

# Product datasheet

Specifications



## protection relay PowerLogic P1F 24-60V 3CT 1Io: 0.05-12IN 4DI-8DO RS485 USB

REL15012

### 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 4
number of Digital Inputs (DI)	4
number of Digital Outputs (DO)	8 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
Arc flash protection	No
measurement functions	Current 3-phase Current RMS Current peak Current inrush Frequency Temperature overload
control functions	Local/remote control I/O push-button Digital Using serial port
monitoring functions	Circuit breaker monitoring Trip circuit supervision 74 Event counters Relay self-monitoring

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

<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

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1

Package 1 Height	16.200 cm
Package 1 Width	16.200 cm
Package 1 Length	18.600 cm
Package 1 Weight	1.135 kg
Unit Type of Package 2	S04
Number of Units in Package 2	6
Package 2 Height	30.000 cm
Package 2 Width	40.000 cm
Package 2 Length	60.000 cm
Package 2 Weight	8.058 kg

## Contractual warranty

Warranty (in months)	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.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
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.

### Use Better



### Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
SCIP Number	2140e85d-91da-4f06-9dcd-b67f68a55691

### Use Longer



### Lifetime extension

Repair	No
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### Use Again



### Repack and remanufacture


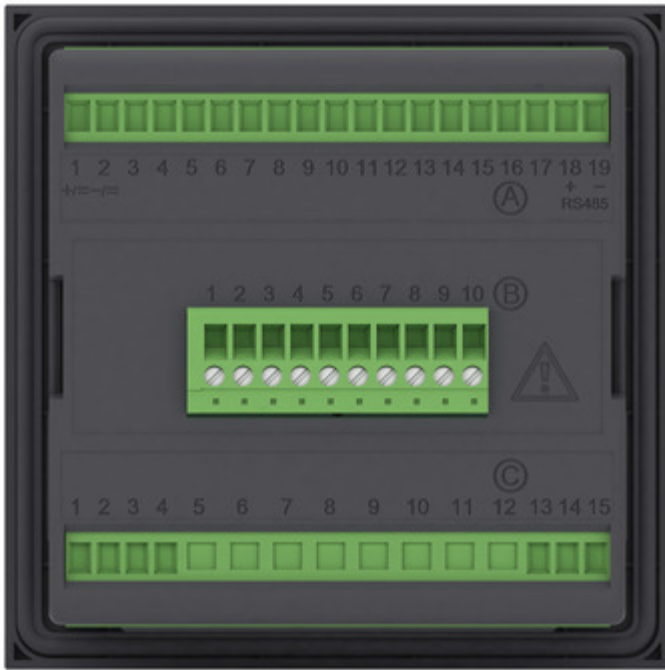
Recyclability potential, in %	5
End of life manual availability	<a href="#">End of Life Information</a>
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Image of product / Alternate images

Alternative

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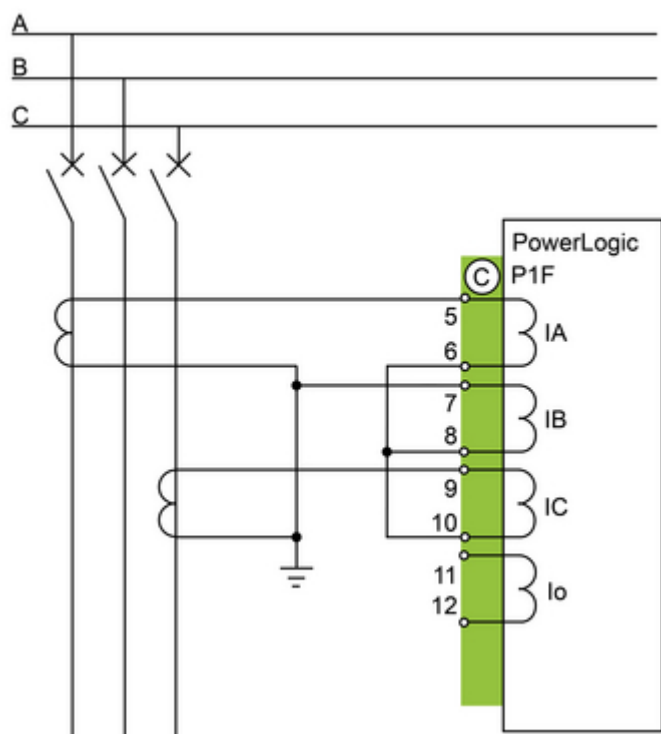




