

Product datasheet

Specifications



CONZERV EM6433H A PWR&ENERG RS485 CL 1.0

METSEEM6433HCL10RS

Main

Range	EasyLogic
Product name	EasyLogic EM64XXH RS
Device short name	EM6433H
Product or component type	Energy meter

Complementary

Device application	Power monitoring
Type of measurement	Current Active power Active energy
Metering type	Active power P, P1, P2, P3 Average current Iavg Reactive power Q1, Q2 Phase currents Apparent power S, S1, S2, S3 Calculated neutral current Power factor and displacement PF (signed, four quadrant) Unbalance current Active, reactive, apparent energy (signed, two quadrant)
[Us] rated supply voltage	44...300 V AC 45...65 Hz 44...300 V DC
Network frequency	60 Hz 50 Hz
[In] rated current	5 A 1 A
type of network	3P 2P + N 1P + N 2P 3P + 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	8 segments LED
Display colour	Red
Messages display capacity	3 fields of 4 characters
Display digits	12 digit(s) - 14.2 mm in height
Communication of data	Reading of measurements
Tamperproof of settings	Protected by access code
Sampling rate	32 samples/cycle
Measurement current	5...6000 mA

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

Signal	Current 0.005...10 A (impedance 0.3 MOhm)6 x
Measurement voltage	35...480 V AC 50...60 Hz between phases 35...277 V AC 50...60 Hz between phase and neutral 277...999000 V AC 50...60 Hz with external VT
Frequency measurement range	45...65 Hz
Measurement accuracy	Current +/- 0.5 % Power +/- 0.5 % Frequency +/- 0.05 % Reactive power +/- 2 % Active power +/- 0.5 % Apparent power +/- 0.5 % Active energy +/- 0.5 % Apparent energy +/- 0.5 %
Accuracy class	Class 1 active energy conforming to IEC 62053-21 Class 2 reactive energy conforming to IEC 62053-24
Number of outputs	1 pulse
Output voltage	5...40 V DC@20 mA
Impulse duration	20 ms
Demand intervals	1 s
Local signalling	Green LED: activity Red LED: output signal 1...9999000 pulse/ k_h (kWh, kVAh, kVARh)
Communication port protocol	Modbus at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2-wire, insulation 2500 V
Communication port support	Screw connector: 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)
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
Wire stripping length	Current circuit: 3.68 mm Voltage circuit: 7 mm Control circuit: 7 mm Communication: 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	Outside : 13 mm Panel : 49 mm
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	9 cm
Package 1 Width	12 cm
Package 1 Length	12.4 cm
Package 1 Weight	340 g
Unit Type of Package 2	S03
Number of Units in Package 2	18
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4.77 kg

Contractual warranty

Warranty (in months)	18
-----------------------------	----



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

Total lifecycle Carbon footprint	171 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	54 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	116 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.6 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	2e6b556c-15aa-4f88-b35e-16e68ae215e5
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
--------	----

Use Again



Repack and remanufacture

Recyclability potential, in %	0
End of life manual availability	End of Life Information
Take-back	Nej
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins