Product data sheet
Characteristics

EMS59201
PowerLogic SC150 CT-LPVT/VT: Switch controller, 1/5 A, LPVT/VT sensors



Main

Range of product	PowerLogic T300
Device short name	SC150

Complementary

Product or component type	MV switch controller
Protection type	ANSI 50/51 : overcurrent ANSI 50N/51N : earth fault ANSI 67 : directional phase overcurrent ANSI 67N : directional earth fault ANSI 47 : negative sequence overvoltage ANSI 27 : undervoltage ANSI 59 : overvoltage ANSI 59N : neutral voltage displacement ANSI 37 : phase undercurrent
Type of measurement	Apparent power Voltage Active and reactive power Active and reactive energy Power factor Current Frequency Apparent energy
Power quality analysis	Voltage unbalance Individual harmonics Voltage sag and swell detection Harmonic distortion Voltage magnitude
Type of measurement	Current: class 0.5 Voltage: class 0.5 Energy: class 1 conforming to IEC 61557-12
Data recording	Sag and swell logs Harmonics logs Min/Max of instantaneous values Demand values Event logs Sequence of event recording Counter Current value before fault
Memory capacity	4 MB
Synchronisation time between inputs	1 ms
Control type	Illuminated push-button status:
Software function	Assistance in commissioning and operating the installation Security/Authority verification Alarm Event log Operating/Status report Reports and diagrams

[Us] rated supply voltage	12...48 V DC +/- 20 %
Power consumption in VA	2 VA
Communication port protocol	IEC 60870-5-104
Communication port support	ETHERNET 2 RJ45
Number of inputs	8 digital conforming to IEC 61131-2 type 3
Measurement current	5 A 1 A
Analogue input type	Current 0.01...35 A (impedance 0.001 Ohm)4 x
Measurement voltage	: 0…10 V LPVT AC at 50/60 Hz (single or three phases) : 47…240 V VTs AC at 50/60 Hz (single or three phases)
Number of outputs	2 digital (relay) switch:
Maximum switching voltage	440 V AC
Output voltage	12...127 V DC motor: 90...220 V AC motor:
Continuous output current	8 A
Breaking capacity	2000 VA
Irms rated making capacity	15 A during 4 s

Environment

Fixing mode	Clip-in (DIN rail)
Type of installation	Indoor Outdoor in cabinet
Electromagnetic compatibility	Electrical fast transient/burst immunity test - test level: level 4 criteria A conforming to IEC 61000-4 Conducted RF disturbances - test level: level 3 criteria A conforming to IEC 61000-4-6 Conducted disturbance emission - test level: level 4 criteria A conforming to IEC 61000-4-16 100 kHz damped oscillating wave - test level: level 3 criteria A conforming to IEC 61000-4-12 Radiated radio-frequency electromagnetic field immunity test - test level: level 4 criteria A conform Immunity to voltage dips criteria A conforming to IEC 61000-4-29 Electrostatic discharge - test level: level 4 criteria B conforming to IEC 61000-4-2 Surge immunity test - test level: level 3 criteria A conforming to IEC 61000-4-5 Magnetic field at power frequency - test level: level 5 criteria B conforming to IEC 61000-4-8 Conducted and radiated emissions class A conforming to EN 55022
IP degree of protection	IP2X body: conforming to IEC 60529 IP4X front: conforming to IEC 60529
IK degree of protection	IK07 conforming to IEC 62262
Relative humidity	5…95 % conforming to IEC 60068-2-30
Mechanical robustness	Vibrations 10…2000 Hz 1 gn 10 cycles conforming to IEC 60068-2-6 Bumps 10 gn 16 ms 1000 bumps non energized conforming to IEC 60068-2-29 Shocks 10 gn 11 ms 3 pulses in operation conforming to IEC 60068-2-27
Ambient air temperature for storage	-40…85 °C
Ambient air temperature for operation	-40…70 °C
Operating altitude	2000 m
Product certifications	CE
Standards	IEC 60255-27 IEC 61557-12 IEC 62586-1 IEC 61000-4-30:class S IEC 61850
Height	140 Mm
Width	45 Mm
Depth	140 Mm
Net weight	0.515 Kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.0 Cm
Package 1 Width	19.0 Cm
Package 1 Length	19.8 Cm
Package 1 Weight	650.0 G
Unit Type of Package 2	S03
Number of Units in Package 2	8

Package 2 Height	30.0 Cm
Package 2 Width	30.0 Cm
Package 2 Length	40.0 Cm
Package 2 Weight	5.61 Kg

Offer Sustainability

Recyclability potential, in %	13
Total lifecycle Carbon footprint	42 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	17.460802859093455
Carbon footprint of the manufacturing phase [A1 to A3]	17 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.5889770583040508
Carbon footprint of the distribution phase [A4]	0.6 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.3271689946698751
Carbon footprint of the installation phase [A5]	0.3 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	21.903810585213666
Carbon footprint of the use phase [B2, B3, B4, B6]	22 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	1.395551058218616
Carbon footprint of the end-of-life phase [C1 to C4]	1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	42
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
End of life manual availability	End Of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised