

# Product datasheet

Specifications



## protection relay PowerLogic P1F 24-60V 3CT 1Io: 0.05-12IN 8DI-6DO RS485 USB

REL15016C

### Main

Range of product	PowerLogic
Product or component type	Protection relay
Relay application	Feeder
product reference	P1
Device mounting	Flush
Mounting support	Fixing kit
Mounting mode	Flush-mounted
power supply	24...60 V AC 24...60 V DC
measuring inputs	: 1/5 A CT phase current 8
number of Digital Inputs (DI)	8
number of Digital Outputs (DO)	6 DO 1 watchdog
type of temperature module connection	1 twisted shielded pair
communication ports	1 RS485 on rear 1 USB type mini B on front
communication protocols	CEI 60870-5-103 Modbus RTU
Cybersecurity	Password protection
protection functions	Breaker failure 50BF Phase overcurrent 50/51 Earth fault overcurrent 50N/51N Lockout relay 86 Thermal overload protection 49 Cold load pick-up Switch ON to fault (SOTF) Inrush detection Negative sequence overcurrent 46 Broken conductor 46BC Recloser 79
Arc flash protection	No
measurement functions	Current 3-phase Current RMS Current peak Current inrush Current positive sequence Current negative sequence Frequency Temperature overload
control functions	Local/remote control I/O push-button Digital Using serial port

<b>monitoring functions</b>	Circuit breaker monitoring Trip circuit supervision 74 Event counters Relay self-monitoring
<b>logs and records</b>	Event recording Disturbance recording Trip context information
<b>Switchgear diagnosis type</b>	Trip circuit supervision ANSI code: TCS
<b>Connections - terminals</b>	Snap-on fixed Screw clamp terminals fixed

## Complementary

<b>Maximum power consumption in W</b>	13.5 W AC 4 W DC
<b>Software name</b>	ESetup Easergy Pro: device setup
<b>Display type</b>	Graphic display terminal
<b>Number of key</b>	9
<b>Local signalling</b>	6 x LED red/orange programmable 1 x LED red relay trip indicator 1 x LED green watchdog
<b>Device connection</b>	Serial port 1 shielded twisted pair
<b>Communication compatibility</b>	IEC 60870-5-103 Modbus RTU
<b>Standards</b>	EN 60255-26:2009 EN 60255-1:2010 EN 60255-27:2005
<b>Product certifications</b>	CE
<b>Height</b>	Embedded: 101.5 mm Total: 116.5 mm
<b>Width</b>	Embedded: 101.5 mm Total: 116.5 mm
<b>Depth</b>	Embedded : 108 mm Total : 119 mm
<b>Net weight</b>	0.8 kg maximum

## Environment

<b>Directives</b>	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility
<b>Electromagnetic compatibility</b>	Electromagnetic immunity level 3 conforming to EN 61000-4-2/3/4/5/6/8
<b>Mechanical robustness</b>	Seismic tests: 2 Gn horizontal, 1 Gn vertical conforming to EN 60255-21-3 Shocks (level: class 1) : 5 Gn for 11 ms conforming to EN 60255-21-2 Shocks withstand (level: class 1) : 10 Gn for 16 ms conforming to EN 60255-21-2 Bumps (level: class 1) : 15 Gn for 11 ms conforming to EN 60255-21-2 Vibrations (level: class 1) : 1 Gn, 10...150 Hz, 1 cycle conforming to EN 60255-21-1
<b>Ambient air temperature for operation</b>	-25...60 °C -30...70 °C ( 16 h )
<b>Ambient air temperature for storage</b>	-30...70 °C
<b>IP degree of protection</b>	IP54 conforming to IEC 60529
<b>Relative humidity</b>	0...93 % at 40 °C, 21 days 0...93 % at 60 °C, 10 days 93 % at 25...55 °C, 6 cycles, 12 + 12 hours

## Packing Units

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<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	19.5 cm
<b>Package 1 Width</b>	16.5 cm
<b>Package 1 Length</b>	16.5 cm
<b>Package 1 Weight</b>	997.0 g

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## **Contractual warranty**

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<b>Warranty (in months)</b>	18
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

Total lifecycle Carbon footprint	235 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	76 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.6 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	157 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	1 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
SCIP Number	2140e85d-91da-4f06-9dcd-b67f68a55691
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>

## Use Longer




### Lifetime extension

Repair	No
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## Use Again



### Repack and remanufacture

Recyclability potential, in %	5
End of life manual availability	<a href="#">End of Life Information</a>
Take-back	Yes
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins