Product data sheet

Specifications

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

REL52055

Product availability: Stock - Normally stocked in distribution facility

Price*: 2,313.15 USD

Main

Range Of Product	PowerLogic P3
Product Or Component Type	Protection relay
Relay Application	Universal
Product Reference	P3U30-5AAA2BBAB
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 Sensors	0 temperature sensor(s) 0 arc sensor(s)
Number Of Digital Inputs (Di)	16
Number Of Digital Outputs (Do)	8 DO 1 watchdog
Number Of Analogue Inputs	0
Number Of Analogue Outputs	0
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	Password protection Port hardening

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

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 H5 detection 68H5 Breaker failure 50BF Switch ON to fault (SOTF) Directional active underpower 32 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 8 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 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 Condition monitoring CB wear Voltage interruption
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 Trip circuit supervision TCS
Connections - Terminals	Screw removable (digital input/output) Ring lugs removable (current transformer) Pin removable (voltage transformer)

Complementary

Operating Threshold	110 V AC/DC
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 LCD 128 x 64 pixels with ANSI symbols
Number Of Key	2 customizable
Local Signalling	4 LEDs 8 LEDs programmable
Height	6.67 in (169.5 mm)
Width	6.69 in (170 mm)
Depth	8.07 in (205 mm)
Net Weight	5.51 lb(US) (2.5 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	-40…149 °F (-40…65 °C)
Ambient Air Temperature For Storage	-40…158 °F (-40…70 °C)
Ip Degree Of Protection	IP54 front IEC 60529
Relative Humidity	0…95 %, without condensation
Maximum Operating Altitude	6561.68 ft (2000 m)
Protective Treatment	Conformal coating

Ordering and shipping details

Category	US1PL1S11405
Discount Schedule	PL1S
Gtin	3606481465450
Returnability	Yes
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	8.38 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)

Sustainability

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Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

Rohs Exemption Information	Yes

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Circularity Profile	End of Life Information