Product data sheet

Specifications

Protection and control relay, PowerLogic P7, motor standard, 11CT, 7VT, 24BI, 20BO, 24-34V, ethernet RJ45

REL72506

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

Price*: 8,266.13 USD

Main

Range of Product	PowerLogic P7
Product or Component Type	Protection and control relay
Relay application	Motor application and bay control
product reference	P7
Mounting case size	40TE
Device mounting	Flush
Mounting Support	19" rack
Mounting Mode	Flush mounting Rack-mounted
power supply	24...34 V DC
measuring inputs	10 CT 1/5 A 1 CT 1 A 7 VT
number of Digital Inputs (DI)	24
number of analogue inputs	8 RTD optional
number of Digital Outputs (DO)	20 1 watchdog
type of temperature module connection	2 twisted, type A, shielded wires (RS485)
communication ports	1 CAN port 1 Ethernet TCP/IP 2 SFP ports 1 USB port 1 COM serial link
communication protocols	Modbus serial and TCP DNP3 serial and TCP IEC 61850 Ed 2.1 IEC 61869-9 IEC 61850-9-2 LE
Redundancy communication port protocol	HSR PRP RSTP Failover

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Cybersecurity	IEC 62443 SL2 LDAP RADIUS based user authentication Port hardening Role-based access control Secure boot Security log Syslog protocol support Secured communication with assciated tools Password protection Firmware signature Client IP address filter Pre-login banner Security policy management
protection functions	Phase overcurrent 50/51 Ground fault protection 50N/51N Sensitive earth fault overcurrent 50G/51G Negative sequence overcurrent 46 Inrush detection 68 Phase undercurrent 37 Undervoltage 27 Overvoltage 59 Positive sequence undervoltage 47 Overfrequency 81O Underfrequency 81U High impedance differential 64REF Motor differential 87M Thermal overload for machines 49 Temperature monitoring (8 or 16 RTDs) 38/49T Startup motoring 48 Locked rotor 51LR Motor restart inhibition 66 Voltage check 47 Overspeed 12 Underspeed (2 set points) 14 Field loss (underimpedance) 40 Underimpedance 21 Out of step 78PS CT supervision 60 VT supervision 60FL Breaker failure 50 BF Programmable logic
measurement functions	Current 3-phase RMS current 3-phase Current sequence Current 1-phase RMS current 1-phase Voltage 3-phase RMS voltage 3-phase Voltage sequence Voltage 1-phase RMS voltage 1-phase Power fundamental frequency Power factor fundamental frequency Active power fundamental frequency Apparent power fundamental frequency Reactive power fundamental frequency RMS active power maximum RMS reactive power minimum RMS apparent power minimum Active power demand maximum Active power demand minimum Reactive power demand maximum Reactive power demand minimum Apparent power demand maximum Apparent power demand minimum RMS phase current demand maximum RMS phase current demand minimum Earth fault current external measurement
control functions	Switchgear control and monitoring Programmable switchgear interlocking Local/remote control Programmable logic Remote control Function keys

controllable switchgear devices	10 controlled objects
number of setting groups	8
monitoring functions	Circuit breaker monitoring Switch monitoring Relay self-monitoring Trip circuit supervision 74 Event counters Watchdog
logs and records	Disturbance recording Event recording Fault recording Operation log
Switchgear diagnosis type	CT/VT supervision 60 Auxiliary power supply monitoring Cumulative breaking current Number of operations DC battery voltage monitoring
Connections - terminals	Screw type terminals (digital input/output) Ring terminal (analogue input)

Complementary

Input power interruption	50 ms
Maximum power consumption in W	24 W typical
Operating threshold	24 V DC
Time synchronisation protocol	IRIG-B SNTP IEEE 1588
Software name	PowerLogic Engineering Suite
Display type	Colour touchscreen 800 x 640 pixels
Display size	7 inch
Information Displayed	Single line diagram Menu-driven user interface
Control Button Type	1 home physical key 1 reset physical key 12 customizable virtual function keys
Local signalling	4 LEDs red/orange device status 24 LEDs tri-colour programmable
Communication compatibility	DNP3 Modbus IEC 61850 Ed 2.1
Device connection	Connection to a PC USB Extension port extension cable Ethernet port RJ45 Serial port RS485 cable SFP redundant Ethernet port fibre optic/RJ45 multi/single mode optional
Product Certifications	cUL Listed UKCA KETOP CE DNV
Height	7.008 in (178 mm)
Width	8.08 in (205.2 mm)
Depth	11.1 in (282 mm)
Net weight	19.4 lb(US) (8.8 kg) maximum

Environment

climatic withstand	Exposure to cold Ae IEC 60068-2-1 Exposure to dry heat Be IEC 60068-2-2 Exposure to damp heat in service Cab IEC 60068-2-78 Temperature variation Nb IEC 60068-2-14 Exposure to damp heat not in service Cab IEC 60068-2-30 Salt mist Kb/1 IEC 60068-2-52 Influence of corrosion/gas test 2 Ke IEC 60068-2-60 Influence of corrosion/gas test 4 Ke IEC 60068-2-60
Mechanical robustness	Vibrations class 2) IEC 60255-21-1 Shocks class 2) IEC 60255-21-2 Shocks class 1) IEC 60255-21-2 Bumps class 1) IEC 60255-21-2 Seismic tests class 2) IEC 60255-21-3
Electromagnetic compatibility	Electromagnetic immunity class A CISPR 11 Electromagnetic immunity class A CISPR 22 Electromagnetic immunity level 3 IEC 6100-4-3 Radiated radio-frequency electromagnetic field immunity test level 3 ANSI C37.90.2 Electrostatic discharge level 4 IEC 6100-4-2 Electrostatic discharge A ANSI C37.90.3 Immunity to magnetic fields level 4 IEC 61000-4-8 Immunity to magnetic fields level 5 IEC 61000-4-9 Immunity to magnetic fields level 5 IEC 61000-4-10 Conducted RF disturbances level 3 IEC 61000-4-6 Fast transient bursts level 4 IEC 61000-4-4 Damped oscillatory wave level 3 IEC 61000-4-18 Damped oscillatory wave level 4 ANSI C37.90.1 Damped oscillatory wave level 3 IEC 61000-4-12 Conducted disturbance emission A IEC 61000-4-16 Surges level 4 IEC 61000-4-5
Ambient air temperature for operation	-40…158 °F (-40…70 °C) 96 h)
IP degree of protection	IP54 front IEC 60529 IP30 case IEC 60529 IP20 rear IEC 60529
IK degree of protection	IK07 conforming to IEC 62262
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
Relative humidity	0…93 % at 104 °F (40 °C), without condensation, 56 days

Ordering and shipping details

Category	US1PL1S11407
Discount Schedule	PL1S
GTIN	3606486926567
Returnability	No
Country of origin	LV

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.81 in (30 cm)
Package 1 Width	11.81 in (30 cm)
Package 1 Length	15.75 in (40 cm)
Package 1 Weight	20.611 lb(US) (9.349 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)

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 CO2 eq, Total Life cycle)	**1805**
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**
SCIP Number	**7185a990-e1e7-4906-8102-573086cf8d7d**
REACh Regulation	**REACh Declaration**
China RoHS Regulation	**China RoHS declaration**
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**

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**

Technical Illustration

Assembly's dimensions