VOLTMETER
EVM–3/EVM–3C

EVM–3(Voltmeter) :

EVM–3 is designed for accurate measuring of the AC RMS voltage and for saving the minimum and maximum values of the measured voltages. Minimum and maximum values remain stored in the memory when the power supply is off. This stored values can be read when the power is on. Although EVM–3 is mainly used for electrical panels, this device can also be used with any application in which accurate voltage readings should be done between 10–600V. The measurement(3–4) and power supply(1–2) connections are located on the rear panel and the digital display is centered on the front panel.

EVM–3C(Setpointed Votmeter) :

EVM–3C has the same functions of the EVM–3. In addition to these functions, an over voltage level and"time delay"can be set. When the measured voltage is over the set value, the output relay is activated at the end of the adjusted time delay, generates an alarm signal and display starts blinking.

Minimum and Maximum Voltage :

The minimum and maximum voltage values are stored ,User May read or delete these values. Stored minimum and maximum voltage values remain stored, when the power supply is off.

Setpoint (SP):

When the measured AC voltage between two points is over the setting value, the output relay is activated in order to generate an error signal, at the end of the delay time. If the AC voltage is 1.5 times of setting value, output relay is activated without any delay. If the AC voltage value become lower the setting value before the end of the delay time, the relay resets itself and no tripping occurs.

Latch Function (LE):

In case of overvoltage the output relay is activated. Latch function is used to select the output relay operation mode. Either "0" or "1" position may be selected.

At position "0" : If the voltage is below the setting value, output relay releases automatically, doesn't need any reset.

At position "1" : Even if the voltage is below the setting value, output relay remains activated until the reset and releases only by pressing the "set" button.

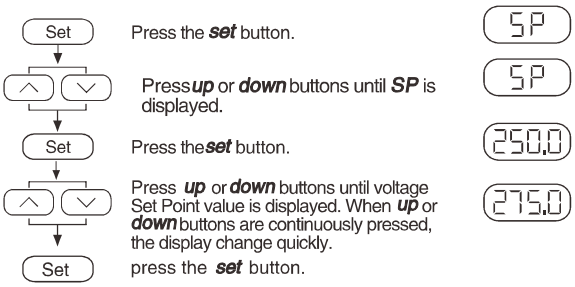
Instant Tripping(tP):

If the AC voltage is 1.5 times of setting value, the output relay is activated without any delay time, This function is user selectable.

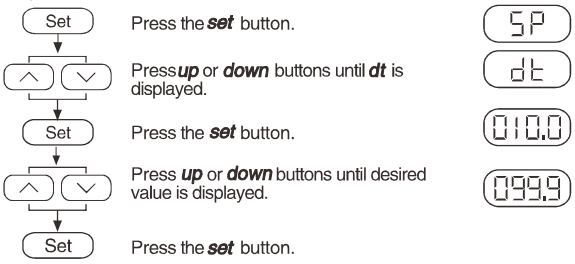
At position "0" : Instant tripping is OFF.

At position "1" : Instant tripping Is ON.

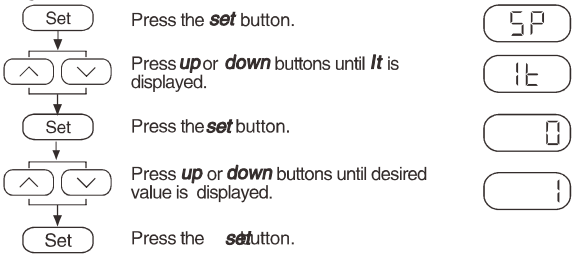
Setting of Set Point Value (For EVM–3C)



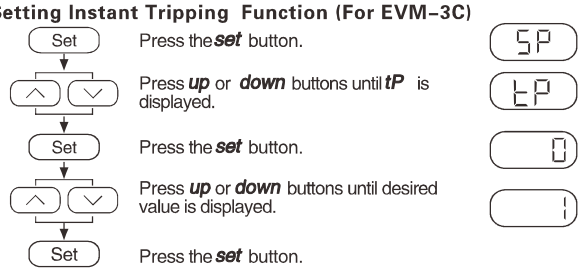
Setting of Delay Time (For EVM–3C)



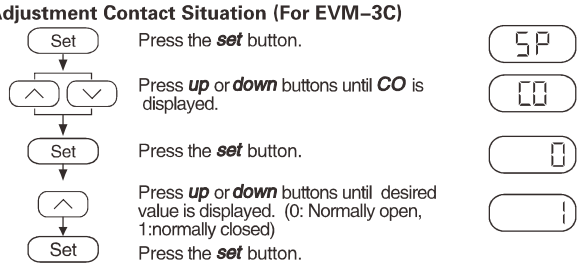
Setting Latch Function (For EVM–3C)



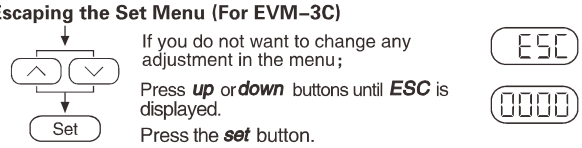
Setting Instant Tripping Function (For EVM–3C)



Adjustment Contact Situation (For EVM–3C)



Escaping the Set Menu (For EVM–3C)



Displaying Minimum Voltage (For EVM–3C)

Press and hold the *down* button to see.

