# Product data sheet

Specifications



### universal protection relay, PowerLogic P3U 3CT 1Io 16DI 8DO 24-48V DI24 RS485 RL

REL53092

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

#### Price\*: 2,313.18 USD

#### Main

Range of Product	PowerLogic P3	
Product or Component Type	Protection relay	
Relay application	Universal	
product reference	P3U30-6ABA1BBAB	
Mounting case size	30TE	
Device mounting	Flush	
Mounting Mode	Flush mounting	
power supply	2448 V 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 RS485 1	
communication protocols	IEC 60870-5-101 IEC 60870-5-103 DNP3 Modbus RTU DeviceNet SPAbus	
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 H5 detection 68H5 Cold load pick-up 50BF 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 Switch ON to fault (SOTF) 27P 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 Programmable stages 99 8 Programmable curve 99 8

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
	RMS reactive power zero sequence
	Active energy
	Reactive energy
	Cos φ
	Tan φ
	Power angle
	Apparent power negative sequence
	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
	RMS apparent power phase to earth
	Voltage interruption
	Active energy phase to phase
	Reactive energy zero sequence
	Cos $\phi$ positive sequence
	Tan $\varphi$ ratio of negative and positive
	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	24 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
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 3 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 level 5 EN/IEC 61000-4-9 EMC immunity EN/IEC 61000-4-9 EMC immunity EN/IEC 61000-4-11 EMC immunity EN/IEC 61000-4-17
Ambient air temperature for operation	-40149 °F (-4065 °C)
IP degree of protection	IP54 front IEC 60529
maximum operating altitude	6561.68 ft (2000 m)
Protective treatment	Conformal coating
Relative humidity	095 %, without condensation

#### Ordering and shipping details

Category	US1PL1S11405
Discount Schedule	PL1S
GTIN	3606487107118
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)

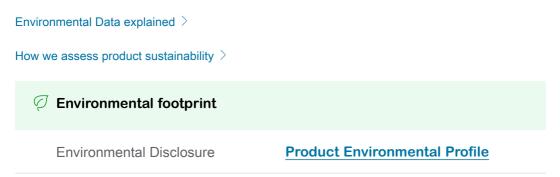
#### **Contractual warranty**

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.



#### **Use Better**

S Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Νο
EU RoHS Directive	Compliant with Exemptions
REACh Regulation	<b>REACh Declaration</b>
China RoHS Regulation	China RoHS declaration

#### **Use Again**

$\bigcirc$ 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.

Dec 23, 2024