easy and fast.
- Flush mounting accessories are designed to allow a robust and secured front panel mounting of PowerLogic™ A1 and A3 devices.
- In all mounting positions, devices LEDs are visually accessible.
- For faster and secured installation, product wiring is easier to pluggable connector.

Mechanical Mounting

Three Mounting modes for easy mounting in green field and brown field application

PB125853.eps

- DIN Rail Back Mounting:
  for dept cubicle like in MV

PB125854.eps

- DIN Rail Side Mounting:
  for limited depth cubicle like in LV

PB125855.eps

- DIN Rail Flush Mounting:
  to get product access of the cubicle front

Overview & Selection Guide

Overview

The PowerLogic™ Arc range can be deployed in a single MV cubicle where three sensors can secure the arc protection up to medium size application with numbers of MV switchgears or LV switchboards.

The connection flexibility and the easy logic built for common protection schematics, makes this range accessible and easy to use for more applications.

Selecting the right device becomes simple and helps to avoid any error.

The PowerLogic™ Arc range for small to medium size applications is composed by:

- PowerLogic™ A1: stand-alone device for cubicle protection.
- PowerLogic™ A3: can be used as stand-alone device or associated to other A3 devices and build a system solution. PowerLogic™ A3 devices could be connected through a high-speed bus to perform high performance protection at system construction.

Selection guide

PowerLogic™ Arc	A125	A3-F6P	A3-F12P	A3-S6P	A3-S12P
					
Number of Light sensors	4	6	12	6	12
Trip outputs	2	3	2/1*	1	-
Watchdog trip	1	1	0/1*	1	0
Operation mode	Stand Alone	System Main unit		Extension Modules to A3-F	
Power supply	Yes	Yes	Yes	-	-
POE (Power Over Ethernet)	-	Yes	Yes	Yes	Yes
Dimensions (mm / in)	70.6 x 134.4 x 126.2 / 2.78 x 5.29 x 4.97			34 x 134.4 x 125.1 / 1.34 x 5.29 x 4.92	

*Note: Configurable by Easergy Pro

PowerLogic™ A125 Functions

We can supply an arc flash protection system tailored to your application

PowerLogic™ A125 at a glance

- **Dedicated unit for each bay**
  A125 Arc flash protection units are versatile and independently operating devices for bay based protection.
- **Designed for partners**
  They offer optimized and cost effective solutions for panel builders and OEMs.
- **Hardware**
  - Interface for four Arc flash sensors
  - Two output relays: One relay output, one high speed output
  - One change-over output for self-supervision
  - Wide range auxiliary power supply
  - External inputs for remote control
  - External input for current criteria

An arc flash protection unit is a protective device used to enhance the environment of your installation.

User benefits

- **Suitable product**
  Fit to various customer segments like utilities, commercial and industrial buildings, mining, steel, cement, other industry and OEMs.
- **Easy to integrate**
  - QR code for product identification and documentation
  - Simple configuration and commissioning
- **Easy to use**
  - Easy entry to arc flash protection
  - One variant with wide-range power supply
  - Optimized for standard switchgear configurations

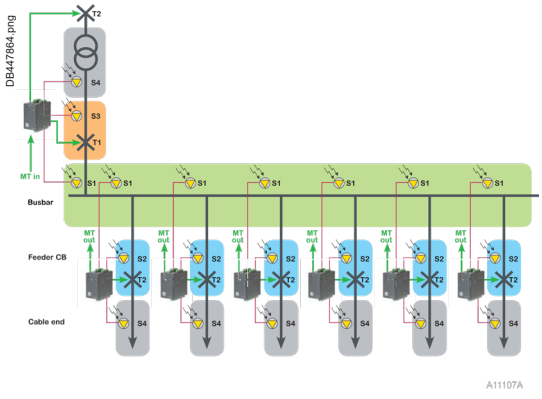
Example of application

One or two incomers and several outgoing feeders

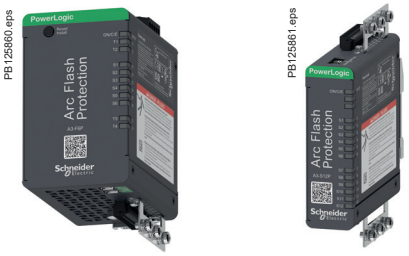
The following applications are typically used for arc flash protection in MV power distribution in commercial buildings and light industries. The arc flash protection is commercialized using A125 arc flash protection units, VA1-DA type point sensors and appropriate wiring between the units.

Operation

Incomer cubicle has three sensors. Activation of sensor S1 operates T1 output. The arc fault happen in the CB compartment sensor S3 activates and controls upstream CB via T2 output. Equally, if the arc fault happens in the power transformer bushings, an upstream CB is tripped through T2. Feeder cubicles also have three sensors. If the arc fault happens in cable compartment, sensor S4 activates and trip T2. If the arc fault happens in CB compartment or busbar, sensor S2 or S1 activates and send signal to upstream A125 in incomer cubicle to trip incomer CB via MT out and MT in.



PowerLogic™ A3 Functions



An arc flash protection units A3-F6P and A3-S12P are protective devices.

User benefits

- **Compact product**
  Easy fits in MV and LV cubicles. Provides easy configuration modes for faster installation in most applications Multiple cubicle protection capability
- **Easy to integrate**
  - QR code for product identification and documentation access
  - With few references cover multiple application modes
- **Easy to use**
  - Easy product selection
  - Dual power supply: Auxiliary and POE*
  - Optimized for common electrical MV and LV cubicles
  - Easy multi-devices commissioning

(*) Power Over Ethernet between devices and limited to two devices.

