

Product data sheet

Specifications



universal protection relay, PowerLogic P3U 3CT 1Io 16DI 8DO 48-230V DI110 2LC RL

REL53102

Product availability: Non-Stock - Not normally stocked in distribution facility

Price*: 2,845.97 USD

Main

Range of Product	PowerLogic P3
Product or Component Type	Protection relay
Relay application	Universal
product reference	P3U30-6AAA2BDAB
Mounting case size	30TE
Device mounting	Flush
Mounting Mode	Flush mounting
power supply	48...230 V AC/DC
measuring inputs	3 1/5 A CT phase current 1 1/5 A CT residual current 4 100 V/110 V VT voltage
number of Digital Inputs (DI)	16
number of analogue inputs	0
number of Digital Outputs (DO)	8 DO 1 watchdog
number of analogue outputs	0
communication ports	Front USB port 1 Rear LC 2
communication protocols	IEC 61850 ed. 1 IEC 61850 ed. 2 IEC 60870-5-101 DNP3 TCP Modbus TCP EtherNet/IP
Redundancy communication port protocol	RSTP PRP
Cybersecurity	Password protection Port hardening

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

protection functions

Phase overcurrent 50/51
Directional phase overcurrent 67
Earth fault overcurrent 50N/51N
Directional earth fault 67N
Transient earth fault 67NI
Capacitor bank unbalance 51C
Broken conductor 46 I2/I1
Cold load pick-up
H2 detection 68H2
Cold load pick-up 67NI
H5 detection 68H5
Breaker failure 50BF
Switch ON to fault (SOTF)
Directional active underpower 37P
Fault locator 21FL
Recloser 79
Phase undercurrent 37
Excessive starting time, locked rotor 48/51LR
Motor restart inhibition 66
Switch ON to fault (SOTF) 66
Capacitor overvoltage 59C
Negative sequence overcurrent 46
Overvoltage 59
Undervoltage 27
Positive sequence undervoltage 27P
Earth fault overvoltage 59N
Underfrequency 81/81N
Rate of change of frequency 81R
Synchro-check 25
Lockout relay 86
CT supervision 60
VT supervision 60
Programmable stages 99 8
Programmable curve

Arc flash protection

No

measurement functions

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
Fault location current 3-phase
Active power
RMS active power
Reactive power
RMS reactive power
Earth fault reactance zero sequence
Apparent power
RMS apparent power
Active energy
Reactive energy
Cos φ
Tan φ
Frequency positive sequence
Power angle
Power factor
Voltage phasor diagram view
Active power negative sequence
Current phasor diagram view
Current 2nd, 15th harmonics with THD
Voltage 2nd, 15th harmonics with THD
Condition monitoring CB wear
Voltage interruption
RMS active power phase to earth
Reactive power phase to phase
RMS reactive power zero sequence
Condition monitoring CB wear 2nd, 15th harmonics with THD

control functions	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 Programmable logic
controllable switchgear devices	4 controlled + 8 displayed
number of setting groups	4
monitoring functions	Trip circuit supervision 74 Circuit breaker monitoring Relay self-monitoring
logs and records	Event recording Disturbance recording Tripping context
Switchgear diagnosis type	CT supervision TCS Trip circuit supervision TCS
Connections - terminals	Screw removable (digital input/output) Pin removable (voltage transformer) Pin removable (current transformer)

Complementary

Operating threshold	110...230 V AC/DC
Time synchronisation protocol	SNTP
Software name	ESetup Easergy Pro virtual simulation test Easergy SmartApp
Web server	Embedded HTTP server
Display type	LCD 128 x 64 pixels with single line diagram
Number of key	2 customizable
Local signalling	4 LEDs 8 LEDs programmable
Height	6.7 in (169.5 mm)
Width	6.7 in (170 mm)
Depth	8.07 in (205 mm)
Net weight	5.5 lb(US) (2.5 kg) maximum

Environment

climatic withstand	Exposure to dry heat Bb 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
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

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 level 4 EN/IEC 61000-4-2 EMC immunity level 3 EN/IEC 61000-4-3 EMC immunity level 4 EN/IEC 61000-4-4 EMC immunity level 3 EN/IEC 61000-4-5 EMC immunity level 3 EN/IEC 61000-4-6 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
Ambient air temperature for operation	-40...149 °F (-40...65 °C)
IP degree of protection	IP54 front IEC 60529
maximum operating altitude	6561.68 ft (2000 m)
Protective treatment	Conformal coating
Relative humidity	0...95 %, without condensation

Ordering and shipping details

Category	US1PL1S11405
Discount Schedule	PL1S
GTIN	3606487107149
Returnability	No
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15.75 in (40 cm)
Package 1 Width	11.81 in (30 cm)
Package 1 Length	11.81 in (30 cm)
Package 1 Weight	8.4 lb(US) (3.8 kg)

Contractual warranty

Warranty	Up to 10 years (Standard warranty 2 years. Please check with your local SE representative for extended warranty availability and conditions)
-----------------	--

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

[Environmental Disclosure](#)

[Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard **Yes**

Packaging without single use plastic **No**

EU RoHS Directive **Compliant with Exemptions**

REACH Regulation [REACH Declaration](#)

China RoHS Regulation [China RoHS declaration](#)

Use Again

Repack and remanufacture

[Circularity Profile](#)

[End of Life Information](#)

WEEE



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Take-back

No
