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DIN Rail Mounting kWh Meters

Models Available

EL100GT DIN Rail Mounting kWh Meter

Product Features

- Active energy (kWh) measurement
- DIN rail mounting enclosure
- Single phase, 3 phase and DC versions
- Accuracy class 1 (1%)
- Non-resettable
- Pulsed output option
- Fingerproof terminal cover included

Kilowatt hour meters are suitable for the monitoring of active energy (kWh) in all types of sub-metering applications. Models are available for single phase and three phase, balanced and unbalanced loads, as well as DC systems. The kWh meters are accurate to class 1 to IEC1036 and AC models have a user selectable CT ratio through a rotary switch accessible from a removable cover on the meter.

The meters are housed in a compact DIN rail mounting enclosure measuring only 100mm in width. All meters have an electromechanical counter eliminating the need for any auxiliary power supply on the AC models. All meters are available with an optional voltage free pulsed output for input to data loggers, PLC's, building management systems or computers.

kWh Meters – for measuring energy (kWh) consumption

General Specification

Design complies with:
- IEC1036, IEC521

Accuracy:
- Class 1 to IEC1036

Counter:
- 7 digit (4mm high) electromechanical

Front Panel LED's:
- Energy LED indicates correct connection of voltage and current
- Pulse LED indicates rate of energy measurement and pulse output

Enclosure Code:
- Case IP50, terminals IP10

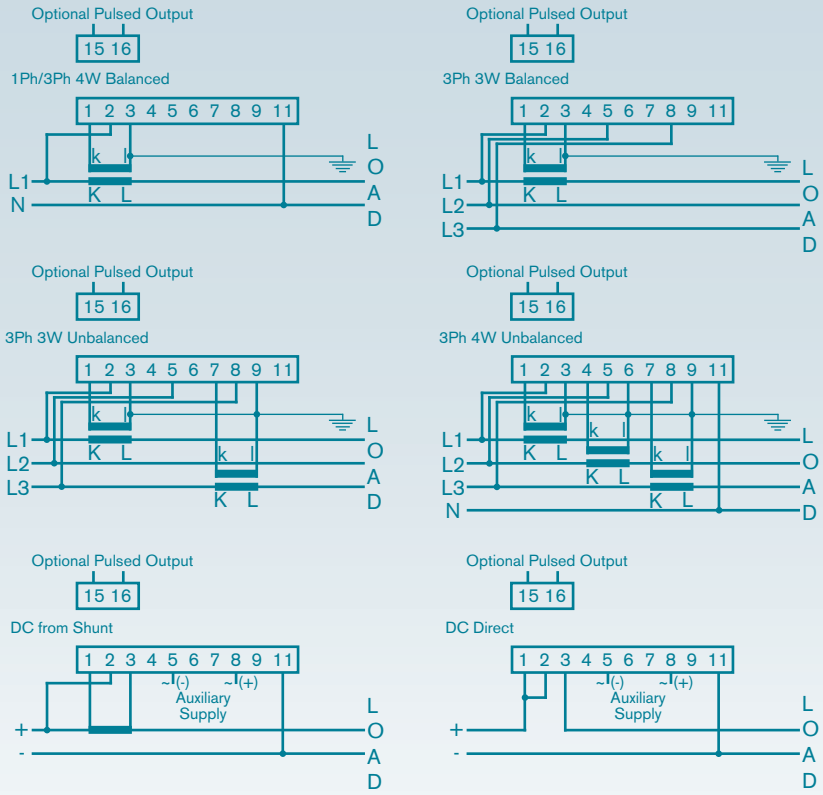
Weight:
- 350g

Markings:
- CE marked

Pulsed Output:
- Voltage free isolated relay
- 5A contacts at 250Vac, 200msec

Pulsed Output Ratio:
- Once every counter increment

Connections



Notes:

1. Ensure that current transformers are mounted such that K faces the supply and L faces the load.
2. Secondary windings of the current transformers should be earthed.