Versatile device to several application

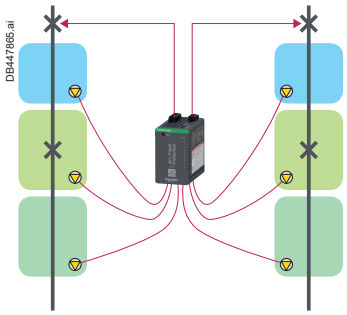
PowerLogic A3 can be used on standalone mode to control one or two circuit breakers and larger cubicles thanks to high number of sensors supported. It can also be used in simple system mode, it means associated with other PowerLogic A3.

Many operation modes are possible:

- Without selectivity: any sensor will make tripping all trip outputs.
- With selectivity: make tripping the circuit breaker related to the zone of the sensor. That makes the faulty zone separated from other circuits.

PowerLogic™ A3 Functions

Examples of application



Stand-alone or Single Unit Mode

PowerLogic™ A3F arc flash protection units could be used as a stand-alone detection device in MV and LV applications.

In this mode, based on required number of sensors and tripping output, the PowerLogic™ A3F can offer 6 to 12 sensors and 1 to 2 high speed output which depends on the model (i.e. A3F6P and A3F12P). Having auxiliary power supply inputs, only PowerLogic™ A3F devices could be used in this kind of mode.

In a DC/AC power inverter panel, the main purpose of using an arc flash detection relay is to detect arc in DC and/or AC circuits and open the main circuit breaker. In this application, most of the time, controlling and tripping the circuit breaker with selectivity approach is not required, therefore the PowerLogic™ A3F as a standalone device can fit well in this kind of application.

Other examples for the standalone approach could be either the arc flash protection in a single feeder as incomer or just the busbar arc flash protection for very limited main ring unit panels.

Simple System Mode

PowerLogic™ A3 arc flash protection units could be used in the system mode in both MV and LV applications. By using the iX Industrial bus to connect two or more PowerLogic™ A3 devices, the system mode of PowerLogic™ A3 devices is configured and is ready to be used in several applications.

Moreover, in this mode, several different protection scheme configurations are available, in addition to lightgroup configurations, so that it gives users sufficient flexibility help to protect a simple and even a bit complicated architecture principally for electrical power system distribution switchgears.

The number of PowerLogic™ A3 devices connected in the system mode is limited to maximum five devices. Depending on different PowerLogic™ A3 models and arrangement, PowerLogic™ A3 arc protection system can cover maximum 50 sensors and 8 or 9 breaking devices to be controlled and tripped.

The PowerLogic™ A3 system mode can protect the single main and some outgoing feeders. The PowerLogic™ A3 system mode can also cover the double main and bus-tie feeder with limited number of outgoing feeders. Both architectures can be done with or without selectivity principle.

PowerLogic™ A3 Functions

Examples of application

PowerLogic™ A3 increase numbers of sensors managed by device and number of trip outputs.
Two typical applications to explain how the PowerLogic™ A3 is cost effective:

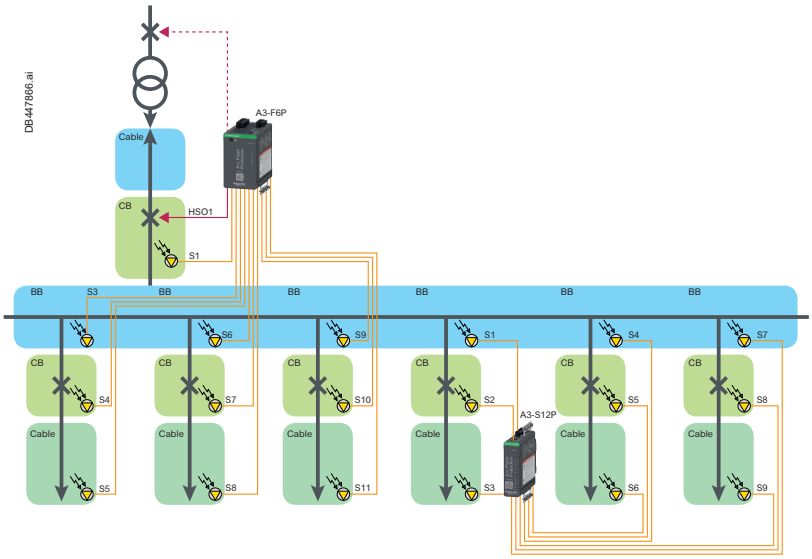
Non-selective Protection

Arc Flash is dangerous. It is better to accept a total shutdown than to be faced with strong damages and destructions.

PowerLogic™ A3 architecture will be maximizing sensors and the Incomer should shut down on any sensor arc detection.

This example shows how with devices 20 devices could be monitored with only two devices.

If any sensor detect the arc flash light, the main incomer will trip and mitigate the Arc flash fault ignition.



Selective Protection

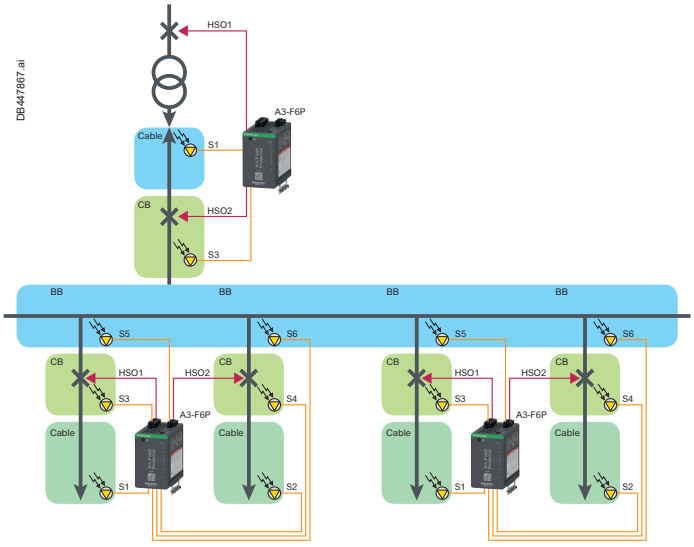
In other applications, the zone selectivity allows to separate damaged zones from the rest of the electrical distribution. In that cases, all circuit breakers should be controlled, and their tripping depends on fault position.

