

# Multimeters (TRMS)

The measurement instruments in the EV3M series are TRMS electronic digital multimeters to view the main electric measurements of 3 or 4 wires three-phase systems  
Measurements view: voltage, current, power, power factor, frequency and neutral current are shown on three LED displays with three digits.

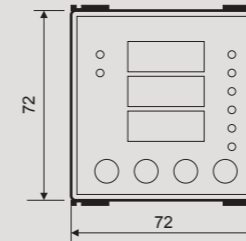


- 1 Terminals for power supply and voltage connection
- 2 Parameters setting keys or browser menu
- 3 Terminals for current measurements
- 4 3 displays with 3 digits showing the taken measurements

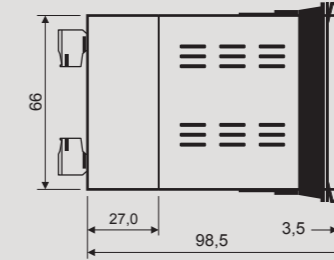
## EV3M-R

### DIMENSIONS (mm)

#### Front view

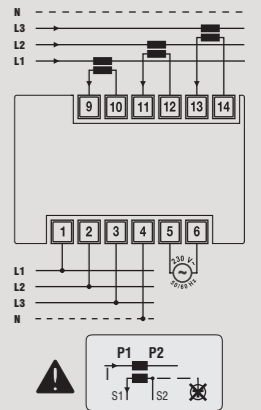


#### Side view



### CONNECTION DIAGRAM

#### Diagram



**Attention: the current transformer secondary circuits CANNOT be earthed.**



## MEASUREMENT AND CONTROL

### DIGITAL MULTIMETER (TRMS)

- Power supply: 230 Vac (-15%/+10%)
- 3 separate displays with 3 digits 7 segments for view the taken measurements
- Measurements taken:
  - phase voltages (L-N); concatenated voltages (L-L)
  - phase current
  - phase active power, phase apparent power, phase reactive power
  - power factor (cosφ)
  - frequency
  - neutral current
- CT transformation ratios selectable:
  - from 5/5 to 1000/5 with steps of 5
  - from 1000/5 to 10000/5 with steps of 50
- Container: 72x72
- Direct voltage connection
- Current connection through external transformer x/5 A

### TECHNICAL INFORMATION

#### GENERAL CHARACTERISTICS

Power supply	V AC	230 (-15 ÷ +10%)
Frequency	Hz	50 / 60
Input current	A	$I_n = 5$ ; $I_{max} = 6$
Maximum own consumption	VA	voltage circuits <2.5 current circuits <2.5
Precision		± (0.5% f.s. + 1 digit)
Measurement precision and range		resolution 1 V resolution 10 mA
Minimum measurable signal	Voltage	10 V
	Current	150 mA

Current connection type	through external CT x/5	
Voltage connection type	direct	
Section of leads	max 2.5 mm <sup>2</sup>	
View	3x3 digits Led display	
Container	77x72	
Operating temperature	°C	-10 ÷ +45
Operating humidity		10% ÷ 90% non condensing
Storage temperature	°C	-20 ÷ +60
Degree of Protection		IP20 / 51 on the front

Code	Model	Description
VE334900	EV3M-R	Digital multimeter 72x72

### REFERENCE STANDARDS

Compliance with Community Directives: 2006/95/EC (Low Voltage) and 2004/108/EC (E.M.C.) is declared with reference to the following harmonized standards: EN 61010-1, EN 61000-6-2 and EN 61000-6-4