Product datasheet

Specifications

iEM3455 energy meter - Modbus - 1 DI - 1 DO - multi-tariff - LVCT

A9MEM3455

EAN Code: 3606480845222

Main

Range	Acti9
range of product	Acti9 iEM3000
Product or component type	Energy meter
Device short name	iEM3455
Market segment	Buildings small building cost management: billing: main incomer Buildings small building cost management: billing: sub feeder Buildings small building cost management: billing: panelboard Buildings medium building cost management: billing: main incomer Buildings medium building cost management: billing: sub feeder Buildings medium building cost management: billing: panelboard Buildings large building cost management: billing: main incomer Buildings large building cost management: billing: sub feeder Buildings large building cost management: billing: panelboard Buildings multi-site cost management: billing: main incomer Buildings multi-site cost management: billing: sub feeder Buildings multi-site cost management: billing: panelboard Data center cost management: billing Healthcare cost management: billing Industry cost management: billing Buildings small building cost management: cost allocation: main incomer Buildings small building cost management: cost allocation: sub feeder Buildings small building cost management: cost allocation: panelboard Buildings medium building cost management: cost allocation: main incomer Buildings medium building cost management: cost allocation: sub feeder Buildings medium building cost management: cost allocation: panelboard Buildings large building cost management: cost allocation: main incomer Buildings large building cost management: cost allocation: sub feeder Buildings large building cost management: cost allocation: panelboard Buildings multi-site cost management: cost allocation: main incomer Buildings multi-site cost management: cost allocation: sub feeder Buildings multi-site cost management: cost allocation: panelboard Data center cost management: cost allocation Healthcare cost management: cost allocation Industry cost management: cost allocation

Complementary

Poles description	3P + N 1P + N 3P
Type of measurement	Active and reactive energy Active and reactive power Current Voltage
Metering type	Active, reactive, apparent energy (signed, four quadrant)
Device application	Sub billing Multi-tariff Partial meter
Accuracy class	Class 0.5S active energy conforming to IEC 62053-22 Class 0.5S active energy conforming to ANSI C12.20
input type	Low voltage current transformer 0.333 V or 1 V

Rated voltage	100…277 V +/- 20 % 173…480 V +/- 20 %
Network frequency	60 Hz 50 Hz
Technology type	Electronic
Display type	LCD display
Sampling rate	32 samples/cycle
Measurement current	1…32767000 mA
Maximum value measured	99999999.9 kWh 99999999 MWh
tariff input	Tariff (4)
Communication port protocol	Modbus RTU at 9.6, 19.2 and 38.4 kbauds even/odd or none
Communication port support	Screw terminal block: RS485
Local signalling	Green indicator light: power ON Yellow flashing LED: accuracy checking alarm: overload Yellow indicator light: communications are active on the Modbus port (Modbus)
Number of inputs	1 digital 0...5 V/11...40 V 24 V DC
Number of outputs	1 digital (static)
Output voltage	5...40 V DC@50 mA
Mounting mode	Clip-on
Mounting support	DIN rail
Connections - terminals	Current circuit: screw terminals 6 mm² cable(s) Voltage circuit: screw terminals 2.5 mm² cable(s) Input/output circuit: screw terminals 1.5 mm² cable(s) Communication: screw terminals 2.5 mm² cable(s)
Tightening torque	Input/output circuit: 0.5 N.m Philips screwdriver Voltage circuit: 0.5 N.m Philips screwdriver Current circuit: 0.8 N.m pozidriv screwdriver Communication: 0.5 N.m Philips screwdriver
Wire stripping length	Input/output circuit: 6 mm Voltage circuit: 8 mm Current circuit: 8 mm Communication: 7 mm
Standards	BS EN 61326-1 IEC 61326-1 EN 61326-1 BS EN 61010-1:2010 EN 61010-1:2010 IEC 61010-1:2010 UL 61010-1:2010 BS EN 61010-2-30 IEC 61010-2-30 EN 61010-2-30 UL 61010-2-30 ANSI C12.20
Product certifications	CE conforming to IEC 61010-1 (safety) CE conforming to EN 61557-12 (power monitor) CE conforming to EN/IEC 61326-1 (EMC) UKCA conforming to BS EN 61010-1 (safety) UKCA conforming to BS EN 61557-12 (power monitor) UKCA conforming to BS EN 61326-1 (EMC) CULus conforming to UL 61010-1 (safety) CULus conforming to EN 61010-1 (safety) KZ RCM
Compatibility code	IEM3455

Environment

IP degree of protection	IP40 front panel: conforming to IEC 60529 IP20 body: conforming to IEC 60529
IK degree of protection	IK08
Pollution degree	2
Relative humidity	5…95 % at 36 °C
Ambient air temperature for operation	-25…70 °C - IEC
Ambient air temperature for storage	-40…85 °C
Operating altitude	< 3000 m
Colour	White
9 mm pitches	10
Width	90 mm
Height	87 mm
Depth	69 mm

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.800 cm
Package 1 Width	9.700 cm
Package 1 Length	10.600 cm
Package 1 Weight	326.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	30
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	11.257 kg
Unit Type of Package 3	P06
Number of Units in Package 3	240
Package 3 Height	80.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	100.364 kg

Logistical informations

Country of origin	CN

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	**73 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**13 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.7 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**58 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.7 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**No**
Packaging without single use plastic	**No**
SCIP Number	**Bf9fffe5-b43e-4345-8e63-000bf5fa7226**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**5**
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 and never end up in rubbish bins**

Technical Illustration

User interface / product ON