Each PowerLogic™ A3 device could manage one or two cubicles and the tipping will be selective depends on arc detection location.

If the fault appears the cable zone of a feeder, the circuit breaker in the same cubicle will trip. The rest of the installation will continue to operate.

If the fault appears on the busbar, in that case, the incomer circuit breaker will trip.

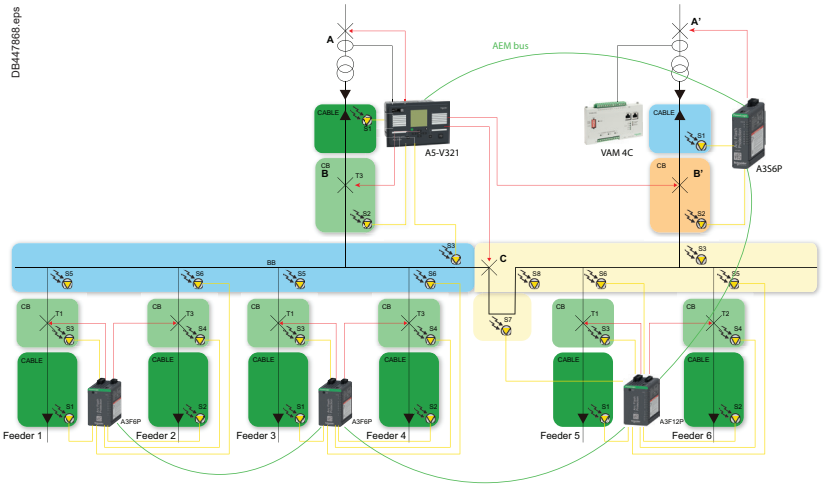
This mode will allows to trip the closest circuit breaker to the located fault and isolate it from the rest of the installation.



PowerLogic™ A3 Functions

A5-V321 and A3 complex network protection

For large installation with many current sources and multiple feeders, the PowerLogic A5-V321 connected to auxiliaries will detect the arc ignition and current sources and isolate the fault. The continuity of service can be maintained on the rest of the installation



PowerLogic™ Arc Datasheet

Technical Characteristics

Product General features					
PowerLogic A3	**A125**	**A3F6P**	**A3F12P**	**A3S6P**	**A3S12P**
Number of light sensors	4	6	12	6	12
Trip outputs	2	3	2/1*	1	-
Watchdog trip outputs	1	1	0/1*	1	0
External power supply	Yes	Yes	Yes	-	-
POE (Power Over Ethernet)	-	Yes	Yes	Yes	Yes
Size (Width x Height x Depth)	70.6 x 134.4 x 126.2 mm / 2.78 x 5.29 x 4.97 in			34 x 134.4 x 125.1 mm / 1.34 x 5.29 x 4.92 in	
Operational temperature range	-40…+65 °C (-40…+149 °F)				
Characteristic	**Value**				
	A125	**A3F6P**	**A3F12P**	**A3S6P**	**A3S12P**
Auxiliary power supply					
U_{AUX}	24…240 (-20%…+10%) Vac/dc			N/A	
Maximum withstand voltage	264 Vac/dc			N/A	
Normal operating power consumption	5 W; (Max. 8 W)	6 W; (Max. 9 W)		3 W; (Max. 4 W)	
Passive Power over Ethernet (PoE)	No	24 V (through the connection bus)			
High speed output, T1 and T3					
Number of contacts	1, NO	2, NO	1, NO	1, NO	-
Rated voltage (max withstand current)	250 V ac, 3 A; 24 V dc, 2 A; 250 V dc, 0.2 A				
Minimum voltage	12 V ac/dc				
Continuous current	5 A				
Maximum operation time (light only mode)	2 ms				
Breaking capacity, AC	2000 VA (resistive load 1, inductive load 0.7)				
Breaking capacity, DC (L/R = 40 ms)	At 48 V dc: 5 A				
	At 110 V dc: 3 A				
	At 220 V dc: 1 A				
Terminal block: Pitch: 5.08 mm/0.2 in.	Wire dimension: • Maximum 2.5 mm^2 (13…14 AWG) • Minimum 1.5 mm^2 (15…16 AWG)				

*Note: Configurable by Easergy Pro

PowerLogic™ Arc Datasheet

Technical Characteristics (cont'd)

Characteristic	Value				
	A125	A3F6P	A3F12P	A3S6P	A3S12P
Trip contact, T2					
Number of contacts	1 / NO	1 / NO	1 / NO	-	-
Rated voltage	250 Vac/dc				
Continuous carry	5 A				
Minimum making current	100 mA at 24 Vdc				
Maximum operation time (light only mode)	9 ms				
Breaking capacity, AC	2000 VA (resistive load 1, inductive load 0.7)				
Breaking capacity, DC (L/R = 40ms)	At 48 Vdc: 1.15 A				
	At 110 Vdc: 0.5 A				
	At 220 Vdc: 0.25 A				
Contact material	Ag alloy				
Terminal block: Pitch: 5.08 mm/0.2 in.	Wire dimension: • Maximum 2.5 mm^2 (13…14 AWG) • Minimum 1.5 mm^2 (15…16 AWG)				
Watchdog, T4					
Number of contacts / status	1 /NC/NO				
Rated voltage	250 Vac/dc				
Minimum making current	100 mA at 24 Vac/dc				
Breaking capacity, AC	2000 VA (resistive load 1, inductive load 0.7)				
Breaking capacity, DC (L/R = 40 ms)	At 48 Vdc: 1.15 A				
	At 110 Vdc: 0.5 A				
	At 220 Vdc: 0.25 A				
Arc sensor inputs					
Number of inputs	4	6	12	6	12
Terminal block: Pitch: 3.5 mm/0.14 in.	Wire dimension: • Maximum 1.5 mm^2 (15…16 AWG) • Minimum 0.14 mm^2 (25…26 AWG)				
Connection cable	Twisted pair, with shield. Shield shall be grounded to the appropriate connector				
IEC 60947-9-2 Compliance					
Light immunity	2000 lx (0,+400)				
Arc detection	• Reduced energy arc, 10 kA, 400 V, with a cos Phi of 0,50 • High energy arcs, 100 kA, 400 V, with a cos Phi of 0,20 • Sensors placed 2000 mm from the arc				
Functional tests	Configure T1, T2 and Trip Out/MT Out triggered for any sensor stimulation. Stimulated all the sensors one by one. The associated LED for sensor and output relay light on when the relay is triggered by the light sensors.				

