

REL50484

PowerLogic P5M30 24-48V 3CT 2Io 4VT
31DI-15DO 3 Arc Sensors Advanced Logic and
Cybersec Backup memory ANSI





Main

Range of Product	PowerLogic P5
Product or Component Type	Protection relay
Relay application	Motor
Product reference	P5M30-CEDE-GAAAH-AADK
Mounting case size	30TE
Device mounting	Flush
Mounting Support	Rack
Mounting Mode	Withdrawable
Power supply	24...48 V DC
Measuring inputs	3 1/5 A CT 1 residual current 1 1 A CT 4 voltage 31 digital
Number of sensors	0
Number of Digital Outputs (DO)	14 digital 1 watchdog
Number of analogue inputs	0
Number of analogue outputs	0
Communication ports	Front USB 2.0 type A 2 Rear extension port 1 with backup memory
Communication protocols	Without
Cybersecurity	Port hardening Firmware signature Client IP address filter Secured communication with associated tools Role-based access control Security policy management Security log IEC 62442-4-2 SL1
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 Earth fault wattmetric 32N Restricted earth fault 64REF Current unbalance 46 I2/I1 Broken conductor Cold load pick-up Switch ON to fault (SOTF) H2 detection H5 detection 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 Lockout relay 86 CT supervision 60 VT supervision 60 Programmable stages 99 Programmable logic Programmable curve
Arc flash protection	Yes

Measurement functions	Current 3-phase Current zero sequence Current positive sequence Current negative sequence Current ratio of negative and positive Current phasor diagram view Current 2nd, 15th harmonics with THD Voltage 3-phase Voltage residual Voltage zero sequence Voltage positive sequence Voltage negative sequence Voltage phasor diagram view Frequency
Control functions	Switchgear control and monitoring Programmable switchgear interlocking Local/Remote control Advanced logic engine
Controllable switchgear devices	13 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 Trip context information Relay maintenance
Connections - terminals	Pin (input) Pin (output) Ring lugs (current transformer) Ring lugs (voltage transformer)

Complementary

Software name	ESetup Easergy Pro virtual simulation test
Display type	And colour LCD 480 x 272 pixels
Number of key	7 customizable
Local signalling	10 LED programmable tri-colour 4 LED red
Height	6.93 in (176 mm)
Width	5.98 in (152 mm)
Depth	8.62 in (219 mm)
Net weight	7.72 lb(US) (3.5 kg)

Environment

Electromagnetic compatibility	Emission tests class A CISPR 11 Emission tests class A CISPR 22 Immunity to electromagnetic emissions IACS E10 Surge withstand ANSI C37.90.1 Immunity to electromagnetic interference ANSI C37.90.2 Electrostatic discharge class 4 ANSI C37.90.3 Electromagnetic field immunity test GOST 30804.4.3 Limits for harmonic current emissions GOST 30804.4.12 EMC immunity GOST 32137 EMC immunity class 4 IEC 61000-4-2 EMC immunity level 3 IEC 61000-4-3 EMC immunity level 4 IEC 61000-4-4 EMC immunity level 4 IEC 61000-4-5 EMC immunity level 3 IEC 61000-4-6 EMC immunity level 5 IEC 61000-4-8 EMC immunity level 5 IEC 61000-4-9 EMC immunity level 5 IEC 61000-4-10 EMC immunity IEC 61000-4-12 EMC immunity level 4 IEC 61000-4-16 EMC immunity level 3 IEC 61000-4-18
Mechanical robustness	Vibrations class 2) IEC 60255-21-1 Shocks class 2) IEC 60255-21-2 Earthquakes class 2) IEC 60255-21-3 Vibrations GOST 17516.1
Climatic withstand	Exposure to cold IEC 60068-2-1 Exposure to dry heat IEC 60068-2-2 Exposure to damp heat in service IEC 60068-2-78 Exposure to damp heat in service IEC 60068-2-30 Temperature variation IEC 60068-2-14 Salt mist IEC 60068-2-52 Influence of corrosion/gas test 2 IEC 60068-2-60 Influence of corrosion/gas test 4 IEC 60068-2-60 Stationary use at weatherprotected locations IEC 60721-3-3
Ambient air temperature for operation	-40...185 °F (-40...85 °C) 16 h) -40...158 °F (-40...70 °C) 96 h)
Ambient Air Temperature for Storage	-40...185 °F (-40...85 °C)
IP degree of protection	IP54 conforming to IEC 60529
Relative humidity	0...93 % at 104 °F (40 °C), without condensation, 56 days 93...95 % at 77...131 °F (25...55 °C), 6 cycles, 12 + 12 hours
Maximum operating altitude	6561.68 ft (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

Ordering and shipping details

Category	11406-EASERGY P5 PROTECTIVE RELAYS
Discount Schedule	PL1S
GTIN	3606482117884
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.81 in (30.0 cm)
Package 1 Width	11.81 in (30.0 cm)
Package 1 Length	13.78 in (35.0 cm)
Package 1 Weight	9.92 lb(US) (4.5 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
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.

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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