

# Product datasheet

Specifications



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

REL15022

### Main

Range of product	Easergy P1
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	RS485 1 rear USB type mini B 1 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
Control functions	Local/remote control

	I/O push-button Using serial port Digital
<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>	and 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>	101.5 mm embedded: 116.5 mm total:
<b>Width</b>	101.5 mm embedded: 116.5 mm total:
<b>Depth</b>	108 mm embedded: 119 mm total:
<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
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<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

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>

## Recommended replacement(s)