

Product datasheet

Specifications



CONZERV EM6438H DUAL P&E RS485 CL1.0

METSEEM6438HCL10RS

Main

Range	EasyLogic
Product name	EasyLogic EM64XXH RS
Device short name	EM6438H
Product or component type	Dual source energy meter

Complementary

Device application	Wind generation Main or redundant power monitoring Energy monitoring Solar generation GenSet
Type of measurement	Power factor Phase angle RPM Active power Active energy
Metering type	Apparent energy (source 1) Alternate source meter Active power P, P1, P2, P3 Reactive power Q1, Q2 Apparent power S, S1, S2, S3 Apparent energy (source 2) Rotation speed Power factor and displacement PF (signed, four quadrant) Active, reactive, apparent energy (signed, two quadrant)
Counter functions	Alternate-source hour counting ON hour counting
[Us] rated supply voltage	44...300 V AC 45...65 Hz 44...300 V DC
Network frequency	50 Hz 60 Hz
[In] rated current	5 A 1 A
Type of network	3P 3P + N 2P 2P + N 1P + N
Maximum power consumption in VA	4 VA at 240 V between phase and neutral
Maximum power consumption in W	2 W at 240 V
Display type	7 segments LED

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

Display colour	Red
Messages display capacity	3 fields of 4 characters
Display digits	12 digit(s) - 14.2 mm in height
Communication of data	System power production All counters Last cleared log Reading of measurements Revolution speed
Tamperproof of settings	Protected by access code
Sampling rate	32 samples/cycle
Measurement current	5...6000 mA
Signal	Voltage (impedance 5 MOhm)4 x Current 0.005...10 A (impedance 0.3 MOhm)6 x
Measurement voltage	46...277 V AC 50...60 Hz between phase and neutral 80...480 V AC 50...60 Hz between phases 277...999000 V AC 50...60 Hz with external VT
Frequency measurement range	45...65 Hz
Measurement accuracy	Power factor +/- 0.01 Reactive power +/- 2 % Active power +/- 1 % Apparent power +/- 1 % Active energy +/- 1 % Reactive energy +/- 2 % Apparent energy +/- 1 %
Accuracy class	Class 1 active energy conforming to IEC 62053-21 Class 2 reactive energy conforming to IEC 62053-23
Number of outputs	0
Demand intervals	1 s
Local signalling	Green LED: activity Red LED: output signal 1...9999000 pulse/ k_h (kWh, kVAh, kVARh) Red LED: alternate source
Communication port protocol	Modbus at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V
Communication port support	Screw terminal block: RS485
Data recording	Energy consumption logs
Material	Polycarbonate
Flame retardance	V-0 conforming to UL 94
Mounting mode	Flush-mounted
Mounting support	Framework
Fixing mode	By clamp
Provided equipment	Installation guide
Installation category	III
Type of installation	Indoor installation
Measurement category	Category III 35...480 V
Electrical insulation class	Class II
Connections - terminals	Current circuit: screw clamp terminals (bottom) 2.08...3.31 mm ² cable(s) Voltage circuit: screw clamp terminals (top) 0.82...3.31 mm ² cable(s) Control circuit: screw clamp terminals (top) 0.82...3.31 mm ² cable(s) Communication: screw clamp terminals (bottom) 0.33...3.31 mm ² cable(s) Secondary circuit: screw clamp terminals (bottom) 0.33...3.31 mm ² cable(s)
Tightening torque	Current circuit: 0.9...1 N.m Philips No 2 screwdriver Voltage circuit: 0.9...1 N.m Philips No 2 screwdriver Control circuit: 0.9...1 N.m Philips No 2 screwdriver Communication: 0.5...0.6 N.m Philips no 1 screwdriver Secondary circuit: 0.5...0.6 N.m Philips no 1 screwdriver
Wire stripping length	Current circuit: 3.68 mm Voltage circuit: 7 mm Control circuit: 7 mm Communication: 7 mm

7 mm

Standards	IEC 61010-1:ed. 3 UL 61010-1:ed. 3
Product certifications	CE conforming to IEC 61010-1 CULus conforming to UL 61010-1 CULus conforming to CSA C22.2 No 61010-1 C-Tick
Width	96 mm
Depth	13 mm outside: 49 mm panel:
Height	96 mm
Net weight	300 g

Environment

Electromagnetic compatibility	Electrostatic discharge conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 Surge immunity test conforming to IEC 61000-4-5 Conducted RF disturbances conforming to IEC 61000-4-6 Magnetic field at power frequency conforming to IEC 61000-4-8 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11 Emission tests conforming to FCC part 15 class A Emission tests conforming to FCC part 15 Subpart C Emission tests conforming to FCC part 15 Subpart E
Overvoltage category	III
IP degree of protection	IP51 front: conforming to IEC 60529 IP30 body: conforming to IEC 60529
Relative humidity	5...95 % at 50 °C
Pollution degree	2
Ambient air temperature for operation	-10...60 °C
Ambient air temperature for storage	-20...70 °C
Operating altitude	<= 2000 m
Service life	7 year(s)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.88 cm
Package 1 Width	9.6 cm
Package 1 Length	9.6 cm
Package 1 Weight	0.27 kg
Unit Type of Package 2	S03
Number of Units in Package 2	18
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	4.86 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration

EU RoHS Directive	Compliant 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

Contractual warranty

Warranty	CONZERV EM6438H DUAL P&E RS485 CL1.0
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Recommended replacement(s)