Displaying Minimum Voltage (For EVM–3)

Press one time to see the minimum voltage value

Displaying Maximum Voltage (For EVM–3C)

Press and hold the *up* button to see.

Displaying Maximum Voltage (For EVM–3)

Press two times to see the maximum voltage value

Deleting the Minimum and Maximum Voltages

Press *up* and *down* buttons at the same time.(For EVM–3C)

Press and hold for two seconds to delete demands values (For EVM–3)

If the button is not pressed again within 20 seconds, EVM–3 turns back automatically in measuring mode.((For EVM–3)

• the decimal point blinks while the display shows demand values.

Factory Settings :

Set point value (SP)	: 250
Delay time (dt)	:10.0
Latch function value (LE)	: 0
Instant tripping function value (tP)	: 1(Instant tripping is on)
Contact situation (CO)	: 0(Normally open)

VOLTMETER
EVM–3/EVM–3C

PRECAUTIONS FOR INSTALLATION AND SAFE USE

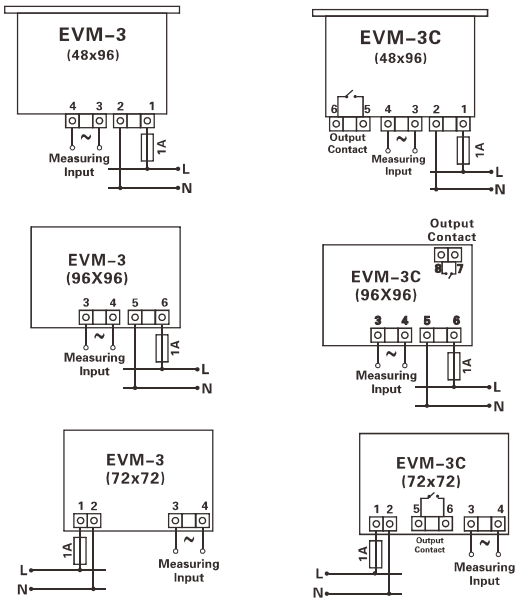
Failure to follow those instructions will result in death or serious injury.

- Disconnect all power before working on equipment.
- When the device is connected to the network, do not remove the front panel.
- Do not try to clean the device with solvent or the like. Only clean the device with a dried cloth.
- Verify correct terminal connections when wiring.
- Electrical equipment should be serviced only by your competent seller.

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 rack panel mounting.

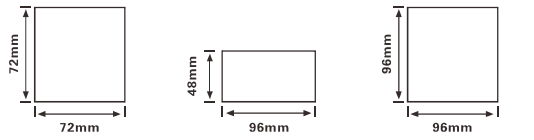
Connection Diagrams



Warning :

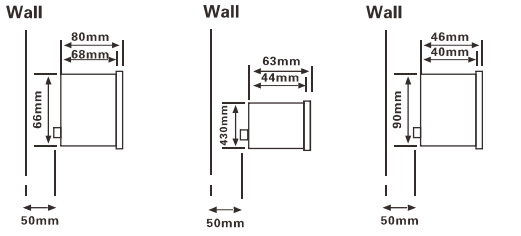
a) A switch or circuit breaker must be connected between the network and the auxiliary supply input of device.
b) Connected switch or circuit breaker must be in close proximity to the device.
c) Connected switch or circuit breaker must be marked as the disconnecting device for the equipment.
d) The type of the used fuse must be FF type and the current of the used fuse must be 1A.
e) No need of a ventilator in the installation area
f) Do not use with generator

Dimensions



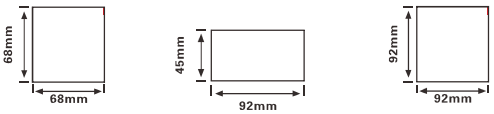
TYPE PR 18 (72x72) TYPE PR 20 (48x96) TYPE PR 25 (96x96)

The area Measurements on The Control Panel



TYPE PR 18 (72x72) TYPE PR 20 (48x96) TYPE PR 25 (96x96)

Control Panel Cut Out



TYPE PR 18 (72x72) TYPE PR 20 (48x96) TYPE PR 25 (96x96)

Technical Data

Operating Voltage (U_n),*	
Operating Range(△U)	: AC 220V ± 10%
Operating Frequency(f)	: 45–65 Hz
Accuracy	:0.5% FS
Measuring Input (V_{in})	: 10–600V AC (for EVM–3, EVM–3C)
Power Consumption(P_{cons})	: <4 VA
Burden	: <1 VA(per phase)
Output Contact	: 5 A,250V,1250 VA (Resistive) (for EVM–3C)
Ins.Tripping	: 1.5 × Setpoint (for EVM–3C)
Hysteresis	: 4% × Setpoint For EVM–3C)
Delay Time	: 0.0–99.9 sec. (for EVM–3C
Enclosure	: Non–flammable
Equipment Protection	: Double insulation (□), Measuring Category III
Ambient Temperature	: –5℃ ;+50 ℃
Degree of protection	: iP 40(Front Panel)
Installations	; Flush Mounting With rear terminals
Dimensions	: Rype PR 18.PR 20.PR25

***Please check the device label for proper value.**

***Different supply voltages are adjustable upon request.**

CE