

# DMTI DG Basic - MC

Single & Three Phase Electronic Watt-Hour Meter Basic - Mechanical Counter

## Application

DIGITAL METER TECHNOLOGY INTERNATIONAL, Ltd produces **DMTI - DG (II) and (III) B Single and Three Phase Basic** electronic watt-hour meter, They adopt many advanced technologies of research and development, like microelectronic-techniques, specialized large-scale IC (integrated circuit), digital sampling and processing technology, SMT technique, and so on. Their technical performances completely conform to International Standards IEC 62053-21 for Class 1 single and three phase active energy meter. They can directly and accurately measure the load active energy consumption in the single and three phase AC networks of rated frequency 50Hz or 60Hz. The DG Basic have multiple types for option, to be suitable with the various market demands. They have features with excellent long-term reliability, small volume, light weight, perfect appearance, easy installation, etc.

## Standard Features:

- ✓ Available as 35mm DIN standard rail mounted, conforming to Standards DIN EN 50022, as well as front PANEL mounted (the center distance between two mounting holes is 63mm). Two mounted methods above are optional for user.
- ✓ Two or Four LEDs to indicate separately the power state (green) and the energy impulse signal (red).
- ✓ Measure the active energy consumption in one direction on single phase two wire, which is not related with the load current flow direction at all, complying with Standards IEC 62053-21.
- ✓ Can select the step motor impulse register of 6 digits (999999kWh)
- ✓ May select normal and simple connection.
- ✓ 6+1 digits (999999.1kWh) LCD display.

### DMTI DG II-B MC

Single Phase Basic Mechanical Counter

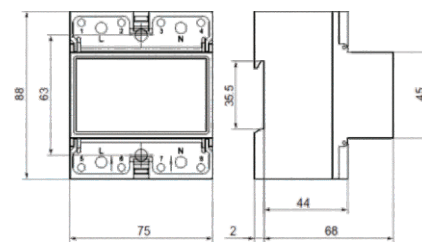


### DMTI DG III-B MC

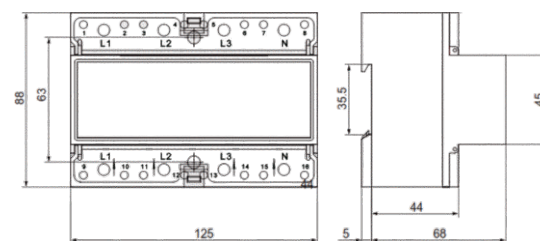
Three Phase Basic Mechanical Counter



## Dimensions



83mm (H) x 75mm (W) x 68mm (D)  
DMTI DG II-B MC



88mm (H) x 125mm (W) x 68mm (D)  
DMTI DG III-B MC

## Electrical parameters:

### DG II B MC - Single Phase

Nominal Voltage (Un)	220VAC
Operational Voltage	161 ~ 300VAC

### Current

Basic current (Ib)	5A / 10A / 20A
Maximum current (Imax)	50A / 100A
Operational current range	0.05Ib ~ Imax
Starting current range	0.004Ib
Internal Power consumption	≤2W / 10VA

### DG III B MC - Three Phase

Nominal Voltage (Un)	3x220VAC / 380AC
Working Voltage Limit	70 ~ 130% Un

### Current

Basic current (Ib)	10A / CT
Maximum current (Imax)	50A / 100A / 5A
Starting current range	0.004Ib(Direct), 0.002Ib (CT)
Internal Power consumption	≤ 2W / 10VA / phase

### Test Output flash rate

Operational Frequency range	50Hz ±10%
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### Insulation Capabilities

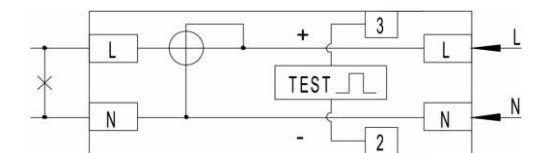
- AC Voltage withstand	4kV for 1 minute
- Impulse Voltage withstand	6kV - 1.2/50μs waveform

### Performance Criteria

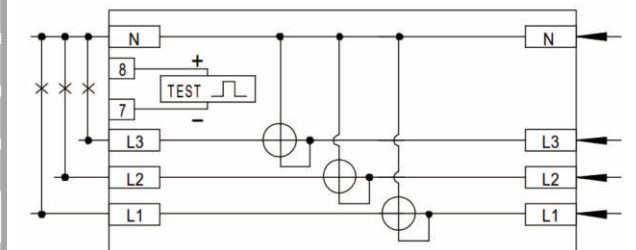
Operating Humidity	≤ 85%
Operating temperature	-10°C to +50°C
Storage temperature	-30°C to + 65°C
Class	1

DMTI DG B MC Specification

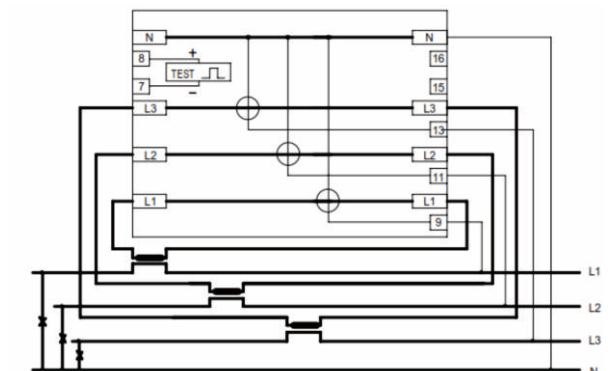
## Wiring Diagram



DMTI DG II-B MC



DMTI DG III-B MC- Direct Connection



DMTI DG III-B MC- CT Connection