

Measuring instrument - EEM-MA250 - 2901363

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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

Your advantages

- ✓ RS-485 interface (JBUS/MODBUS)
- ✓ Pulse output
- ✓ Two-tariff measurement via pulse input



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356585811
Weight per Piece (excluding packing)	317.500 g
Weight per piece (including packing)	319.800 g
Custom tariff number	90303100
Country of origin	France
Note	Made to Order (non-returnable)

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

Dimensions

Width	72 mm
Height	90 mm
Depth	64 mm

Ambient conditions

Ambient temperature (operation)	-10 °C ... 55 °C (14 °F to 131 °F)
---------------------------------	------------------------------------

Measuring instrument - EEM-MA250 - 2901363

Technical data

Ambient conditions

Ambient temperature (storage/transport)	-20 °C ... 70 °C (-4 °F ... 158 °F)
Max. permissible relative humidity (operation)	≤ 95 %
Max. salt spray content	≤ 2.5 %
Degree of protection	IP51 (Front)
	IP20 (Back side)

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 ... 519 V AC (Phase/Phase)
	28 V AC ... 300 V AC (Phase/neutral conductor)
Precision	0.2 %
Input name	Current measurement I1, I2, I3
Input current range	via external transformers
Input current	9999 A (primary)
	5 A (secondary)
Overload capacity	6 A (Permanent)
Response threshold from measuring range nominal value	5 mA
Precision	0.2 %
Messbereich_Leistung	0 kW ... 9999 kW
	0 kvar ... 9999 kvar
	0 kVA ... 9999 kVA
Precision	0.5 %
Active energy (IEC 62053-22)	Class 0.5 S
Reactive power (IEC 62053-23)	Class 2
Description of the input	Digital input
Number	1
Voltage input signal	230 V AC ±10 % (Tariff switchover: e.g., day/nighttime tariff)

Output data

Output description	Transistor output, active
Number	1
Maximum switching voltage	30 V DC
Current carrying capacity	27 mA

Interfaces

Designation	Modbus RTU/JBUS
Interface	RS-485
Connection method	Screw terminal blocks
Serial transmission speed	2,4 ... 38.4 kbps

Measuring instrument - EEM-MA250 - 2901363

Technical data

General

Display	LCD display, backlighting
Measuring rate	approximately
Supply voltage range	110 V AC ... 277 V AC -10 % ... +15 %
Nominal power consumption	5 VA
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)
Test voltage	3.5 kV AC (50 Hz, 1 min.)
	2.2 kV AC (50 Hz, 1 min.)

UL data

Nominal supply voltage range	110 V AC ... 277 V AC -10 % ... +15 %
Operating mode	Indoor use
Surge voltages	Transient overvoltage according to installation classes
Overvoltage category	I, II, III
Overvoltage category of the supply	Min. II
Altitude	≤ 2000 m
Ambient temperature (operation)	5 °C ... 40 °C
Max. permissible relative humidity (operation)	80 % (up to 31 °C)
	50 % (at 40 °C)

Standards and Regulations

Conformance	CE-compliant
UL, USA/Canada	UL 61010-1
	CSA-C22.2 No. 61010-1
	cULus

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Classifications

eCl@ss

eCl@ss 4.0	27210900
eCl@ss 4.1	27210900
eCl@ss 5.0	27210900
eCl@ss 5.1	27210900
eCl@ss 6.0	27142300
eCl@ss 7.0	27142330
eCl@ss 8.0	27142330

Measuring instrument - EEM-MA250 - 2901363

Classifications

eCl@ss

eCl@ss 9.0	27142330
------------	----------

ETIM

ETIM 4.0	EC002301
ETIM 5.0	EC002301
ETIM 6.0	EC002301
ETIM 7.0	EC002301

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121535
UNSPSC 11	39121535
UNSPSC 12.01	39121535
UNSPSC 13.2	39121535

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 357804
-----------	---	---	---------------

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 357804
------------	---	---	---------------

EAC		RU *- DE.A*30.B.01628
-----	---	--------------------------

cULus Listed	
--------------	---

