

# Product datasheet

Specifications



## protection relay Easergy P1F 24-60V 3CT 1Io: 0.01-2IN 1VT 8DI-6DO RS485 USB

REL15020

### 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 Directional earth fault 67N
Arc flash protection	No
measurement functions	Current 3-phase Current RMS Current peak Current inrush Current positive sequence Current negative sequence Frequency Temperature overload

<b>control functions</b>	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>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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	19.5 cm
Package 1 Width	16.5 cm
Package 1 Length	16.5 cm
Package 1 Weight	997.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	6.423 kg

## 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

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	235
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Environmental Disclosure	<a href="#">Product Environmental Profile</a>
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## Use Better

### Materials and Packaging

Packaging made with recycled cardboard	No
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Packaging without single use plastic	No
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EU RoHS Directive	Compliant with Exemptions
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REACH Regulation	<a href="#">REACH Declaration</a>
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China RoHS Regulation	<a href="#">China RoHS declaration</a>
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## Use Again

### Repack and remanufacture

Circularity Profile	<a href="#">End of Life Information</a>
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Take-back	No
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Technical Illustration

Wiring diagram

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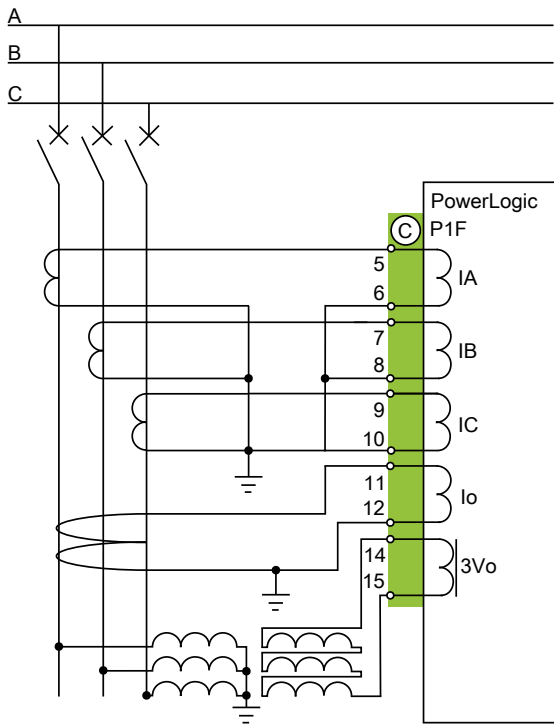


Image of product / Alternate images

**Alternative**

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Technical Illustration

Assembly's dimensions

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