

Product datasheet

Specifications



Relais de protection PowerLogic P5F30

REL50492

EAN Code: 3606486364482

Main

Range of product	PowerLogic P5
Product or component type	Protection and control relay
Relay application	Feeder - directional over current
product reference	P5F30-DDCD-GABEH-AEAC
Mounting case size	30TE
Device mounting	Flush
Mounting support	Rack
Mounting mode	Withdrawable
power supply	100...230 V AC 48...250 V DC
measuring inputs	: 1/5 A CT phase current 3 : 1/5 A CT residual current 1 : 1 A CT current 1 : voltage 4
number of Digital Inputs (DI)	19
number of analogue inputs	0
number of Digital Outputs (DO)	1 watchdog 18 digital
number of analogue outputs	0
communication ports	USB port 2 front Extension port 1 rear with backup memory RJ45 4 rear
communication protocols	IEC 61850 ed. 1 IEC 61850 ed. 2 DNP3 over ethernet Modbus TCP Modbus RTU IEC 60870-5-101 IEC 60870-5-103 EtherNet/IP DNP3 RTU
Redundancy communication port protocol	RSTP
Cybersecurity	Password protection Port hardening Firmware signature Client IP address filter Secured communication with associated tools

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

protection functions	Phase overcurrent 50/51 Directional phase overcurrent 67 Earth fault overcurrent 50N/51N Directional earth fault 67N Transient earth fault 67NI Neutral admittance 21YN Broken conductor 46 I2/I1 Cold load pick-up Switch ON to fault (SOTF) Breaker failure 50BF Directional active underpower 37P Phase undercurrent 37 Excessive starting time, locked rotor 48/51LR Motor restart inhibition 66 Negative sequence overcurrent 46 Overvoltage 59 Undervoltage 27 Positive sequence undervoltage 27P Earth fault overvoltage 59N Underfrequency 81/81N Overfrequency 81/81N Restricted earth fault 64REF Lockout relay 86 CT supervision 60 VT supervision 60 H2 detection 68H2 H5 detection 68H5 Earth fault wattmetric 32N Programmable stages 99 Programmable curve Programmable logic Current unbalance 46 I2/I1
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 zero sequence Voltage positive sequence Voltage negative sequence Voltage 3-phase Voltage residual Frequency Voltage phasor diagram view Current phasor diagram view Current 2nd, 15th harmonics with THD
control functions	Switchgear control and monitoring Programmable switchgear interlocking Local/remote control 2 function keys Programmable logic
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
Connections - terminals	Pin removable (digital input/output) Ring lugs removable (current transformer) Pin removable (voltage transformer) Ring lugs (voltage transformer) Screw (connector)

Complementary

Time synchronisation protocol	SNTP
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Software name	EcoStruxure Power Device: virtual simulation test ESetup Easergy Pro
Web server	Embedded HTTP server
Display type	Colour LCD 480 x 272 pixels
Number of key	7 customizable
Local signalling	10 x LED tri-colour programmable 4 x LED red programmable
Height	176 mm
Width	152 mm
Depth	219 mm
Net weight	3.5 kg maximum

Environment

climatic withstand	Exposure to dry heat conforming to IEC 60068-2-2 Exposure to cold conforming to IEC 60068-2-1 Exposure to damp heat in service conforming to IEC 60068-2-30 Exposure to damp heat in service conforming to IEC 60068-2-78 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 Stationary use at weatherprotected locations conforming to IEC 60721-3-3
Mechanical robustness	Vibrations conforming to GOST 17516.1 Vibrations conforming to IACS E10 Shocks (level: class II) conforming to IEC 60255-21-2 Seismic tests (level: class II) conforming to IEC 60255-21-3 Bumps (level: class II) conforming to IEC 60255-21-2 Vibrations (level: class II) conforming to IEC 60255-21-1
Electromagnetic compatibility	Emission tests conforming to IACS E10 Emission tests class A conforming to CISPR 11 Emission tests class A conforming to CISPR 32 EMC immunity level 4 conforming to IEC 61000-4-2 EMC immunity level 3 conforming to IEC 61000-4-3 EMC immunity level 4 conforming to IEC 61000-4-4 EMC immunity level 4 conforming to IEC 61000-4-5 EMC immunity level 3 conforming to IEC 61000-4-6 EMC immunity level 5 conforming to IEC 61000-4-8 EMC immunity conforming to IACS E10 EMC immunity level 5 conforming to IEC 61000-4-10 EMC immunity conforming to IEC 61000-4-12 EMC immunity level 4 conforming to IEC 61000-4-16 EMC immunity level 3 conforming to IEC 61000-4-18 EMC immunity conforming to ANSI C37.90.1 EMC immunity conforming to ANSI C37.90.2 EMC immunity class 4 conforming to ANSI C37.90.3 EMC immunity conforming to GOST 30804.4.12 EMC immunity conforming to GOST 32137 EMC immunity conforming to GOST 30804.4.3
Ambient air temperature for operation	-40...85 °C (16 h) -40...70 °C (96 h)
IP degree of protection	IP54 conforming to IEC 60529
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
Relative humidity	0...95 % at 40 °C, without condensation, 56 days 93...95 % at 25...55 °C, 6 cycles, 12 + 12 hours

Packing Units

Unit Type of Package 1	PCE
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Number of Units in Package 1	1
Package 1 Height	30 cm
Package 1 Width	30 cm
Package 1 Length	40 cm
Package 1 Weight	4.441 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

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	445
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Environmental Disclosure	Product Environmental Profile
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Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	No
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EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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REACH Regulation	REACH Declaration
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China RoHS Regulation	China RoHS declaration
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Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
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WEEE



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

Take-back

No