Environmental Characteristics

Characteristic	Value			
	A3F6P	A3F12P	A3S6P	A3S12P
Characteristic	**Standard**	**Description**		
Emission				
Radiated	EN IEC 60255-26 CISPR 11	Class A(1)		
Conducted	EN IEC 60255-26 CISPR 11 CISPR 32	Class A (Power ports, Wired network port)		
Radiated disturbances immunity tests				
Electrostatic discharges	IEC 61000-4-2	Level 4: +/- 8 kV Contact Discharge +/- 15 kV Air Discharge Criteria B		
Radiated radio frequency electromagnetic field	IEC 61000-4-3	Level 3: 10 V/m, 0.8 to 6 GHz, AM 80% - 1 kHz Criteria A		
Power frequency magnetic fields	IEC 61000-4-8	Level 5: 100 A/m, continuously - 60 s, 50/60 Hz Criteria A 1000 A/m, continuously - 3 s, 50/60 Hz Criteria B		
Conducted disturbances immunity tests				
Electrical fast transient	IEC 61000-4-4	Level 4: 4 kV, burst frequency 5 kHz and 100 kHz Criteria B		
Surge	IEC 61000-4-5	Level 3: 2 kV, 1.2/50 µs (CM) - 1 kV, 1.2/50 µs (DM) Criteria B(2)		
RF conducted disturbances	IEC 61000-4-6	Level 3: 10 Vrms, 0.15 - 80 MHz - AM 80% - 1kHz Criteria A		
Conducted low frequency	IEC 61000-4-16	Level 4: Continuous disturbance: 30 V - 50/60 Hz Short disturbance: 300 V (CM) - 50/60 Hz Criteria A		
Ripple (DC)	IEC 61000-4-17	Level 4: 15% UDC - 100 Hz / 120 Hz – 5 min Criteria A		
Damped oscillatory waves	IEC 61000-4-18	Level 3: 2.5 kV (1 MHz and 100 kHz): CM 1 kV (1 MHz and 100 kHz): DM 2 kV (93/10/30 MHZ): CM Criteria B		
Gradual shutdown	IEC 60255-26	Criteria C: Shut-down ramp 60 s Power off 5 min Start-up ramp 60 s		

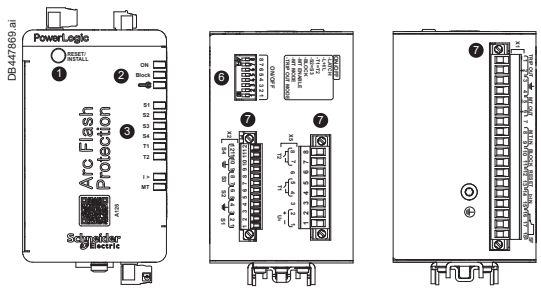
(1) Tested from 30 MHz to 1 GHz. According to the EN IEC 60255-26, if the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz.
(2) Zone B requirement level

Environmental Characteristics

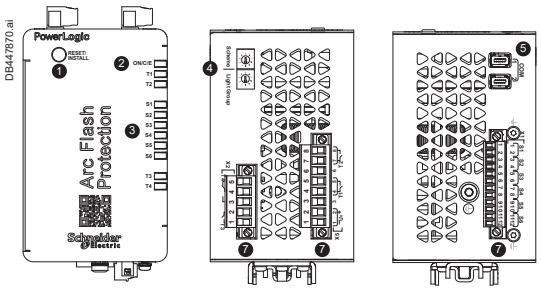
Characteristic	Value A125	
Characteristic	**Standard**	**Description**
Emission		
Radiated	EN IEC 60255-26 CISPR 11 CISPR 16-2-3	Class A(1)
Conducted	EN IEC 60255-26 CISPR 11 CISPR 32	Class A (Power ports, Wired network port)
Radiated disturbances immunity tests		
Electrostatic discharges	IEC 61000-4-2	Level 4: +/- 8 kV Contact Discharge +/- 15 kV Air Discharge Criteria B
Radiated radio frequency electromagnetic field	IEC 61000-4-3	Level 3: 10 V/m, 0.8 to 6 GHz, AM 80% - 1 kHz Criteria A
Power frequency magnetic fields	IEC 61000-4-8	Level 5: 100 A/m, continuously - 60 s, 50/60 Hz Criteria A 1000 A/m, continuously - 3 s, 50/60 Hz Criteria B
Conducted disturbances immunity tests		
Electrical fast transient	IEC 61000-4-4	Level 4: 4 kV, burst frequency 5 kHz and 100 kHz Criteria B
Surge	IEC 61000-4-5	Level x: 2 kV, 1.2/50 µs (CM) - 1 kV, 1.2/50 µs (DM) Criteria B(2)
RF conducted disturbances	IEC 61000-4-6	Level 3: 15 Vrms, 0.15 - 80 MHz - AM 80% - 1kHz Criteria A
Conducted low frequency	IEC 61000-4-16	Level 4: Continuous disturbance: 30 V - 50/60 Hz Short disturbance: 300 V (CM) - 50/60 Hz Criteria A
	IEC 60255-26	BI port (3) 300V (CM) 50/60HZ Zone A
Ripple (DC)	IEC 61000-4-17	Level 4: 15% UDC - 100 Hz / 120 Hz – 10 min Criteria A
Damped oscillatory waves	IEC 61000-4-18	Level 3: 2.5 kV (1 MHz and 100 kHz): CM 1 kV (1 MHz and 100 kHz): DM 2 kV (3/10/30 MHZ): CM Criteria B
Gradual shutdown	IEC 60255-26	Criteria C: Shut-down ramp 60 s Power off 5 min Start-up ramp 60 s

