

## M100/M600 Kilowatt Hour Transducer



The kilowatt hour meter is available in either a panel mount or DIN rail mount version. The kW.h meter has an accuracy of 1% to IEC 1036. With the advent of the deregulation in the electric industry on a global basis and the ever increasing cost of electricity, the requirement for measuring kW.h is becoming more and more important. With the savings realized by the monitoring and using electricity at the optimum time, the cost of the kW.h transducer can be recovered within weeks. The DIN case allows for the product to be mounted on individual machines as well as control switch-boards for complete or partial installations.

The mechanical counter provides an ideal replacement and offers numerous advantages over the traditional disc type.

The mechanical counter has a 7 digit non re-settable counter. Reset occurs at 9999999, and resets to zero. Optional pulse output of kW.h, is available to send to remote counters, PLCs data loggers and computers. Analog mA output of the instantaneous Watt, kW or MW is also an option.

### SPECIFICATIONS

#### INPUT

Rated Un	57 to 500V, specify nominal voltage
Range	80-120% Un
Burden	<0.2VA per phase
Overload	1.5 x Un continuous 4 x Un for 1 second
Rated In	1 or 5 amp
Range	10-120% In
Burden	<0.5VA per phase
Overload	4 x In continuous. 50 x In for 1sec
Frequency	50 to 60 Hz
Nominal Range	45 to 65Hz

#### ACCURACY

Active Energy	1% of reading (IEC 1036) Accuracy of IEC 1036Class I BS 5685 (IEC 521)
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#### ANALOG OUTPUT

Accuracy	1%
Rated value 0-1mA	<5 kOhm
Rated value 0-20mA	<250 Ohms

#### INSULATION

Test Voltage	4 kV RMS 50 Hz for 1 min (3kV analog output )
Impulse Test	EMC 5kV transient comply with IEC 801 / EN 55020
H.F. interference	EHF 2.5 kV 1MHz complies with IEC 255-4
Protection Class	II complies with IEC348 BS 4743, DIN 57411 and VDE 0411

#### STANDARDS

Designed to	IEC 1036 accuracy (IEC 521)
AUXILIARY CURRENT & VOLTAGE RATIOS	AC Voltage 115 or 230 or 400 V Internally selectable

#### OUTPUT RELAY

kW.h pulse output	Normally open volt free contact 50V, 150mA 5W
Pulse rate	Standard 1 pulse per kW.h (1 pulse = 10 kW.h on higher CT & VT ratios
Pulse duration	Standard 250 msec other values optional on request 0.1 kW.h per flash
Led flash rate	

#### ENVIRONMENTAL

Working Temp.	0 to +60 deg C
Function Temp.	-25 to +70 deg C
Storage Temp.	-55 to +85 deg C
Temp. Coefficient	0.01% per deg C
Relative Humidity	0-95% non cond.
Warm up time	1 min.
Shock	30G in 3 planes

#### ENCLOSURE

M600	100 x 70 x 112mm, Poly-carbonate
M100	Snap on Din rail 35 x 7.5 mm complies with DIN 50022, BS 5584
Enclosure	Case IP50, Terminals IP 30
Terminals	Screw terminal for 2 x 0.5-3.5mm

#### OPTIONS

Pulsed output; Analog output of instantaneous watts; Non standard pulse width; Calibration at temp. other than 23 °C and Calibration at nominal 35 to 450 Hz.

**Represented By: techniCAL**