

**DVF-0303**  
**VOLT-FREQUENCY METER**  
**TRUE RMS 72x72mm**



**INTRODUCTION**

These state-of-the-art panel meters are designed for accurate measurement of the AC RMS voltages and frequency in three-phase systems.

Although they are mainly used in electrical panels , these devices can also be integrated in many other applications.

Devices have separate inputs for supply and measurement with common neutral point.


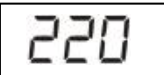
**Changing Display Selection:**

By using the **MENU**  button, L1-N, L2-N, L3-N, L1-L2, L2-L3, L3-L1 voltages and frequency can be selected and read from display. Every depression on the **MENU**  button will display the next measurement.


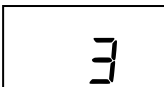
60 seconds after the last keypress, the display will return automatically to the default display mode. However the default display mode is selectable by programming.

**SETTING THE DEFAULT DISPLAY SELECTION**


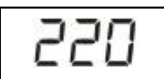
Any measured parameter can be set as the default display. Automatic parameter scrolling is also provided. The selection is stored into a non-volatile memory and is not affected from power failures.

**MENU**  Press **MENU** button for 3 sec. 



**MENU**  Press **MENU** button until requested value is displayed. 



**MENU**  Press **MENU** button for 3 sec. for saving the default display selection and exit from setup menu. 

0=Automatically scroll values every 5 sec.  
 1=L1-N, L2-N, L3-N  
 2=L1-L2, L2-L3, L3-L1  
 3=L1, L2-L3, frequency

**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.
- 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.

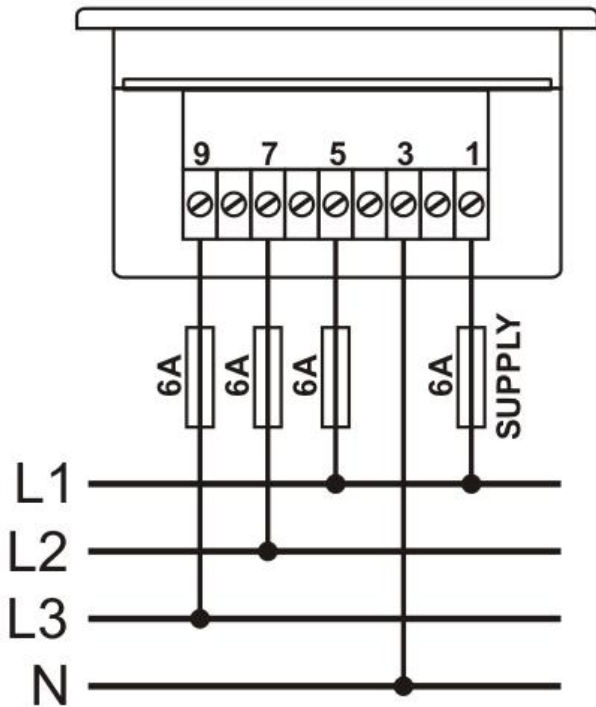


**Current Transformers must be used for current measurement.**  
**No direct connection allowed**

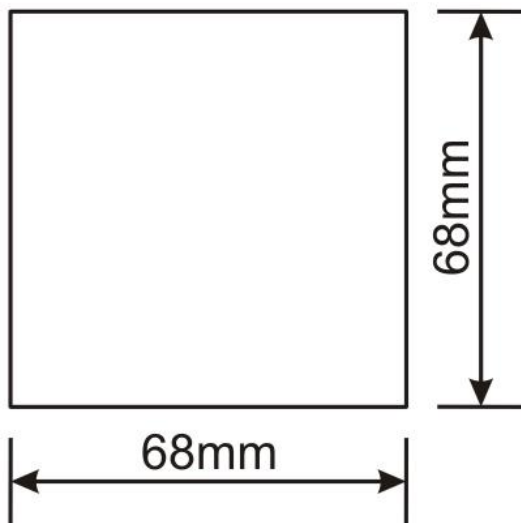
**Before installation**

- 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.

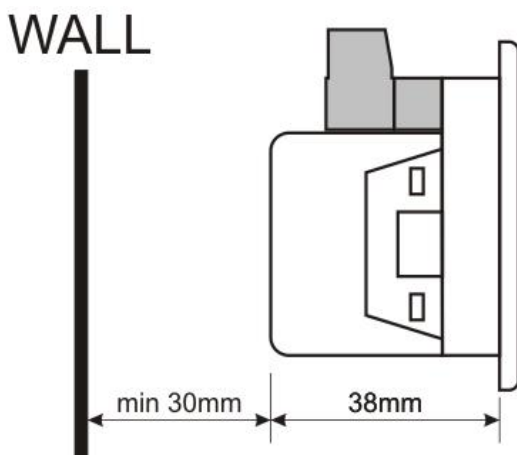
## CONNECTION DIAGRAM



## 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 (Phase-Neutral)  
20 - 520 V AC (Phase-Phase)  
30 - 100 Hz

**Accuracy:** 0.5% + 1 digit

**Power Consumption:** < 1.5W

**Burden:** < 0.1VA 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

[HnL=0]