(1) Tested from 30 MHz to 1 GHz. According to the EN IEC 60255-26, if the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz.
(2) Zone B requirement level
(3) According to IEC 60255-26:2023, A125 do not test differential mode since the BI ports do not have AC or DC mode selection based on hardware or software settings.

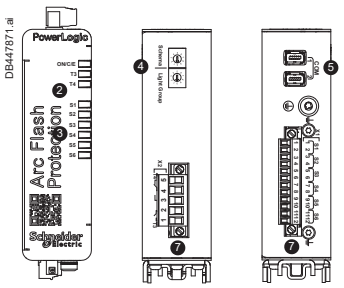
PowerLogic™ A1-A3 Functions



Arc flash protection units A125



PowerLogic™ A3-F

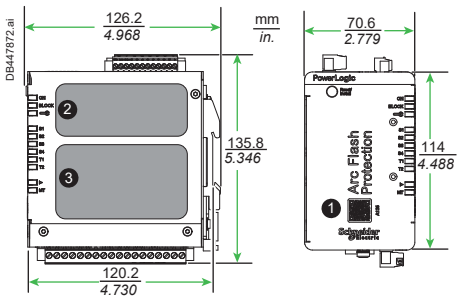


PowerLogic™ A3-S

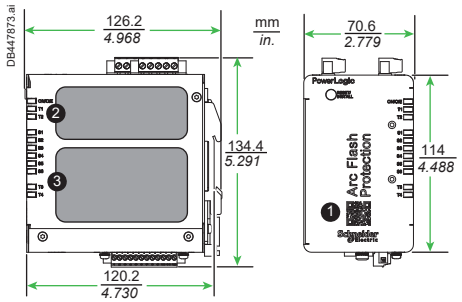
Front Panel Description

No.	Item	Description		
		A125	A3-F	A3-S
1	Reset/install button	• Reset all sensors and output: Press this button to reset. • Install sensors: Press and hold this button 3 s, wait 5 s while ON/C/E LED is flashing orange. • Enter the test mode: During the maintenance, it is possible to test sensors and product light detection without tripping outputs.		
2	Operating status indication LED	• ON/C/E: Power/Communication/Error indication LED. - Green, steady: In service. - Green, blink: Communicating. - Orange, steady: Test mode. - Red: Error. Different color and blincking modes allows to identify operating or malfunctioning status.		
3	Sensor and trip output status LED	• T1...T3: Red, steady: Output relay activation. • T4: Red, steady: Self-diagnostics. • S1...S6: Yellows steady or blink LEDs for sensors and Trips will indicate their status period missing		
4	Rotary configuration switches for A3	Select the scheme and light group. See Configuring with rotary switches, page 45 for details.	Select the scheme and light group. See for details.	
5	Com 1 / Com 2	• Connection with central unit, PowerLogic A3 devices period missing • Connection with a PC for Config tool configuration period missing		
6	Dip switch configuration for A125	Dip switches for protection modes, current status input, configuration mode and Mtin/Mtout activation period missing		
7	X connectors	See Connectors description in the user manual period missing		

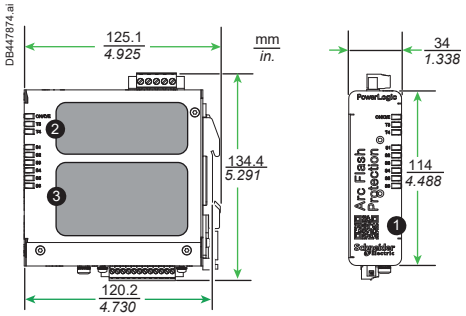
PowerLogic™ A1-A3 Functions



Arc flash protection units A125



PowerLogic™ A3-F



PowerLogic™ A3-S

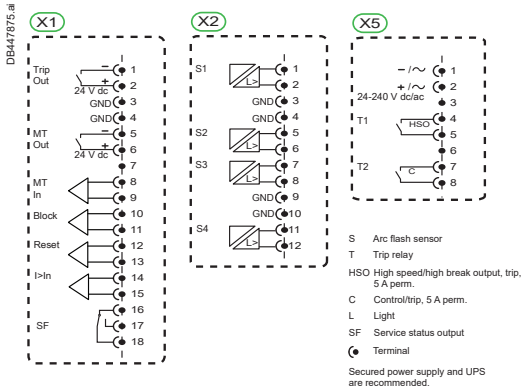
Dimensions and Weight

Dimensions	mm/in		
	A125	A3-F	A3-S
Height	135.8/5.346	134.4/5.29	134.4/5.29
Width	70.6/2.779 202/7.95	70.6/2.78	34/1.34
Depth	126.2/4.97	126.2/4.97	125.1/4.92

Weight					
	A125	A3F6P	A3F12P	A3S6P	A3S12P
kg	0.9	0.95	0.91	0.54	0.51
lb	1.987	2.094	2.006	1.190	1.124

