


DM-0301 DIGITAL MULTIMETER TRUE RMS 72x72mm

INTRODUCTION

These state-of-the-art panel meters are designed for accurate measurement of the AC RMS voltage, AC RMS current, frequency, active power and power factor in single-phase systems. The current transformer ratio can be set between 5/5A and 5000/5A via front panel buttons.

Devices have separate inputs for supply and measurement. The unit allows both manual selection of the display channel and automatic scrolling.

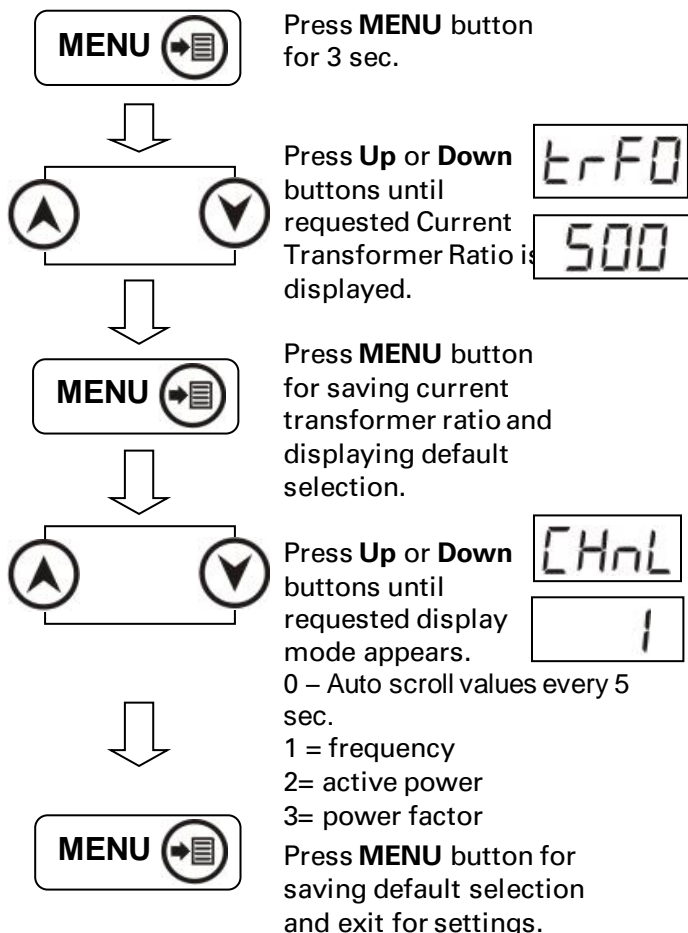
Changing Display Selection:

By using the **MENU**  button, frequency, active power and power factor can be selected and read from display. Every depression on the **MENU** button will display the next measurement.

60 seconds after the last keypress, the display will return automatically to the default display mode. However the default display mode is selectable by programming.

SETTING THE CURRENT TRANSFORMER RATIO AND THE DEFAULT DISPLAY

Any measured parameter can be set as the default display. Automatic parameter scrolling is also provided. Selections are stored into a non-volatile memory and is not affected from power failures.



PRECAUTIONS FOR INSTALLATION AND SAFE USE




Failure to follow below instructions will result in death or serious injury

- Do not open the unit. There is no serviceable parts inside.
- Fuses must be connected to the power supply and phase voltage inputs, in close proximity of the unit.
- Fuses must be of fast type (FF) with a maximum rating of 6A.
- Disconnect all power before working on equipment.
- When the unit is connected to the network do not touch terminals.
- Short circuit terminals of unused current transformers.
- Do not try to clean the device with solvent or the like. Only clean with a dry cloth.
- Verify correct terminal connections before applying power.
- Electrical equipment should be serviced only by competent service personnel. No responsibility is assured by the manufacturer or any of its subsidiaries for any consequences arising out of the use of this material.
- Only for front panel flush mounting.

