# **Product datasheet**

Specifications





## PowerLogic<sup>™</sup> P5U20 24-250V 3CT 1CSH 4DI-4DO RSTP Eth RJ45

REL50332

EAN Code: 3606481207814

#### Main

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Range Of Product	PowerLogic P5	
Product Or Component Type	Protection and control relay	
Relay Application	Universal	
Product Reference	P5U20-AABA-CABAH-AAEA	
Mounting Case Size	20TE	
Device Mounting	Flush	
Mounting Mode	Withdrawable	
Power Supply	24240 V DC 100230 V AC	
Measuring Inputs	: 1/5 A CT phase current 3 : CSH residual current 1	
Number Of Sensors	0 temperature sensor(s) 0 arc sensor(s)	
Number Of Digital Inputs (Di)	4	
Number Of Digital Outputs (Do)	3 DO 1 watchdog	
Number Of Analogue Inputs	0	
Number Of Analogue Outputs	0	
Communication Ports	RJ45 2 rear Extension port 1 rear with backup memory USB port 2 front	
Communication Protocols	IEC 61850 ed. 1 IEC 61850 ed. 2 DNP3 over ethernet Modbus TCP EtherNet/IP	
Cybersecurity	Port hardening Firmware signature Client IP address filter Secured communication with assciated tools Security policy management Role-based access control Security log LDAP RADIUS based user authentication IEC 62442-4-2 SL1	

Protection Functions	Phase overcurrent 50/51
	Earth fault overcurrent 50N/51N
	Capacitor bank unbalance 51C
	Broken conductor 46 I2/I1
	Current unbalance 46 I2/I1
	Cold load pick-up
	Switch ON to fault (SOTF)
	H2 detection
	H5 detection
	Breaker failure 50BF
	Recloser 79
	Thermal overload protection 49
	Phase undercurrent 37
	Negative sequence overcurrent 46
	Excessive starting time, locked rotor 48/51LR
	Motor restart inhibition 66
	Capacitor overvoltage 59C
	Lockout relay 86
	CT supervision 60
	Programmable stages 99
	Programmable logic
	Programmable curve
Measurement Functions	Current 3-phase
	Current zero sequence
	Current positive sequence
	Current negative sequence
	Current ratio of negative and positive
	Frequency
	Phasor diagram of currents or voltages
	Current 2nd, 15th harmonics with THD
Control Functions	Switchgear control and monitoring
	Programmable switchgear interlocking
	Local/remote control
Controllable Switchgear Devices	6 controlled + 2 monitored objects
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
	Relay maintenance
Switchgear Diagnosis Type	
emisingen Blagnosis Type	CT supervision ANSI code: 60
	Trip circuit supervision ANSI code: 74
Connections - Terminals	Screw (digital input/output)
	Ring lugs (analog inputs and outputs)

## Complementary

Time Synchronisation Protocol	SNTP	
Software Name	EcoStruxure Power Device ESetup Easergy Pro: virtual simulation test	
Web Server	Embedded HTTP server	
Display Type	LCD 192 x 96 pixels	
Number Of Key	1 customizable	
Local Signalling	4 x LED 6 x LED tri-colour programmable	
Height	176 mm	
Width	102 mm	
Depth	219 mm	
Net Weight	2.5 kg	

#### Environment

Electromagnetic Compatibility	Emission tests class A conforming to CISPR 11 Emission tests class A conforming to CISPR 32 Emission tests conforming to IACS E10 EMC immunity class 4 conforming to IEC 61000-4-2 EMC immunity class 4 conforming to ANSI C37.90.3 EMC immunity class 4 conforming to ANSI C37.90.2 EMC immunity conforming to ANSI C37.90.2 EMC immunity conforming to GOST 32137 EMC immunity conforming to GOST 30804.4.3 EMC immunity conforming to IACS E10 EMC immunity level 5 conforming to IEC 61000-4-8 EMC immunity level 5 conforming to IEC 61000-4-9 EMC immunity level 5 conforming to IEC 61000-4-10 EMC immunity level 3 conforming to IEC 61000-4-10 EMC immunity level 3 conforming to IEC 61000-4-18 EMC immunity level 3 conforming to IEC 61000-4-18 EMC immunity conforming to IEC 61000-4-18 EMC immunity conforming to IEC 61000-4-12 EMC immunity conforming to IEC 61000-4-12 EMC immunity level 4 conforming to IEC 61000-4-16 EMC immunity level 4 conforming to IEC 61000-4-5	
Mechanical Robustness	Vibrations (level: class 2) conforming to IEC 60255-21-1 Vibrations conforming to GOST 17516.1 Vibrations conforming to IACS E10 Shocks (level: class 2) conforming to IEC 60255-21-2 Earthquakes (level: class 2) conforming to IEC 60255-21-3	
Climatic Withstand	Exposure to cold conforming to IEC 60068-2-1 Exposure to dry heat conforming to IEC 60068-2-2 Exposure to damp heat in service conforming to IEC 60068-2-78 Exposure to damp heat in service conforming to IEC 60068-2-30 Temperature variation conforming to IEC 60068-2-14 Salt mist conforming to IEC 60068-2-52 Influence of corrosion/gas test 2 conforming to IEC 60068-2-60 Influence of corrosion/gas test 2 conforming to IEC 60068-2-60 Influence of corrosion/gas test 2 conforming to IEC 60721-3-3 Influence of corrosion/gas test 4 conforming to IEC 60721-3-3	
Ambient Air Temperature For Operation	-4085 ℃ ( 16 h ) -4070 ℃ ( 96 h )	
Ambient Air Temperature For Storage	-4085 °C	
Ip Degree Of Protection	IP54 conforming to IEC 60529	
Relative Humidity	093 % at 40 °C, without condensation, 56 days 9395 % at 2555 °C, 6 cycles, 12 + 12 hours	
Maximum Operating Altitude	2000 m	
Protective Treatment	Conformal coating conforming to IEC 60068-2-52:Kb/1 Conformal coating conforming to IEC 60068-2-60:Ke Conformal coating conforming to IEC 60721-3-3:3C2	

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	13.5 cm
Package 1 Width	27.0 cm
Package 1 Length	37.0 cm
Package 1 Weight	2.8 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)

# Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

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

Yes

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

## Well-being performance

Rohs Exemption Information

#### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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