PowerLogic™ A1-A3 Functions

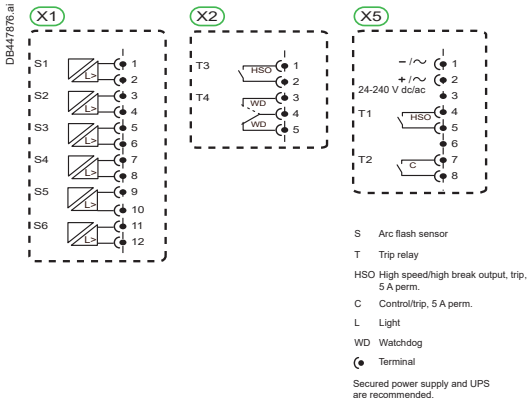
Connectors



S Arc flash sensor
T Trip relay
HSO High speed/high break output, trip, 5 A perm.
C Control/trip, 5 A perm.
L Light
SF Service status output
Terminal

Secured power supply and UPS are recommended.

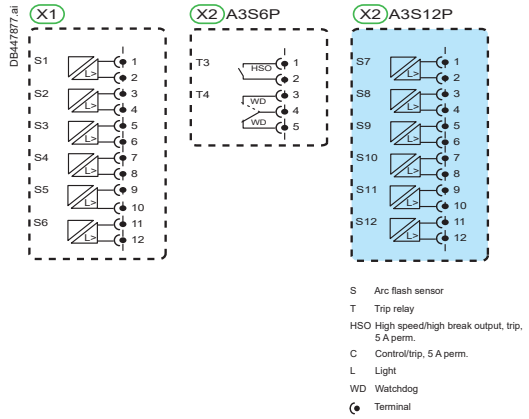
Arc flash protection units A125



S Arc flash sensor
T Trip relay
HSO High speed/high break output, trip, 5 A perm.
C Control/trip, 5 A perm.
L Light
WD Watchdog
Terminal

Secured power supply and UPS are recommended.

PowerLogic™ A3-F



S Arc flash sensor
T Trip relay
HSO High speed/high break output, trip, 5 A perm.
C Control/trip, 5 A perm.
L Light
WD Watchdog
Terminal

PowerLogic™ A3-S

Wiring A125

Terminal type	Applicable cable end	Wire gauge	Tightening torque	Tool
X2	7 mm (0.28 in.)	0.14...1.5 mm² (AWG 26...16)	0.22...0.25 N.m (1.95...2.21 lb-in.)	2.5 mm (3/32 in.)
X1, X5	7 mm (0.28 in.)	1.5...2.5 mm² (AWG 16...14)	0.5...0.6 N.m (4.4...5.3 lb-in.)	3.5 mm (9/64 in.)
Ground stud	Ø = 4...6 mm (0.16...0.24 in.)	⩾ 2.5 mm² (AWG 12)	1.5 N.m (13.28 lb-in.)	Socket wrench for M4 screw

Wiring A3-F

Terminal type	Applicable cable end	Wire gauge	Tightening torque	Tool
A3F6P: X1 A3F12P: X1, X2	7 mm (0.28 in.)	0.14...1.5 mm² (AWG 26...16)	0.22...0.25 N.m (1.95...2.21 lb-in.)	2.5 mm (3/32 in.)
A3F6P: X2, X5 A3F12P: X5	7 mm (0.28 in.)	1.5...2.5 mm² (AWG 16...14)	0.5...0.6 N.m (4.4...5.3 lb-in.)	3.5 mm (9/64 in.)
Ground stud	Ø = 4...6 mm (0.16...0.24 in.)	⩾ 2.5 mm² (AWG 12)	1.5 N.m (13.28 lb-in.)	Socket wrench for M4 screw

Wiring A3-S

Terminal type	Applicable cable end	Wire gauge	Tightening torque	Tool
A3S6P: X1 A3S12P: X1, X2	7 mm (0.28 in.)	0.14...1.5 mm² (AWG 26...16)	0.22...0.25 N.m (1.95...2.21 lb-in.)	2.5 mm (3/32 in.)
A3S6P: X2	7 mm (0.28 in.)	1.5...2.5 mm² (AWG 16...14)	0.5...0.6 N.m (4.4...5.3 lb-in.)	3.5 mm (9/64 in.)
Ground stud	Ø = 4...6 mm (0.16...0.24 in.)	⩾ 2.5 mm² (AWG 12)	1.5 N.m (13.28 lb-in.)	Socket wrench for M4 screw

Mobile application

PB126862.eps

EcoStruxure™ Power Device app

Within the palm of your hand you can be connected to your Schneider Electric:

- MasterPact MTZ air circuit breaker
- TeSys GV4 motor circuit breaker
- Easergy P5 protection and control relays
- PowerLogic A1 & A3
- and more...

Note: Please contact your local Schneider Electric representative for availability.

EcoStruxure Power Device app is a single mobile application with necessary information and capabilities to operate and efficiently maintain devices in the EcoStruxure architecture.

This app can be installed on your IOS and Android smartphone.
The protection devices can be identified on the app by simply scanning their QR codes.

Wireless communication is possible via by WIFI(1), Bluetooth(2), NFC(2) technologies for operation and monitoring within the proximity of the devices. Get real time notifications about the electrical installation: load levels, health status, warnings and alarms, protection settings and more...

Free download EcoStruxure Power Device on:

Download on the App Store

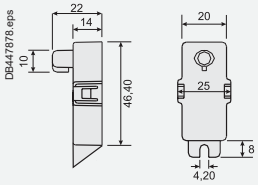
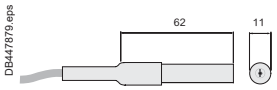
GET IT ON Google Play

(1) WIFI is not embedded in Easergy P5, a separate WIFI router connected to an Ethernet port of the device is required.
(2) Contact Schneider Electric for availability.

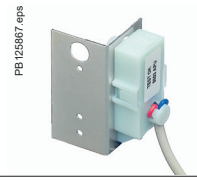
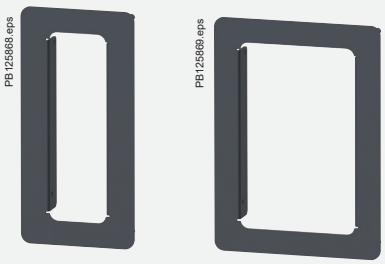
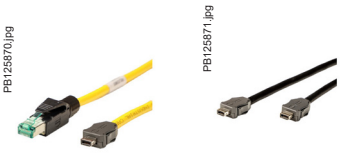
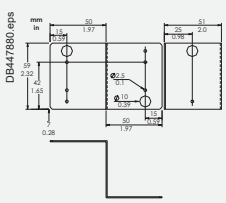
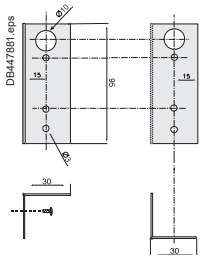
Additional modules and accessories

Sensors and Accessories

Sensors

Point sensor VA1DA	Point sensor VA1EH	Shielded arc sensor VA2DV
• Typically used for MV and LV air insulated switchgears • IP20 • Surface mounting • Continuous self-supervision	• Typically used for MV air insulated swichgears and wind power installations • IP 65 • Tube mounting • Continuous self-supervision	• Typically used for wind power installations in harsh environment • IP65 • Placed in a hole and fixed with a nut • Continuous self-supervision
		
		

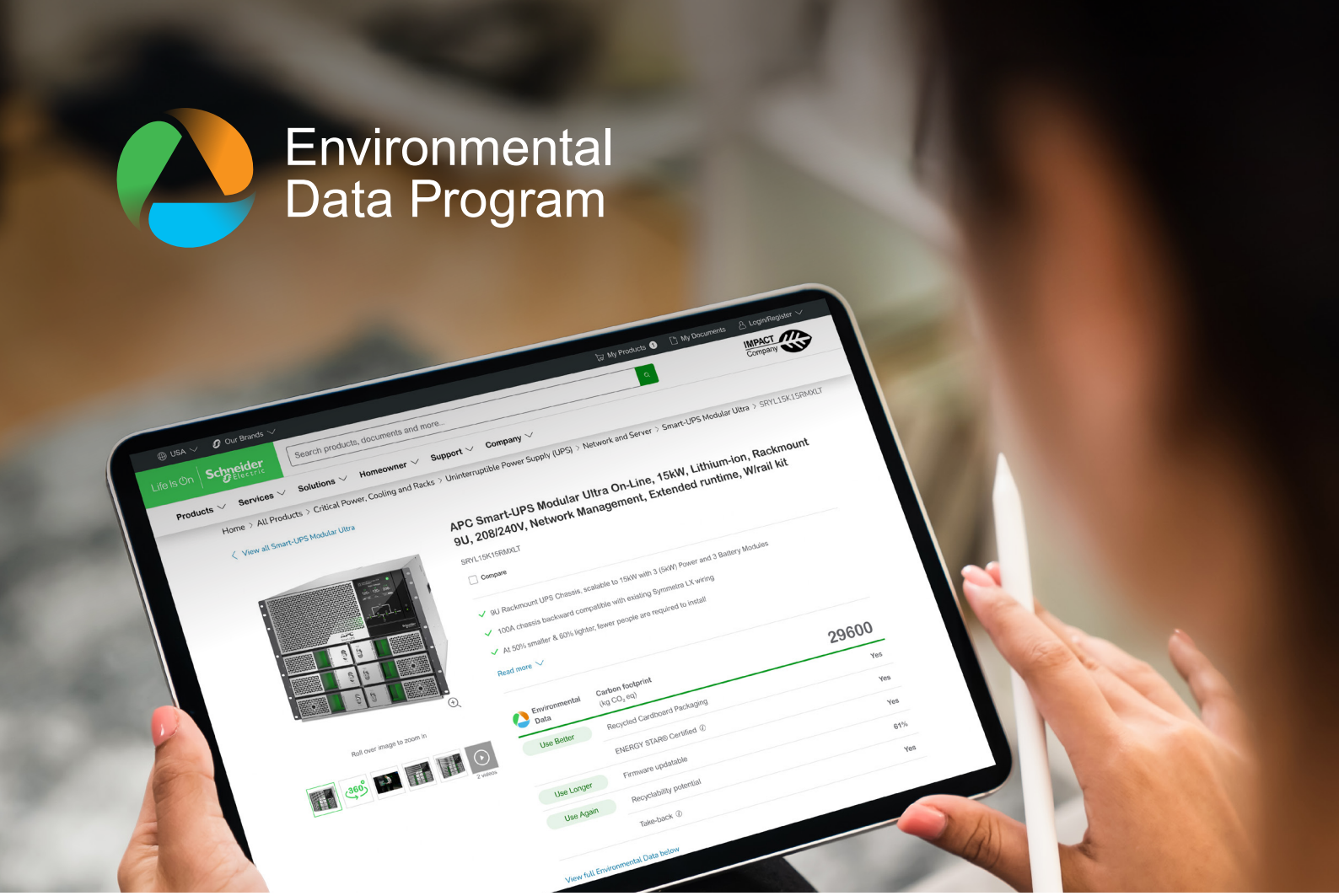
Accessories

Sensor mounting plate Z-shaped	Sensor mounting plate L-shaped	Door mount bracket VYX 628	Cables
REL52828	REL52829	REL52902 and REL52903	REL52960 and REL52961
Wall mounting to VA1DA-x sensors (no extra holes in the switchgear) period missing	Wall mounting to VA1DA-x sensors (no extra holes in the switchgear) period missing	Optional door mounting bracket supports installation to a door for easy access of system status data.	
		 REL52902 REL52903	 REL52960 REL52961
			

