

Product data sheet

Specifications



modular single phase power meter iEM2050 - 230V - 45A with communication Modbus

A9MEM2050

Main

Range	Acti 9
Family	Acti 9 iEM2000
Device short name	iEM2050
Product or component type	Energy meter

Complementary

Poles description	1P + N
Type of measurement	Active and reactive energy Active and reactive power Power factor Current Voltage Frequency Apparent power
Metering type	Active, reactive, apparent energy (signed, four quadrant)
Device application	Sub billing Multi-tariff
Accuracy class	Class 1 active energy conforming to IEC 62053-21 Class 2 reactive energy conforming to IEC 62053-23
Input type	Direct input
Rated current	45 A
Rated voltage	230 V - 15...10 %
Network frequency	50 Hz
Frequency measurement range	45...55 Hz
Technology type	Electronic
Display type	LCD display
Sampling rate	32 samples/cycle
Measurement current	5...45 A
Display digits	6
Maximum value measured	9999.99 kWh 99999.9 kWh
Tariff input	Tariff (2)
Communication port protocol	Modbus RTU at 1200...9600 bit/s even/odd or none
Communication port support	Screw terminals: RS485

Local signalling	Red LED: metering and activity 0.01, 0.1, 1, 10, 100, 1000, 2000 or 10000 p/kWh
Digital inputs	0
Digital outputs	1 pulse
Impulse duration	11.2...32 ms
Supply voltage	195...253 V AC 50 Hz
Maximum power consumption in VA	10 VA at 240 V AC
Maximum power consumption in W	2 W
[Uimp] rated impulse withstand voltage	6 kV 1.2/50 µs
Mounting mode	Clip-on
Mounting support	DIN rail
Connections - terminals	Power circuit: tunnel type terminals (bottom) 1 8...10 mm ² cable(s) Power circuit: tunnel type terminals (top) 1 8...10 mm ² cable(s) Pulse output: screw clamp terminals (top) 1 2.5 mm ² cable(s) Communication: screw clamp terminals (bottom) 1 2.5 mm ² cable(s)
Tightening torque	Power circuit: 0.35 N.m flat screwdriver 2.2 mm Pulse output: 0.1 N.m flat screwdriver 1.3 mm Communication: 0.1 N.m flat screwdriver 1.3 mm
Wire stripping length	Power circuit: 7.5 mm Pulse output: 7 mm Communication: 7 mm
Standards	IEC 62052-11 IEC 62053-21
Product certifications	CE

Environment

IP degree of protection	IP51 front panel: conforming to IEC 60529
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-30...70 °C
Relative humidity	0...75 %
Colour	White
9 mm pitches	2
Width	17.5 mm
Height	90 mm
Depth	63 mm

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	86.0 g
Package 1 Height	6.8 cm
Package 1 width	2.0 cm
Package 1 Length	10.0 cm
Unit Type of Package 2	S03
Number of Units in Package 2	60
Package 2 Weight	6.555 kg

Package 2 Height	30.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 cm
Package 3 Height	75 cm

Offer Sustainability

REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins