



Energy-meters Three-phase for connection with CT.../5A

PM30B01KNX

Product and Applications Description

Active energy-meters for three-phase alternating current with 8 digits digital counters. These meters have 2 SO output generating pulses for remote processing of the instantaneous energy active and reactive measurements for 2 tariffs

KNX bus connection must be done with KNX interface code **PM00A00IRI**

Overview:

- Green backlit LCD
- For transformer .../5 A
- For transformer primary current of 5 A to 10.000/5 A. Input is in 5 A increments
- 8 digits - 8 display for energy values indication
- Detection of connection errors (phase transposition)
- Accuracy class 1 for active energy according to EN 50470-3
- Accuracy class 2 for active energy according to EN 62053-23
- Operating range current (*Ist* ... *I_{max}*) for connection by CT .../5 A = 0.003 ... 5 A
- Versions designed to be combined with the communication module
- Energy register zero setting (NO MID)
- Energy register for import and export
- Instantaneous power active and reactive display
- Sealable terminal covers

Technical Data

General characteristics

- Housing DIN 43880
- Mounting EN 60715 35 mm
- Depth mm 70
- Weight approx. 300 g

Operating features

- Connectivity to three-phase network 4 wires
- Storage of energy values and configuration in internal flash memory
- Display 2 tariffs for active and reactive energy (T1 and T2)
- Reference voltage U_n – Line to neutral 230 Vac
- Reference voltage U_n – Line to Line 400 Vac
- Reference current 5 A
- Minimum current 0.05 A
- Maximum current 6 A
- Reference frequency 50 Hz
- Number of phases (wires) 3 (4)
- Accuracy Class B

Supply Voltage and Power Consumption

- Operating range voltage 184V ... 276V / 319V ... 240V
- Maximum power dissipation ≤ 2 VA (0.6 W)
- Voltage input Waveform AC

Overload capability

- Voltage**
- continuous; phase/phase 480 Vac
 - 1 second: phase/phase 800 Vac
 - continuous; phase/N 276 Vac
 - 1 second: phase/N 460 Vac

Current

- continuous 6 A
- temporary (0,5 s) 120 A

Measuring accuracy

- Accuracy class 1 for active energy and power according to EN 50470-3 (B)
- Accuracy class 2 for reactive energy and power according to EN 62053-23

Pulse output (SO signals)

- according to EN 62053-31
- Pulse output 1: proportional to active imported energy
- Pulse output 2: proportional to reactive imported energy
- Pulse rate p/kWh – p/kvarh 100-10-1
- Pulse ON duration 30 msec
- Operating voltage ac 5..230Vac
- Operating voltage dc 5..300Vdc
- Pulse ON maximum current 90 mA
- Pulse OFF leakage current 1 μ A

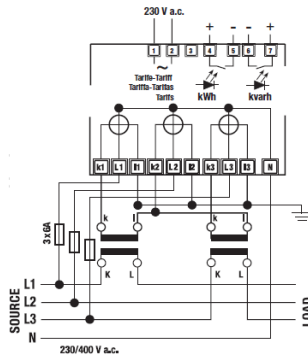
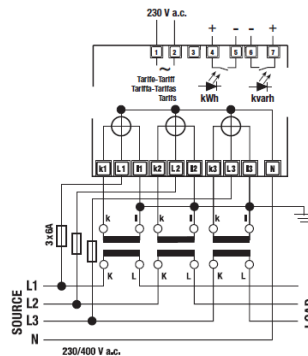
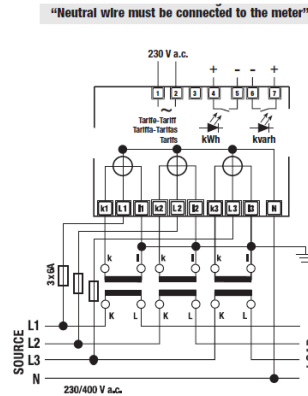
Adaptor for Communication

- Infrared port to interface the EIB/KNX communication module.

Environmental conditions

- Mechanical environment M1
- Electromagnetic environment E2
- Operating temperature -25°C ... +55°C
- Storage / transportation temperature -25°C ... +70°C
- Relative humidity (not condensation) $\leq 75\%$
- IP rating IP20

Terminals, connections and command/visualisation elements



Primary current setting



Sequence:

- Press "Menu-Key" for 4 sec.
- Select the desired Primary Current value using "+" and "-" key
- Press "Command Button" for 4 sec. to confirm the modification, otherwise wait 8 sec. to cancel the modification and come back to normal display mode. Only on 282201 (not MID) the acceptance of modification, by pushing "Command Button" after "reset?" question, implies the reset of all energy registers.

Display (readouts)

Active Energy	Tariff 1	KWh	Imp. and exp. Energy
	Tariff 2	KWh	Imp. and exp. Energy
Reactive Energy	Tariff 1	KWh	Imp. and exp. Energy
	Tariff 2	KWh	Imp. and exp. Energy
Active Power	-	(k-M) W	Instantaneous val.
	-	(k-M) var	Instantaneous val.
Connection errors	-	-	Phase error
Primary transformer	5...10.000/5	A	CT (current transformer)



88888888

Energy Value

→

Energy exported (→) Imported (←)

T8

Running Tariff (T1 – T2)

L8

Energy Line (L1-2-3)

ΣL

Phase Summary Line Energy

ε

Inductive, Reactive Power

⊥

Capacitive, Reactive Power

888

Running Active Power

CT8888

CT Primary Counter



Consumption Bar (% of Pmax)

Mounting and Wiring hints

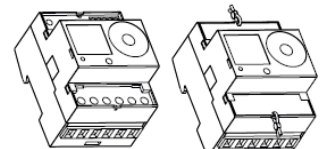
Device is intended to be used indoor in dry places.

IMPORTANT:

- This device must be installed only by a qualified electrician.
- Install in conformity to SELV installation rules.
- The applicable safety and accident prevention regulations must be observed.
- The device must not be opened. Any faulty devices should be returned to manufacturer.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

For further information please visit www.eelectron.com

Sealable Terminal Covers:



eelectron spa

Email: info@eelectron.com
Web: www.eelectron.com

