

EEM-EM377 - Measuring device



2908590

<https://www.phoenixcontact.com/us/products/2908590>

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3-phase energy meter for active power measurement with direct measurement in grids of up to 500 V/80 A, with S0 output, Ethernet interface, certified in accordance with the MID directive



Commercial data

Item number	2908590
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	CMMC11
GTIN	4055626338279
Weight per piece (including packing)	575.5 g
Weight per piece (excluding packing)	583.2 g
Country of origin	IT

Technical data

Product properties

Product type	Energy meter
Insulation characteristics	
Protection class	II (EN 50470-1)
Insulation characteristics	
Pollution degree	2
Display	
Display type	LCD with white backlighting

Electrical properties

Accuracy class	Class B (EN 50470-3)
	Class 1 (EN 62053-21)
Electric strength	6 kV
	4 kV (EN 50470-3, 7.2)
Supply	
Supply voltage range	Supply from the measuring circuit

Input data

Measurement	
Input voltage range	3x 184 V ... 288 V (320 V ... 500 V)
Input current range	0.02 A ... 80 A
Power consumption	3.5 VA (1 W)
Frequency range	45 Hz ... 65 Hz
Startup current I_{st}	0.02 A
Minimum current I_{min}	0.25 A
Limiting current I_{max}	80 A
Transient current I_{tr}	0.5 A
Reference current I_{ref}	5 A
Current transformer load	1.5 mΩ
Active energy (EN 50470-3)	Class B
Real energy (IEC 62053-21)	Class 1
Reactive power (IEC 62053-23)	Class 2

Output data

S0 output	
Output description	Passive opto-isolated
Maximum switching voltage	27 V DC
Max. switching current	27 mA

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Pulse time	50 ms ±2 ms
Pause time	30 ms ±2 ms
Pulse LED	1000 imp/kWh
Meter constant	100 imp/kWh, kVAh, kvarh

Connection data

Measurement connection

Designation	Measurement connection
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Conductor connection

Connection method	Screw connection
rigid	1.5 mm ² ... 35 mm ²
flexible	1.5 mm ² ... 35 mm ²
AWG	16 ... 2 (rigid/flexible)
Tightening torque	2 Nm

Connector

Pin dimensions	0,6 x 3,5
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other connections

Designation	other connections
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Conductor connection

Connection method	Screw connection
rigid	0.14 mm ² ... 1.5 mm ²
flexible	0.14 mm ² ... 1.5 mm ²
AWG	20 ... 16 (rigid/flexible)
Tightening torque	0.5 Nm

Interfaces

Communication:

Communication protocol	Modbus/TCP
	HTTP
	NTP
	DHCP
	FTP
Communication standard	IEEE 802.3
Connection method	RJ45
Transmission speed range	10 Mbps ... 100 Mbps

Dimensions

Item dimensions

Width	72 mm
Height	90 mm
Depth	67 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	(Front) IP20 (Connections)
Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 75 °C
Max. permissible relative humidity (operation)	80 %
Mechanical environment	M1
EMC environment	E2

Approvals

CE

Certificate	CE-compliant
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MID

Identification	MID-compliant
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Standards and regulations

Standards/specifications	EN 50470-1
	EN 50470-3

Mounting

Mounting type	DIN rail mounting
Mounting position	Horizontal DIN rail

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Approvals

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EAC

Approval ID: RU *-DE.A*30.B.01628

MID

Approval ID: No. 308/MID

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Classifications

ECLASS

ECLASS-13.0	27142330
ECLASS-15.0	27142330

ETIM

ETIM 9.0	EC002301
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UNSPSC

UNSPSC 21.0	41113600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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EF3.1 Climate Change

CO2e kg	32.195 kg CO2e
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