

# Measuring instrument - EEM-AM157-70



1219090

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One-phase energy meter for active power measurement with direct measurement in networks of up to 276 V / 40 A, with S0 output, operating temperature up to +70°C and RS-485 interface, certified in accordance with the MID directive



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## Commercial Data

Item number	1219090
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	CK4C11
GTIN	4063151302795
Weight per Piece (including packing)	122.3 g
Weight per Piece (excluding packing)	122.3 g
Customs tariff number	90283019
Country of origin	IT

## Technical Data

### Product properties

Product type	Energy meter
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### Insulation characteristics

Protection class	II (EN 50470-1)
Pollution degree	2

### Electrical properties

Electric strength	6 kV
	4 kV (EN 50470-3, 7.2)

### Supply

Supply voltage range	Supply from the measuring circuit
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### Input data

#### Measurement

Input voltage range	184 V ... 276 V
Input current range	0.02 A ... 40 A
Power consumption	1.5 VA (1 W)
Frequency range	45 Hz ... 65 Hz
Start current $I_{st}$	0.02 A
Minimal current $I_{min}$	0.25 A
Maximum current $I_{max}$	40 A
Transient current $I_{tr}$	0.5 A
Nominal current $I_{ref}$	5 A
Current transformer load	1.5 mΩ
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
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

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## Measurement connection

Connection method	Screw connection
Conductor cross section solid	1.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>

## Measurement connection

Connection method	Screw connection
Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

## Interfaces

### Communication

Communication protocol	Modbus
Communication standard	RS-485
Transmission speed range	2400 bps ... 38400 bps
Parity	odd, even, none

## Dimensions

Width	19 mm
Height	92 mm
Depth	70 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP51 (Front) IP20 (Connections)
Ambient temperature (operation)	-25 °C ... 70 °C
Ambient temperature (storage/transport)	-25 °C ... 75 °C
Max. permissible relative humidity (operation)	80 %

## Approval data

### CE

Certificate	CE-compliant
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### CE

Identification	MID-compliant
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## Standards and regulations

Standards/specifications	EN 50470-1 EN 50470-3
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## Approvals

### **MID**

Approval ID: No. 388/MID

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## Classifications

### ECLASS

ECLASS-9.0	27142330
ECLASS-10.0.1	27142330
ECLASS-11.0	27142330

### ETIM

ETIM 8.0	EC002301
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### UNSPSC

UNSPSC 21.0	41113600
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