Measuring instrument - EEM-MA600 - 2901366

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Energy measurement device to measure electrical parameters in low voltage installations up to 700 V, acquisition of individual harmonic oscillations - can be extended with communication and special functional modules

Product Features

- Can be extended with special function and communication modules
- Remote access via web server, integrated in Ethernet communication module
- Acquisition of individual harmonics up to 63rd harmonic
- Trend calculation for real and reactive power

Key commercial data

package_quantity	1
GTIN	4046356584258

Technical data

Note:

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

Dimensions

Width	96 mm
Height	96 mm
Depth	82 mm
Installation depth with extension module	80 mm
Installation depth without extension module	60 mm

Ambient conditions

Degree of protection	IP52 (front), IP30 (back)
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 %
Max. salt spray content	≤ 2.5 %
Altitude	≤ 2000 m
Ambient temperature (operation)	0 °C ... 40 °C
Max. permissible relative humidity (operation)	80 % (Up to 31°C)

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Ambient conditions

Max. permissible relative humidity (operation)	50 % (at 40 °C)

Input data

Measuring principle	True r.m.s. value measurement
Acquisition of harmonics	up to 63rd harmonic
Measured value	AC sine (50/60 Hz)
Input name	Voltage measuring input V1, V2, V3
Input voltage range	18 V AC ... 700 V AC (Phase/Phase)
Input voltage range	11 V AC ... 404 V AC (Phase/neutral conductor)
Input voltage	500 kV AC (Primary, via external voltage transducers)
Input voltage	(Secondary, 60, 100, 110, 115, 120, 173, 190 V AC)
Precision	0.2 %
Input current range	Via external transformers
Input current	9999 A (primary)
Input current	(1 A and 5 A, secondary)
Current measuring range	0 kA ... 11 kA
Overload capacity	6 A (Permanent)
Response threshold from measuring range nominal value	10 mA
Precision	0.2 %
Current overload	10 x I_N for 1 s
Messbereich_Leistung	0 MW ... 8000 MW
Messbereich_Leistung	0 Mvar ... 8000 Mvar
Messbereich_Leistung	0 MVA ... 8000 MVA
Precision	0.5 %
Active energy (IEC 62053-22)	Class 0.5S
Reactive power (IEC 62053-23)	Class 2
Voltage input signal	(Via extension module)

Output data

Output description	Via extension module

Interfaces

Name	Via extension module

General

Display	LCD display, backlighting
Measuring rate	approximately
Supply voltage range	110 V AC ... 400 V AC ± 10%
Nominal power consumption	10 VA
Power consumption	20 VA (With maximum number of extension modules)
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 at mains voltage < 300 V AC (L/N)	III

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General

Rated insulation voltage at mains voltage > 300 V AC - 600 V AC (L/N)	II
Test voltage	3.5 kV AC (50 Hz, 1 min.)

Connection data

Conductor cross section stranded min.	0.5 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	2.5 mm²
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 mm²
Conductor cross section stranded max.	6 mm²
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	6 mm²
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

UL data

Nominal supply voltage range	110 V AC ... 240 V AC ± 10%
Nominal supply voltage range	120 V DC ... 250 V DC ± 10%
Power consumption	10 VA
Operating mode	Indoor use
Surge voltages	Surge voltages according to installation classes
Surge voltage category	I, II, III
Surge voltage category of the supply	Min. II

classifications

eCl@ss

eCl@ss 4.0	27210902
eCl@ss 4.1	27210902
eCl@ss 5.0	27210902
eCl@ss 5.1	27210902
eCl@ss 6.0	27371890
eCl@ss 7.0	[NO ASSET AVAILABLE: TXB,7175153,P]

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classifications

eCl@ss

eCl@ss 8.0	27142333

ETIM

ETIM 3.0	EC001505
ETIM 4.0	EC000705
ETIM 5.0	EC000705

UNSPSC

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

approvals

UL Listed / cUL Listed / cULus Listed /

Approval details

UL Listed

cUL Listed

cULus Listed

accessories

Communication module

EEM-RS485-MA600 - 2901367

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accessories

EEM-PB-MA600 - 2901368

EEM-PB 12-MA600 - 2901418

EEM-ETH-MA600 - 2901373

EEM-ETH-RS485-MA600 - 2901374

Function module

EEM-MEMO-MA600 - 2901370

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accessories

EEM-2DIO-MA600 - 2901371

EEM-2AO-MA600 - 2901475

Mounting material

EEM-MKT-DRA - 2902078

Extension module

EEM-IMP-MA600 - 2904313

Drawings