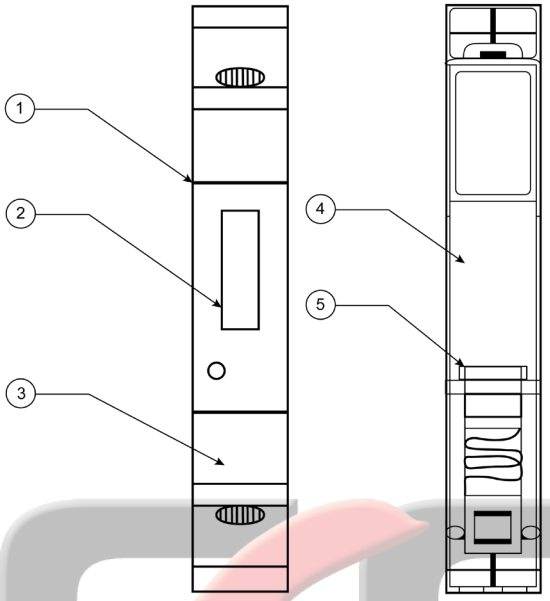
MKWHE1545 DIN Rail Energy Meter

Features

1. Meter top case
2. LCD display
3. Terminal cover
4. Meter bottom case
5. DIN rail clip

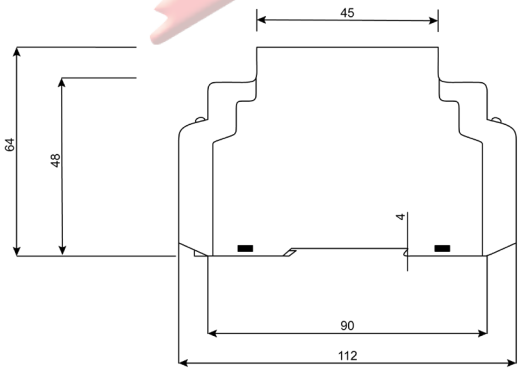


Specifications

- Nominal Voltage (Un): 230V AC
- Operational Voltage: 195-253V AC
- Operating Temperature: -25°C - +55°C
- Insulating Protective Class: 2
- IP Rating: IP51
- Accuracy Class: 1
- Basic Current (Ib): 5A
- Maximum Rated Current (Imax): 45A
- Operational frequency range: 50Hz ±10%
- Internal Power Consumption: ≤2W/phase- ≤10VA/phase
- Reading Accuracy: 1/100 kWh
- Test output flash rate (RED LED): 1000/2000imp/kWh
- Pulse output rate (pins 20 & 21): 1000/2000imp/kWh
- Mounting: 35mm DIN Rail
- 18mm pole width
- Standards: EN 50470-1 and EN 50470-3

Dimensions

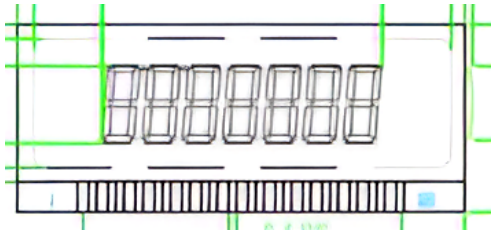
Height: 112mm
Width: 17.5mm
Depth: 64mm
Weight: 0.12Kg (net)



Display Information

MKWH1545 is a seven digit LCD display, there are two options.

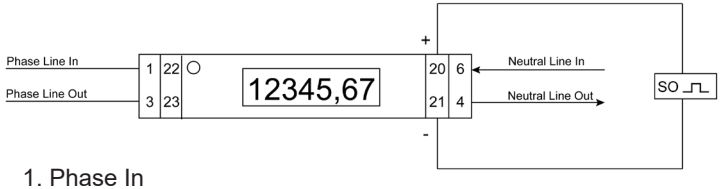
- 5+2 - 5 integer-bit and 2 decimal place which will display a maximum of 99999.99kWh.
- 6+1 - 6 integer-bit and 1 decimal place which will display a maximum of 999999.9kWh



WARNING

- A fuse, thermal cut-off or single pole circuit breaker should not be fitted on the supply or neutral line.
- It is recommended that an over-current protection device is installed on the supply side of the meter

Wiring Diagram



1. Phase In
3. Phase Out
4. Neutral In
6. Neutral Out
20/21. Pulse Output Contacts

OPERATING INSTRUCTIONS

Consumption Indication

The MKWH1545 meter has a dual colour LED consumption indicator on the front panel that provides indication in both green and red. During consumption the LED will flash red. The more rapid the LED flashes, the greater the consumption metered.

Display

The MKWH1545 energy meter is equipped with 5+2 or 6+1 LCD display which is used to record consumption.
Note: LCD display cannot be reset to zero.

Pulse Output

The MKWH1545 energy meter is equipped with a pulse output that is fully seperated from the internal circuit. Pulses are generated in proportion to the measured energy for accuracy testing.

Troubleshooting

Problem	Check	Solution
No light for the Power supply indicator	1. Is AC power supply connected to the meter? 2. Are terminals 1 and 4 correctly connected?	1. Check mains power is connected to the device and ON. 2. Make sure all terminal screws are fixed. Check that there is 230V 50Hz AC voltage between the terminal screws on the 1 and 4 when power is supplied to the meter.
The LED consumption indicator is not flashing	1. Is the connected load operating?	1. Only when load is running, this LED will flash.
The LCD display is not operating	1. Is there power supplied to the meter? 2. Is the operating power too low?	1. Check that the power supply indicator is flashing. 2. If the operating power is too low, the spacing interval of the pulses will also be slower which may seem like the display register is not counting.
No pulse output	1. Is the DC power supply connected to the meter? 2. Is the connection correct?	1. Check the external voltage (Ui) is 5-27V DC. 2. Check the connection: Connect 5-27V DC to connector 20 (anode), and the signal wire (S) to connector 21 (cathode).