

# EEM-MA400


Order No.: 2901364



<http://eshop.phoenixcontact.ae/phoenix/treeViewClick.do?UID=2901364>

Energy measurement device to measure electrical parameters in low voltage installations up to 500 V, acquisition of total harmonic oscillations - can be extended with RS-485 communication module

## Commercial data

EAN	 4 046356 585804
Pack	1 pcs.
Customs tariff	90303100
Gross weight in pieces	695.50 g

Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation at <http://www.download.phoenixcontact.com>. The General Terms and Conditions of Use apply to Internet downloads.

## Technical data

### Input data

Measuring principle	True r.m.s. value measurement
Acquisition of harmonics	up to 51st harmonic
Measured value	AC sine (50/60 Hz)
Input name	Voltage measuring input V1, V2, V3
Input voltage range	50 V AC ... 500 V AC (Phase/Phase) 28 V AC ... 289 V AC (Phase/neutral conductor)
Precision	0.2 %
Input current range	Via external transformers
Input current	9999 A (primary) 5 A (secondary)

Current measuring range	0 kA ... 11 kA
Overload capacity	6 A (Permanent)
Response threshold from measuring range nominal value	5 mA
Precision	0.2 %
Current overload	10 x I <sub>N</sub> for 1 s
Messbereich_Leistung	0 MW ... 11 MW
	0 Mvar ... 11 Mvar
	0 MVA ... 11 MVA
Precision	0.5 %
Active energy (IEC 62053-22)	Class 0.5S
Reactive power (IEC 62053-23)	Class 2

**Interfaces**

Name	Via extension module
------	----------------------

**General data**

Width	96 mm
Height	96 mm
Depth	82 mm
Installation depth with extension module	80 mm
Installation depth without extension module	60 mm
Display	LCD display, backlighting
Measuring rate	approximately
Supply voltage range	110 V AC ... 400 V AC ± 10%
Nominal power consumption	5 VA
Power consumption	10 VA (With maximum number of extension modules)
Degree of protection	IP52 (front), IP30 (back)
Mains type	3-phase (3 or 4-wire), 2-phase (2-wire), and single-phase (1-wire)
Color	black
Conformance	CE-compliant
Rated insulation voltage	300 V AC (EN 61010-1)
Surge voltage category	III
Test voltage	3.5 kV AC (50 Hz, 1 min.)
	2.2 kV AC (50 Hz, 1 min.)
Ambient temperature (operation)	-10 °C ... 55 °C (14 °F to 131 °F)
Ambient temperature (storage/transport)	-20 °C ... 85 °C (-4 °F ... 185 °F)

Max. permissible relative humidity (operation)	≤ 95 %
Salt spray	≤ 2.5 %

**Connection data**

Conductor cross section stranded min.	0.5 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	20
Conductor cross section AWG/kcmil max	14
Connection method	COMBICON plug-in screw terminal block
Stripping length	6 mm
Tightening torque	0.4 Nm
Note	Voltage and other connections
Conductor cross section stranded min.	0.5 mm <sup>2</sup>
Conductor cross section stranded max.	6 mm <sup>2</sup>
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	20
Conductor cross section AWG/kcmil max	8
Connection method	Screw connection
Stripping length	7 mm
Note	Current connection

**Certificates**



Certification cULus Listed

Certifications applied for:

Certification Ex:

**Accessories**

Item	Designation	Description
------	-------------	-------------

**General**

2902078	EEM-MKT-DRA	DIN rail adapter for EEM-MA600 and EEM-MA400 energy meters
2901365	EEM-RS485-MA400	RS-485 JBUS/MODBUS communication module for EEM-MA400

**Address**

PHOENIX CONTACT Middle East FZ LLC  
Office 301, Third Floor, Block 10, Dubai International  
Academic City (DIAC)  
Dubai, United Arab Emirates  
Phone +971 4 437 0324  
Fax +971 4 437 0323  
<http://www.phoenixcontact.com>

PHOENIX CONTACT Middle East FZ LLC  
Technical modifications reserved;