

Product data sheet

Specifications



universal protection relay,
PowerLogic P3U 3CT 1Io ringlug
4VT 16DI 8DO 48-230V DI110V
RS485

REL52016

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

Main

Range of Product	PowerLogic P3
Product or Component Type	Protection relay
Relay application	Universal
product reference	P3U30-6AAA2BBAA
Mounting case size	30TE
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)	1 watchdog 8
number of analogue outputs	0
type of temperature module connection	Copper cable external module Fiber optic cable external module
communication ports	Front USB port 1 Rear RS485 1
communication protocols	IEC 60870-5-101 IEC 60870-5-103 DNP3 Modbus RTU DeviceNet SPAbus
Cybersecurity	Port hardening Password protection

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

protection functions	<ul style="list-style-type: none"> 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 Switch ON to fault (SOTF) Breaker failure 50BF Directional active underpower 37P Fault locator 21FL Recloser 79 Phase undercurrent 37 Excessive starting time, locked rotor 48/51LR Motor restart inhibition 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 H2 detection 68H2 H5 detection 68H5 Negative sequence overcurrent 47 Programmable stages 99 Programmable curve
Arc flash protection	No
measurement functions	<ul style="list-style-type: none"> 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 Reactive power RMS reactive power Apparent power RMS apparent power Active energy Reactive energy Cos φ Tan φ Power angle Power factor Voltage phasor diagram view Current phasor diagram view Current 2nd, 15th harmonics with THD Voltage 2nd, 15th harmonics with THD Voltage interruption Condition monitoring CB wear
control functions	<ul style="list-style-type: none"> 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/VT supervision 60 CT supervision Trip circuit supervision TCS
Connections - terminals	Screw removable (digital input/output) Ring lugs removable (current transformer) Pin removable (voltage transformer)

Complementary

Operating threshold	110...230 V AC/DC
Software name	EcoStruxure Power Device ESetup Easergy Pro
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
Standards	IEC
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 Bumps class II) IEC 60255-21-2 BumpsEa IEC 60068-2-27
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 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	3606481357229
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	11.811 in (30.000 cm)
Package 1 Width	11.772 in (29.900 cm)
Package 1 Length	15.669 in (39.800 cm)
Package weight(Lbs)	8.098 lb(US) (3.673 kg)
Unit Type of Package 2	P12
Number of Units in Package 2	8
Package 2 Height	17.717 in (45.000 cm)
Package 2 Width	31.496 in (80.000 cm)
Package 2 Length	47.244 in (120.000 cm)
Package 2 Weight	81.569 lb(US) (36.999 kg)

Contractual warranty

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

Carbon footprint (kg CO2 eq, Total Life cycle) 727

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](#) Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number 7fd15df9-a702-4a28-ad01-afb36a7b785f

REACH Regulation [REACH Declaration](#)

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

Use Again

Repack and remanufacture

Circularity Profile [End of Life Information](#)

Take-back No

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