## Product data sheet Characteristics

## **REL52122**

# Easergy P3T32 6CT 3lo ringlug 4VT 12DI 14DO 110-230V DI110V RS485 RJ45 ANSI



#### Main Range of product Easergy P3 Product or component Protection relay type Relay application Transformer P3T32-CGG1A-AA1FA-BBAAB Product reference Device mounting 48...230 V AC/DC Power supply 6 1/5 A CT phase current Measuring inputs 2 5/1 A CT residual current 1 1/0.2 A CT residual current 4 100 V/110 V VT voltage Number of sensors 0 temperature 0 arc Number of Digital Inputs 12.0 Number of Digital 14 DO Outputs (DO) 1 watchdog Number of analogue 0 inputs Number of analogue outputs Communication ports Front USB port 1 Rear RJ45 1 Rear RS485 1 IEC 61850 ed. 1 Communication protocols IEC 61850 ed. 2 IEC 60870-5-101 **DNP3 TCP** Modbus TCP Ethernet/IP IEC 60870-5-103 DNP3 Modbus RTU DeviceNet **SPAbus**

Password protection Port hardening

Cybersecurity

Overfluxing (V/Hz) 24 Synchro-check 25 Undervoltage 27 Directional active underpower 37P Negative sequence overcurrent 46 Thermal overload protection 49 Earth fault overcurrent 50N/51N Phase overcurrent 50/51 Breaker failure 50BF Switch ON to fault (SOTF) Capacitor bank unbalance 51C Capacitor overvoltage 59C Overvoltage 59 Earth fault overvoltage 59N Restricted earth fault 64REF Directional phase overcurrent 67 Directional earth fault 67N H2 detection 68H2 H5 detection 68H5 Underfrequency 81/81N Rate of change of frequency 81R Lockout relay 86 Two-winding transformer differential 87T Programmable stages 99 Programmable curve Cold load pick-up
No Solution piece-up
Differential current relay
Current 3-phase Current zero sequence Current positive sequence Current negative sequence Current ratio of negative and positive Voltage phase to earth Voltage phase to phase Voltage zero sequence Voltage positive sequence Voltage negative sequence Voltage ratio of negative and positive Short circuit fault reactance Fault location current Earth fault reactance Frequency Active power RMS active power RMS reactive power RMS reactive power RMS apparent power Active energy Reactive energy Cos \( \phi \) Tan \( \phi \) Power angle Power factor Voltage phasor diagram view Current phasor diagram view Current 2nd, 15th harmonics with THD Voltage 2nd, 15th harmonics with THD Condition monitoring CB wear Voltage interruption
Switchgear control and monitoring Programmable switchgear interlocking Local control on single-line diagram Local control with I/O keys Local/Remote control 2 function keys Mobile application with Easergy SmartApp Web-server
6 controlled + 8 displayed
4
Trip circuit supervision 74 Circuit breaker monitoring Relay self-monitoring

Logs and records	Event recording Disturbance recording Tripping context
Switchgear diagnosis type	CT/VT supervision Trip circuit supervision TCS
Connections - terminals	Screw Ring lugs Pin

## Complementary

Operating threshold	110 V AC/DC
Time synchronisation protocol	SNTP
Web server	Embedded HTTP server
Display type	LCD LCD
Number of key	2 customizable
Local signalling	2 LEDs 16 LEDs programmable
Height	6.93 in (176 mm)
Width	10.63 in (270 mm)
Depth	9.06 in (230 mm)
Net weight	9.26 lb(US) (4.2 kg) maximum

### Environment

Electromagnetic compatibility	Emission tests IEC/EN 60255-26 ed. 3	
	Emission tests class A CISPR 11	
	Emission tests class A CISPR 22	
	EMC immunity IEC/EN 60255-26 ed. 3	
	EMC immunity EN/IEC 61000-4-18	
	EMC immunity IEC 60255-22-1	
	EMC immunity level 4 EN/IEC 61000-4-2 EMC immunity IEC 60255-22-2	
	EMC immunity level 3 EN/IEC 61000-4-3	
	EMC immunity IEC 60255-22-3	
	EMC immunity level 4 EN/IEC 61000-4-4	
	EMC immunity IEC 60255-22-4	
	EMC immunity level 3 EN/IEC 61000-4-5	
	EMC immunity IEC 60255-22-5	
	EMC immunity level 3 EN/IEC 61000-4-6	
	EMC immunity IEC 60255-22-6	
	EMC immunity EN/IEC 61000-4-8	
	EMC immunity level 5 EN/IEC 61000-4-9	
	EMC immunity EN/IEC 61000-4-29	
	EMC immunity EN/IEC 61000-4-11 EMC immunity EN/IEC 61000-4-17	
	EMC immunity IEC 60255-27	
	EMC immunity class III IEC 60255-5	
	EMC immunity EN/IEC 60255-1	
Mechanical robustness	Vibrations class II) IEC 60255-21-1	
	VibrationsFc IEC 60068-2-6	
	Shocks class II) IEC 60255-21-2	
	ShocksEa IEC 60068-2-27	
	Seismic tests method A class II) IEC 60255-21-3	
Climatic withstand	Exposure to dry heat Bd EN/IEC 60068-2-2	
	Exposure to cold Ad EN/IEC 60068-2-1	
	Exposure to damp heat in service Db EN/IEC 60068-2-30	
	Exposure to damp heat in service Cab EN/IEC 60068-2-78	
Ambient air temperature for operation	-40149 °F (-4065 °C)	
Ambient air temperature for storage	-40158 °F (-4070 °C)	
P degree of protection	IP54 IEC 60529	
Relative humidity	095 %, without condensation	
Maximum operating altitude	6561.68 ft (2000 m)	
Protective treatment	Conformal coating	

## Ordering and shipping details

Category	11405 - EASERGY P3 PROTECTIVE RELAYS
Discount Schedule	PL1S
GTIN	03606481499950
Package weight(Lbs)	1 lb(US) (0.45 kg)
Returnability	Yes
Country of origin	US