

Product datasheet

Specifications



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

REL15016

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
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

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

Complementary

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

Environment

Directives	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility
Electromagnetic compatibility	Electromagnetic immunity level 3 conforming to EN 61000-4-2/3/4/5/6/8
Mechanical robustness	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
Ambient air temperature for operation	-25...60 °C -30...70 °C (16 h)
Ambient air temperature for storage	-30...70 °C
IP degree of protection	IP54 conforming to IEC 60529
Relative humidity	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

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Recommended replacement(s)