

Product data sheet

Specifications



protection relay Easergy P1V 90-250V 4VT: 57-130V 6DI-8DO RS485 USB

REL15032

Main

Range of product	Easergy P1
Product or component type	Protection relay
Relay application	Voltage
Product reference	P1
Device mounting	Flush
Mounting support	Fixing kit
Mounting mode	Flush-mounted
Power supply	90...240 V AC 90...250 V DC
Measuring inputs	: VT voltage 6
Number of Digital Inputs (DI)	6
Number of Digital Outputs (DO)	8 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	Undervoltage 27 Overvoltage 59 Earth fault overvoltage 59N Lockout relay 86 Negative sequence overvoltage 47 Positive sequence undervoltage 27D Overfrequency 81O Underfrequency 81/81N
Arc flash protection	No
Measurement functions	Frequency Voltage positive sequence Voltage negative sequence Voltage RMS
Control functions	Local/remote control
Monitoring functions	Circuit breaker monitoring Trip circuit supervision 74 Event counters Relay self-monitoring
Logs and records	Event recording

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

Disturbance recording
Trip context information

Switchgear diagnosis type Trip circuit supervision ANSI code: TCS
VT supervision

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 873.0 g

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Circularity Profile	End of Life Information
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Recommended replacement(s)