Order codes

PowerLogic™ Arc Devices		
Commercial Reference	**Product Name**	**Description**
REL52900	A125	A125 4 point sensors 2 control arc device
REL52920	A3 F6P	A3 F6P 3 point sensors 4 control arc device
REL52921	A3 F12P	A3 F12P 12 point 2 control sensors arc device
REL52930	A3 S6P	A3 S6P 6 point sensors 1 control Arc extension device
REL52931	A3 S12P	A3 S12P 12 point sensors Arc extension device
Accessories and sensors		
Commercial Reference	**Product Name**	**Description**
REL52902	A3S Flush Mounting Frame	A3S Front Mounting Frame Small size
REL52903	A3F and A125 Mounting Frame	A3S and A125 Front Mounting Frame Large size
REL52960	A3 Config Arc EM	A3 Configuration Arc EM cable to RJ45
REL52961	A3 Arc EM cable 1 m (3.28 ft)	A3 Arc EM cable 1 m (3.28 ft) Comm and ix Industrial® ports
REL52962	A3 Arc EM cable 2 m (6.56 ft)	A3 Arc EM cable 2 m (6.56 ft) Comm and ix Industrial® ports
REL52963	A3 Arc EM cable 3 m (9.85 ft)	A3 Arc EM cable 3 m (9.85 ft) Comm and ix Industrial® ports
REL52964	A3 Arc EM cable 5 m (16.41 ft)	A3 Arc EM cable 5 m (16.41 ft) Comm and ix Industrial® ports
REL52965	A3 Arc EM cable 10 m (32.81 ft)	A3 Arc EM cable 10 m (32.81 ft) Comm and ix Industrial® ports
REL52966	A3 Arc EM cable 15 m (49.21 ft)	A3 Arc EM cable 15 m (49.21 ft) Comm and ix Industrial® ports
REL52967	A3 Arc EM cable 20 m (65.61 ft)	A3 Arc EM cable 20 m (65.61 ft) Comm and ix Industrial® ports
REL52968	A3 Arc EM cable 25 m (82.02 ft)	A3 Arc EM cable 25 m (82.02 ft) Comm and ix Industrial® ports
REL52969	A3 Arc EM cable 30 m (98.42 ft)	A3 Arc EM cable 30 m (98.42 ft) Comm and ix Industrial® ports
REL52804	VA1DA-6	Arc sensor, 6 m
REL52801	VA1DA-20	Arc sensor, 20 m
REL52806	VA1DA-6S	Arc sensor, 6 m, shielded
REL52803	VA1DA-20S	Arc sensor, 20 m, shielded
REL52805	VA1DA-6S-HF	Arc sensor, 6 m, shielded, halogen free
REL52802	VA1DA-20S-HF	Arc sensor, 20 m, shielded, halogen free
REL52839	VA1DA-6W	Arc sensor, 6 m, shielded at sensor end
REL52840	VA1DA-20W	Arc sensor, 20 m, shielded at sensor end
REL52828	VYX001	Surface mounting plate for sensors, Z-shaped
REL52829	VYX002	Surface mounting plate for sensors, L-shaped
REL52810	VA1EH-6S	Arc sensor, 6 m pipe sensor sielded
REL52808	VA1EH-20S	Arc sensor, 20 m pipe sensor shielded

Environmental Data Program

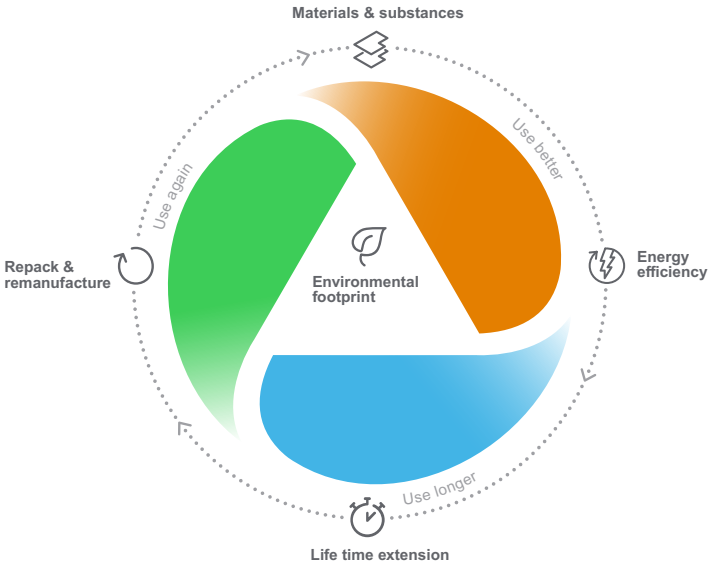


Next-level transparency for better-informed product choices

The Environmental Data Program is a framework for how we measure, categorize, and compare the environmental attributes and footprint of our products.

Using a rigorous, fact-based methodology, the program provides environmental data from across the product lifecycle

Five data categories across the product lifecycle



Use Better: How sustainable a product is, including environmental footprint, materials and substances, packaging, and energy efficiency.

Use Longer: How a product's life time can be effectively extended in terms of repairability and updatability.

Use Again: How a product can be reused, from dismantling and remanufacturing to recyclability and manufacturer take back.

With this transparent, verified data, customers and partners are empowered to make conscious environmental choices and accurately evaluate and report on sustainability performance.

All our hardware offers have an associated environmental data available on se.com product pages.

Learn more about the Environmental Data Program

www.se.com

Schneider Electric Industries SAS
35 rue Joseph Monier
92500 Rueil Malmaison
France

December 2025
PowerLogic™ A1-A3
NRJED323201EN