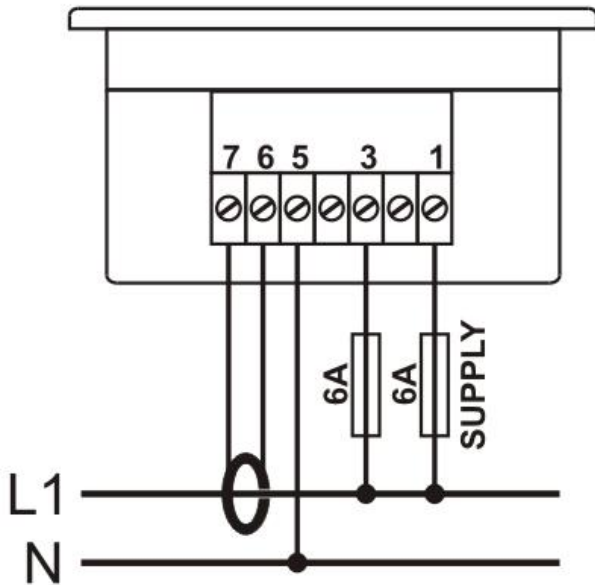


**Current Transformers must be used for current measurement.
No direct connection allowed**

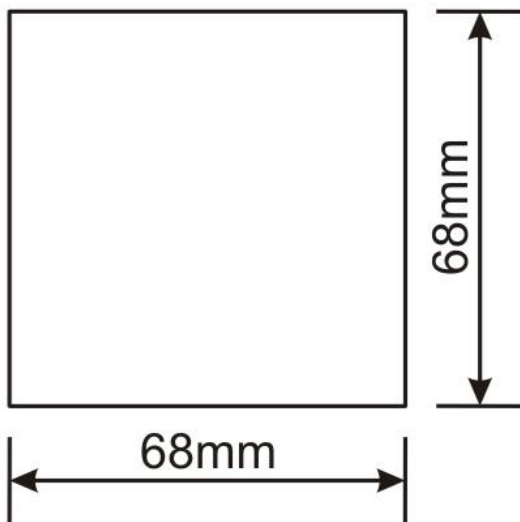
Before installation

- Read the user manual carefully, determine the correct connection diagram.
- Remove all connectors and mounting brackets from the unit, then pass the unit through the mounting opening.
- Put mounting brackets and tighten.
-  Do not tighten too much, this can brake the enclosure.
- Make electrical connections with connectors removed from sockets, then place connectors to their sockets.
- Note that the power supply terminal is separated from measurement terminals, with common neutral point.

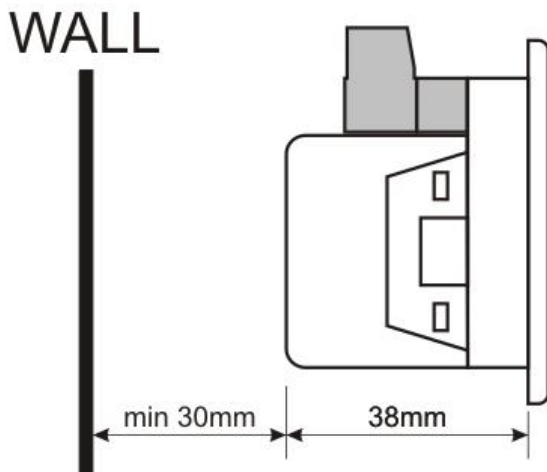
CONNECTION DIAGRAM



PANEL CUTOUT DIMENSIONS



MOUNTING TOLERANCES



TECHNICAL SPECIFICATIONS

Power Supply Input: 170 - 275VAC
50 - 60Hz nominal ($\pm 10\%$)
Different AC/DC supply values available.

Measurement Inputs:
10 - 300 V AC
0.2 - 5.50 A AC
30 - 100 Hz

Accuracy: Volts-Amps-Hz: 0.5% + 1 digit
kW : 1.0% + 2 digits
cos: 0.5% + 2 digits

Power Consumption: < 1.5W

Burden:
Voltage input: < 0.1VA per phase
Current input: < 1VA per phase

Operating Temperature: -40°C to +70 °C

Maximum Humidity: 95% non-condensing.

Degree of Protection: IP 54 (Front Panel)
IP 30 (Back panel)

Enclosure:
Non-flammable, ROHS compliant, high temperature
ABS/PC (UL94-V0)

Installation:
Flush mounting with rear retaining brackets

Dimensions: 78x78x41mm (WxHxD)

Panel Cutout Dimensions: 68x68mm

Weight: 145 gr

EU Directives Conformity:
2006/95/EC (low voltage)
2004/108/EC (EMC)

Norms of reference:
EN 61010 (safety requirements)
EN 61326 (EMC requirements)

PACKAGING INFORMATION

Pieces per Package: 24 Pcs

Package Size: 280 x 170 x 215mm (LxWxH)

Package Weight: 3.7 kg

FACTORY SETTINGS

trFD = 500
CHnL = 0

