

# 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

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

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <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>	<a href="#">Yes</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>California proposition 65</b>	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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

### Recommended replacement(s)