Ordering information

Model	Code	Description
	EL100GT	DIN Rail Mounting kWh Meter

Current or CT Ratio	Code	Description
	1L	25/1 to 800/1A (selectable) - see table below *
	1H	200/1 to 6000/1A (selectable) - see table below **
	5L	25/5 to 800/5A (selectable) - see table below *
	5H	200/5 to 6000/5A (selectable) - see table below **
	Specify	Other CT ratio (specify)
	Specify	0.5 to 5 Amps direct (specify)
DC	Specify	0.1 to 10 Amps DC direct (specify) or 10 to 5000 Amps DC from 50, 60, 75mV shunt (specify)***

Wiring System	Code	Description
	/1	Single Phase
	/2	3 Phase 3 Wire Balanced
	/3	3 Phase 3 Wire Unbalanced
	/4	3 Phase 4 Wire Balanced
	/5	3 Phase 4 Wire Unbalanced
DC	/DC	DC System

Input Voltage	Code	Description
	Specify	110, 230 or 415Vac (specify L-N or L-L)
	Specify	50 to 440Vac upon request (specify)
DC	Specify	12, 24, 48Vdc or up to 600Vdc upon request

Auxiliary Power (DC)	Code	Description
DC	Specify	110, 230 or 415Vac (specify)
DC	Specify	12, 24 or 48Vdc (specify)

Options	Code	Description
	/P	Voltage Free Pulsed Output

Example **EL100GT - 5L - /1 - 230VL-N - /P**

Current Transformer Primary Currents (Selectable)

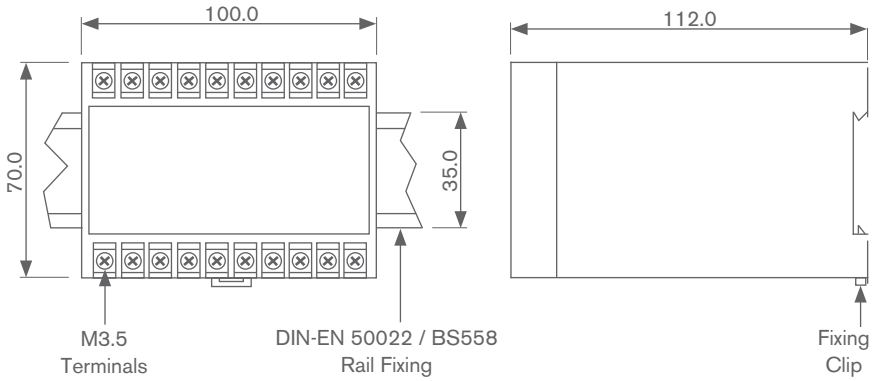
* L 25, 40, 50, 60, 75, 80, 100, 120, 150, 200, 250, 300, 400, 500, 600, 800A

** H 200, 250, 300, 400, 500, 600, 800, 1000, 1200, 1500, 1600, 2000, 2500, 3000, 4000, 6000A

*** Standard Shunt Values

10, 15, 20, 25, 30, 40, 50, 60, 75, 80, 100, 120, 150, 200, 250, 300, 400, 500, 600, 800, 1000, 1200, 1500, 2000, 2500, 3000, 4000, 5000A

Dimensions



All dimensions in mm

Specification (AC Measurement)

Input Current, *In*:
- 0-0.2A to 0-5A direct connected
- 1A or 5A CT operated

Input Voltage, *Un*:
- 110, 230, 415V or VT ratio
- (50 to 440V upon request)

Voltage Variation:
- ±20% of *Un*

Frequency:
- 50/60Hz

Overload:
- 1.2 x *In* or *Un* for 2 hours
- 6 x *In* for 5 seconds

Test Voltage:
- 2kV rms for 1 minute

Burden:
- Voltage circuit < 3VA per phase
- Current circuit < 0.1VA per phase

Counter & Pulse Resolution:
- 1 kWh (L CT ratio model)
- 10 kWh (H CT ratio model)
- Other resolutions available on request to suit direct connected units or VT ratios

Specification (DC Measurement)

Input Current, *In*:
- 0-0.1A to 0-10A direct connected
- 0-10A to 0-5000A from 50, 60 or 75mV shunt

Input Voltage, *Un*:
- 12, 24 or 48Vdc
- (upto 600V upon request)

Voltage Variation:
- 0-120% of *Un*

Overload:
- 1.2 x *Un* continuous, 2 x *Un* for 3 sec
- 1.2 x *In* continuous, 10 x *In* for 3 sec

Test Voltage:
- 1kV rms for 1 minute

Counter & Pulse Resolution:
- 1 Wh, 10Wh, 0.1kWh or 1kWh
- Other resolutions available on request

Auxiliary Power Supply:
- 12, 24, 48Vdc, 110, 230 or 415Vac

Auxiliary Power Supply Variation:
- -10% to +20% of nominal

Specification subject to change without notice.