Measuring instrument - EEM-MA771 - 2908286

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Multi-functional energy measuring device with direct Rogowski connection and integrated Modbus/TCP interface for measuring electrical parameters in low-voltage installations up to 690 V.

Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 471969
GTIN	4055626471969
Weight per Piece (excluding packing)	507.000 g
Weight per piece (including packing)	521.200 g
Custom tariff number	90303100
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Dimensions

Width	96 mm
Height	96 mm
Depth	58 mm

Ambient conditions

Ambient temperature (operation)	-10 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Maximum altitude	≤ 2000 m
Max. permissible relative humidity (operation)	≤ 95 % (non-condensing)
Degree of protection	IP54 (Display (+ EEM-MA-IP))
	IP20 (Housing)

Input data

Measuring instrument - EEM-MA771 - 2908286

Technical data

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	35 V AC ... 690 V AC (Phase/Phase)
	20 V AC ... 400 V AC (Phase/neutral conductor)
	60 V AC ... 2000000 V AC (primary)
	60 V AC ... 400 V AC (secondary)
Surge voltage capacity	760 V AC (Phase/Phase)
Precision	0.2 %
Input name	Current measurement RC1, RC2, RC3
Input current	4000 A
Response threshold from measuring range nominal value	5 A
Precision	< 1 %
	1 %
Reactive power (IEC 62053-23)	Class 2
Description of the input	Digital input in accordance with IEC/EN 61131-2 (type 3)
Number	1
Voltage input signal	0 V DC ... 30 V DC
Current input signal	2 mA ... 15 mA

Output data

Output description	Digital output in accordance with IEC/EN 61131-2 (type 3)
Number	1
Current output signal	≤ 100 mA

Device interface

Designation	Network interface
Communication protocol	Modbus/TCP
	REST
Connection method	RJ45

General

Display	LCD display, two-color backlit
Supply voltage range	100 V AC ... 400 V AC (±20 %)
	150 V DC ... 250 V DC (±20 %)
Power consumption	≤ 4 W
Mains type	3-phase (3 or 4-conductor), 2-phase (2-conductor), and single-phase (1-conductor)
Color	gray
Conformance	CE-compliant
Test voltage	4 kV AC (50 Hz, 1 min.)
Product family	EMpro

Measuring instrument - EEM-MA771 - 2908286

Technical data

Connection data

Connection name	Current / voltage / supply
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm² ... 6 mm²
Conductor cross section flexible	0.2 mm² ... 4 mm²
Conductor cross section AWG	24 ... 10
Torque	0.5 Nm ... 0.6 Nm

Connection data 2

Connection name	Digital I/O / communication
Connection method	Screw connection
Stripping length	7 mm
Screw thread	M3
Conductor cross section solid	0.14 mm² ... 2.5 mm²
Conductor cross section flexible	0.14 mm² ... 1.5 mm²
Conductor cross section AWG	26 ... 14
Torque	0.5 Nm ... 0.6 Nm

UL data

Operating mode	Indoor use

Standards and Regulations

Conformance	CE-compliant

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Classifications

eCl@ss

eCl@ss 10.0.1	27142330
eCl@ss 11.0	27142330
eCl@ss 9.0	27142330

ETIM

ETIM 6.0	EC002301
ETIM 7.0	EC002301

Measuring instrument - EEM-MA771 - 2908286

Approvals

Approvals

Approvals

EAC / UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details

EAC			RU*DE*08.B.00734/19
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
cULus Listed			

Accessories

Accessories

Assembly adapter

DIN rail adapter - EEM-MKT-DRA - 2902078

DIN rail adapter for EEM-MA770-X and EEM-MA771-X series energy measuring devices

Mounting material

Measuring instrument - EEM-MA771 - 2908286

Accessories

Holder - PACT RCP-CLAMP - 2904895

The optional holding device ensures the Rogowski coil is securely seated on busbars with a thickness of 10 ... 15 mm. During installation, the coil housing is pushed onto the flange of the holding device and snaps in automatically.

Rogowski coil

Coil - PACT RCP-D95 - 2904890

300 mm long Rogowski coil. The measuring coil diameter when installed is 95 mm. The Rogowski coil is used for AC current measurement for busbars and power lines.

Coil - PACT RCP-D140 - 2904891

450 mm long Rogowski coil. The measuring coil diameter when installed is 140 mm. The Rogowski coil is used for AC current measurement for busbars and power lines.

Coil - PACT RCP-D190 - 2904892

600 mm long Rogowski coil. The measuring coil diameter when installed is 190 mm. The Rogowski coil is used for AC current measurement for busbars and power lines.

Coil - PACT RCP-D95-5M - 2910322

300 mm long Rogowski coil. The measuring coil diameter when installed is 95 mm. The Rogowski coil is used for AC current measurement for busbars and power lines.

Measuring instrument - EEM-MA771 - 2908286

Accessories

Coil - PACT RCP-D95-10M - 2910323

300 mm long Rogowski coil. The measuring coil diameter when installed is 95 mm. The Rogowski coil is used for AC current measurement for busbars and power lines.

Coil - PACT RCP-D190-10M - 2910324

600 mm long Rogowski coil. The measuring coil diameter when installed is 190 mm. The Rogowski coil is used for AC current measurement for busbars and power lines.