Technical Illustration

Assembly's dimensions

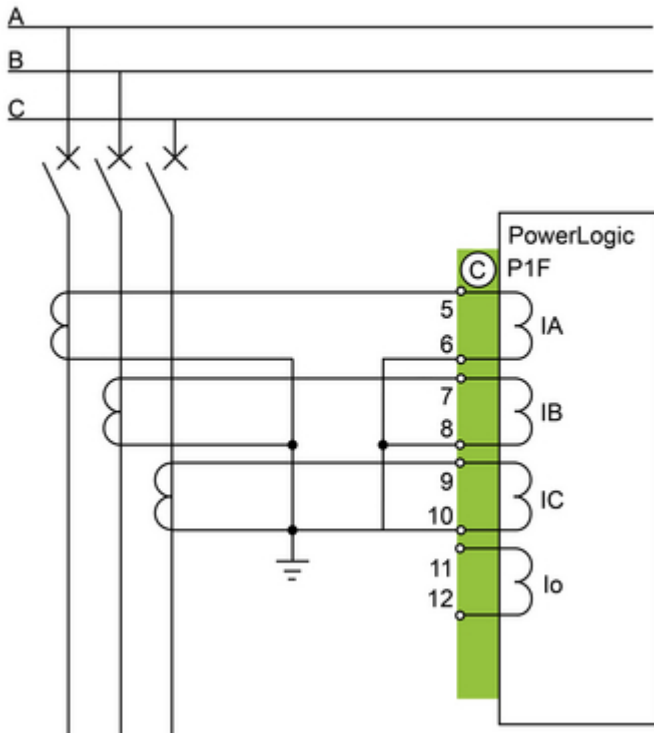
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Technical Illustration

Assembly's dimensions

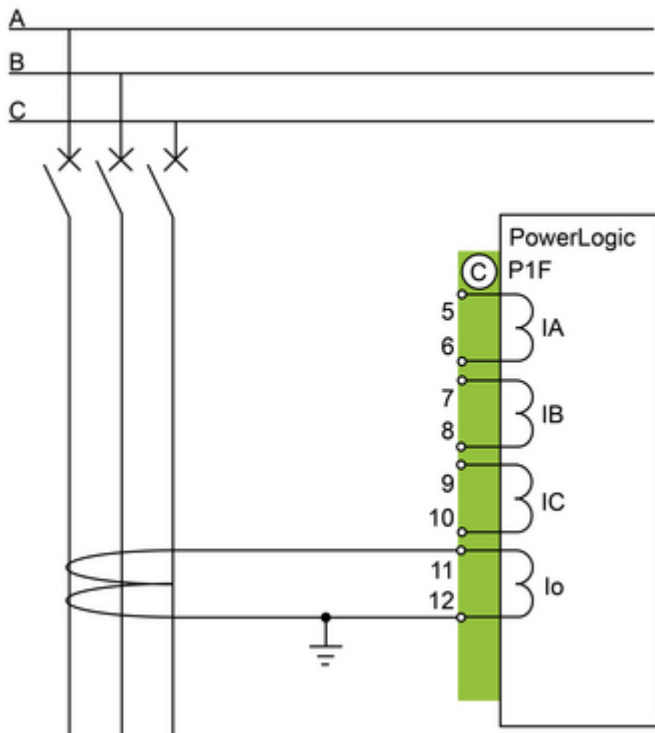
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Technical Illustration

