Product data sheet

Specifications

universal protection relay, PowerLogic P3U 3CT 1Io 16DI 8DO 24-48V DI24 2LC RL

REL53090

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	P3U30-6ABA1BDAB
Mounting case size	30TE
Device mounting	Flush
Mounting Mode	Flush mounting
power supply	24...48 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
	H5 detection 68H5
	Breaker failure 50BF
	Cold load pick-up 67NI
	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) 27P
	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
	RMS active power ratio of negative and positive
	Apparent power
	RMS apparent power
	Active energy
	Reactive energy
	Reactive power phase to earth
	Cos φ
	Tan φ
	Power angle
	Power factor
	Voltage phasor diagram view
	Current phasor diagram view
	Current 2nd, 15th harmonics with THD
	RMS reactive power zero sequence
	Voltage 2nd, 15th harmonics with THD
	Condition monitoring CB wear
	Voltage interruption
	Apparent power positive sequence
	RMS apparent power negative sequence
	Active energy ratio of negative and positive
	Condition monitoring CB wear phasor diagram view
	Voltage interruption 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
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	3606487107095
Returnability	No
Country of origin	FR

Packing Units

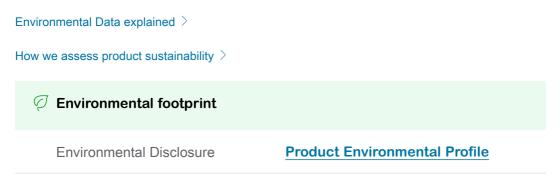| Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15.75 in (40 cm)
Package 1 Width	11.81 in (30 cm)
Package 1 Length	11.81 in (30 cm)
Package 1 Weight	8.4 lb(US) (3.8 kg)

Contractual warranty

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

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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

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**