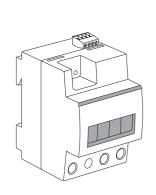
MINI Meter

Single phase energymeter from ABB Cewe





MINI Meter



General description

ABB Cewe's MINI Meter is a single-phase active energy meter for applications that do not demand a certified meter. It is a robust meter with LED display that can be read even in dark places.

The MINI Meter can be used as a direct- or transformer connected meter. When used as transformer connected, the meter allows programming of a number (see technical data for selection) of transformer ratios.

The LED display consists of 4-digits, by simply pushing a button two additional digits can be read (4+2). The MINI Meter has as standard the energy consumption shown in kWh without decimal.

The Mini Meter is available with or without pulse output and the assortment includes also a version with reset.

The two push buttons, "Set" and "Scroll", allows programming of the transformer ratio and the pulse output frequency. One are also used to display the two additional integer digits.

The MINI Meter is mainly conceived for DIN-rail mounting, preferably into standard enclosures with DIN-compartments. The width of the meter is equal to only 3 modules. The MINI Meter is adapted to the ABB pro*M* design.

The MINI Meter has high reliability and it complies to standards IEC61010-1 and EN 61326, with regard to safety requirements and EMC, accuracy class is 2.

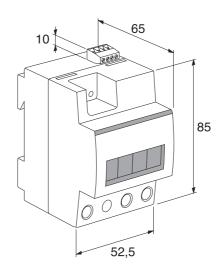
Single phase - 230 V, single tariff

Art.No.	Туре	Description	Selectable pulse output frequencies
Without pulse output			
09 810 80	EE20		
09 810 81	EE20 R	Locally resetable	
With pulse output			
09 810 82	EE22		1,10,100,1000 imp./kWh*
09 810 83	EE22 R	Locally resetable	1,10,100,1000 imp./kWh*
09 810 84	EE22 Rr	Locally and remote resetable	1,10,100,1000 imp./kWh*

^{*} Pulse output frequency 10 imp/kWh is the default set up at delivery.

Each meter can be used both as direct connected or transformer rated meter. Transformer ratio values 3,10,20,30,40,50,60 can be programmed in the meter to obtain primary reading. The default set up value at delivery is 1.

When used as transformer rated, the pulse output is primary related.



2 ABB Cewe

MINI Meter

Technical data/Connection diagram

Installation category: Ш +/-2 % Accuracy: Start current: 35mA Basic current: 5 A Current range: 0,1 to 32 A Max. fuse: 32 A

1x230 V +/- 10% Voltage: Frequency: 50 / 60 Hz Internal comsumption: 1,5 W Temperature range: -40 to +70° C Relative humidity max. According IEC 1036

Transformer ratio

Programmable values: 1, 3, 10, 20, 30,40,50, 60. (The default set up at delivery is 1.)

Pulse output (optional)

Programmable: 1, 10, 100, 1000 imp/kWh. (The default set up at delivery is 10.)

Max. current: 100 mA Pulse length: 100 ms

Pulse output voltage: 10-40 V, AC or DC

Max. connection area: 1,5 mm² 0,2 mm² Min. connection area:

Connection terminals

Max. connection area: 10 mm² Min. connection area: 1,5 mm²

Reset input terminal (optional)

Max. voltage: 40 V AC or DC

Function: 10 - 40 V performs a reset

Max. connection area: 1,5 mm² Min. connection area: 0,2 mm²

Display 4 digit LED (two additional integer positions can be read by means of scroll button.)

Enclosure

Material: Polycarbonate

Degree of protection: IP 20 Weight

Standards

IEC 61010 Safety requirements

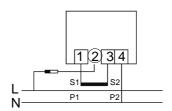
157 g

EN 61326 **EMC**

Documentation: User manual and Installation Instructions are packed together with the meter.

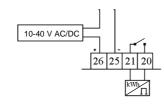
Direct connection 1 2 3 4

Connection via current transformer



Warning: do not connect the current transformer to neutral or earth

Remote reset, Pulse output



Programming buttons

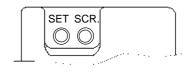


ABB Cewe



For Camping sites



For Marines



ABB Cewe Box 1005 S-611 29 Nyköping, Sweden Phone Int +46155-29 50 00 Fax Int +46155-28 81 10