Assembly's dimensions

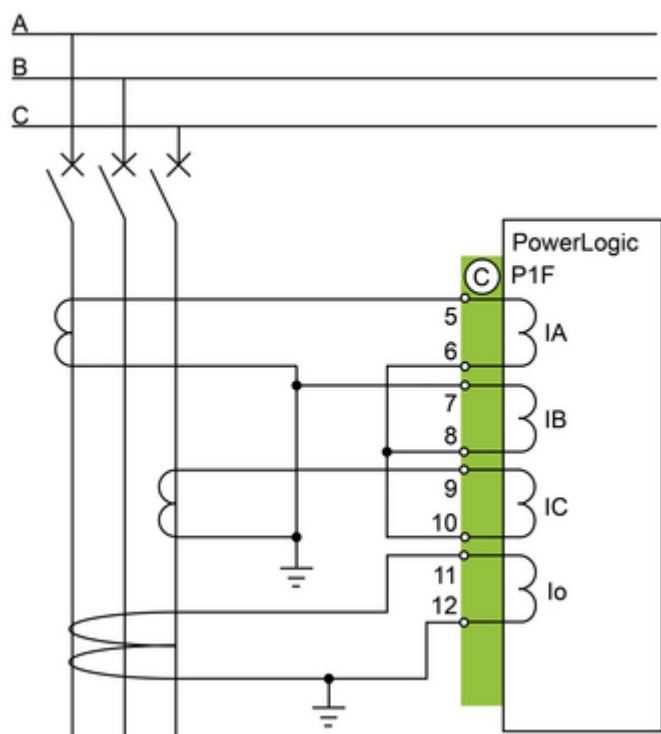
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Technical Illustration

Assembly's dimensions

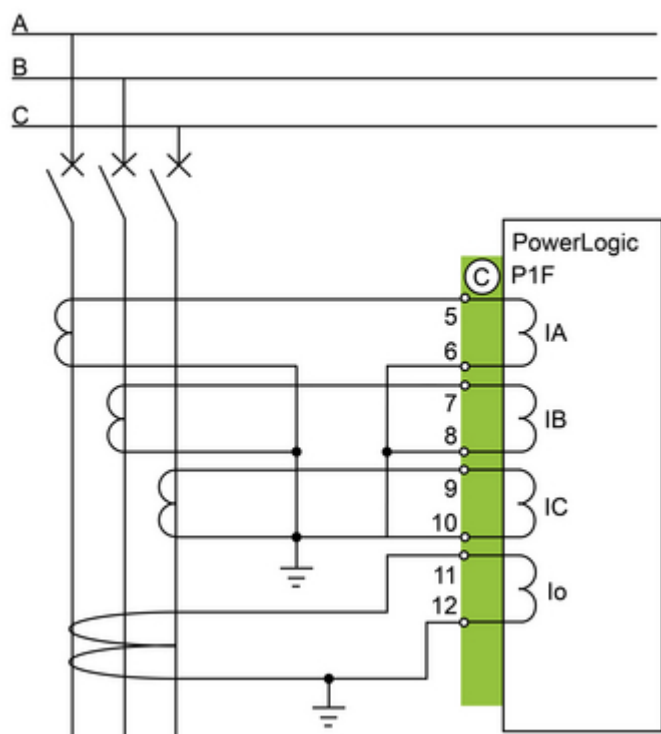
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Technical Illustration

Assembly's dimensions

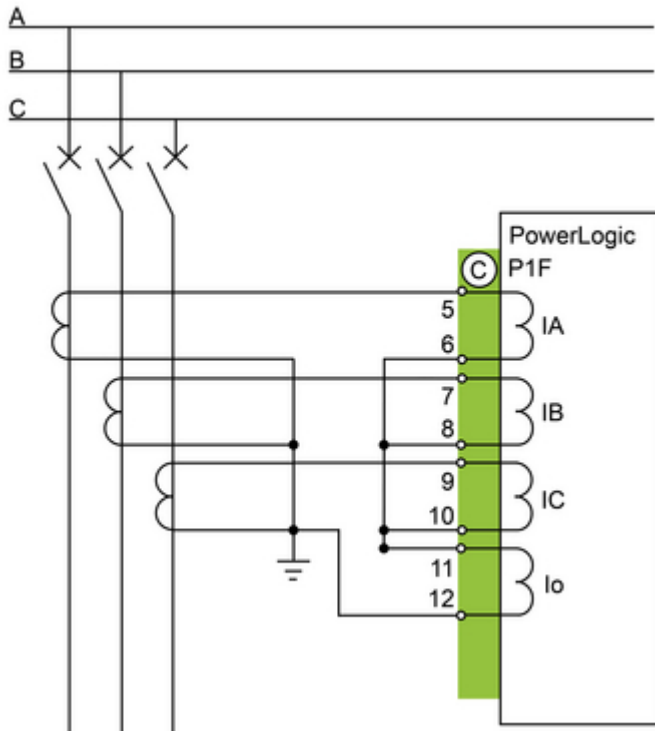
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Technical Illustration

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Technical Illustration

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