SELEC

MV SERIES

(96 x 96)

Operating Instructions

DP372-V01









(48 x 96)

(48

(72 x 72)

SPECIFICATIONS								
AC MODEL								
Product Name	MV15	MV205	MV305	MV507	MV207	MV2307		
Description	1 Ø Digital voltmeter					3 Ø Digital voltmeter with Selector switch		
Display	3 Digi	3 Digit 7 segment LED display 3 Digit			t, LCD with Analog style bar graph indication			
Display range	0 to 516V			0 to 300V (L-N) 0 to 516V (L-L)				
Input range	50 to 480V AC							
Input Frequency	50 / 60Hz							
Max continuous Input range	516V							
Over range indication	"Or" for input > 516V							
Input impedance	1MΩ(±5%)							
Resolution	1V							
Electrical connection	1 Ø - 2 wire				3 Ø-4wire, 3 Ø-3wire			
Weight	170gm	180gm	180gm	165gm	194gm	206gm		

	DC MODEL				AC MODEL (AUTO RANGING TYPE)		
Product Name	MV15-DC-20V	MV15-DC-200V	MV15-DC-200mV	MV15-DC-2V	MV15-AC-20/200V	MV15-AC-200/2000mV	
Description	Digital voltmeter						
Display	3 ½ digit 7 Segment LED Display						
Display range	-19.99V to +19.99V	-199.9V to +199.9V	-199.9mV to +199.9mV	-1999mV to +1999mV	0 to 19.99/199.9V	0 to 199.9/1999mV	
Input range	0 to ±20V	0 to ±200V	0 to ±200mV	0 to ±2000mV	0 to 20/200V	0 to 200/2000mV	
Input Frequency					50 / 60Hz		
Max continuous Input range	±19.99V	±199.9V	±199.9mV	±1999mV	19.99/199.9V	199.9/1999mV	
Over range Indication	"Or" for input > ±19.99V	"Or" for input > ±199.9V	"Or" for input > ±199.9mV	"Or" for input > ±1999mV	"Or" for input > 199.9V	"Or" for input > 1999mV	
Resolution	0.01	0.1 1		1	0.01/0.1	0.1/1	
Electrical connection	1 Ø - 2 wire						
Weight	170gm	170gm	170gm	170gm	170gm	170gm	

Accuracy : ±0.5% of full scale over rated

operating conditions

Supply Voltage(Vn) : 240V AC (± 20%), 50/60Hz 110V AC (± 20%), 50/60Hz

Measurement Method : True RMS

Sampling Rate : 3 samples / second

Power consumption : 5VA max.

Measuring input over : 1.5 x Vn continuous, 2 x Vn (3s)

voltage

Environmental Conditions

Temperature : Operating: -10°C to 55°C

Storage :-20°C to 75°C
Humidity : Up to 95% RH(non condensing)

Altitude : Up to 2000 meters

Pollution degree : II
Installation Category : III
Protection Class : II

MECHANICAL INSTALLATION

For installing the meter

- Prepare the panel cutout with proper dimensions as shown helow
- Push the meter into the panel cutout. Secure the meter in its place by pushing the clamp on the rear side. The clamps must be secured in diagonally opposite slots.
- For proper sealing, tighten the screws evenly with required torque.
 Terminal screw tightening torque: 0.5 N-m (4.42536 Lb-inch)
 Screw clamp tightening torque: 0.1N-m (0.885 Lb-inch)

	Outline Dimensions (in mm)	Panel cutout Dimensions (in mm)	
MV507	52 3.5 68.5 3.5	46.5→	
MV15	4.5	92 92	
MV305	Ĭ S S S S S S S S S S S S S	8 92 92	
MV2307	₹ 92 15 15 15 15 15 15 15 15 15 15	€2.5	

MAINTENANCE

- The equipment should be cleaned regularly to avoid blockage of ventilating parts.
- Clean the equipment with a clean dry or damp cloth.
 Do not use any cleaning agent other than water.

SAFETY PRECAUTIONS

All safety related codifications, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure the safety of the operating personnel as well as the instrument.

If the equipment is not used in a manner specified by the manufacturer it might impair the protection provided by the equipment.

- Do not use the equipment if there is any mechanical damage.
- Ensure that the equipment is supplied with correct voltage.

A CAUTION:

- Read complete instructions prior to installation and operation of the unit
- 2. Risk of electric shock.
- The equipment in its installed state must not come in close proximity to any heating sources, caustic vapors, oils, steam, or other unwanted process by products.

WIRING GUIDELINES

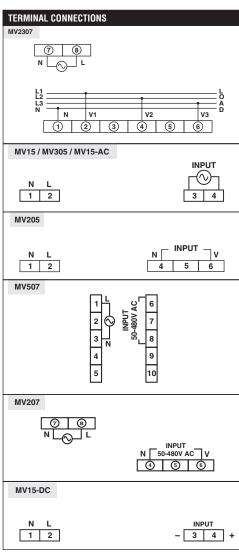
⚠ WARNING:

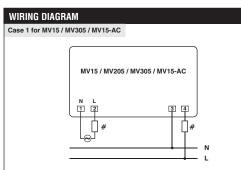
- To prevent the risk of electric shock, power supply to the equipment must be kept OFF while doing the wiring arrangement.
- Wiring shall be done strictly according to the terminal layout. Confirm that all connections are correct.
- Use lugged terminals.
- To reduce electromagnetic interference use of wires with adequate ratings and twists of the same in equal size shall be made with shortest connections.
- Layout of connecting cables shall be away from any internal EMI source.
- Cable used for connection to power source, must have a cross section of 0.5mm² to 2.5mm² (20 to 14AWG). These wires shall have current carrying capacity of 6A.
- Before attempting work on device, ensure absence of voltages using appropriate voltage detection device.

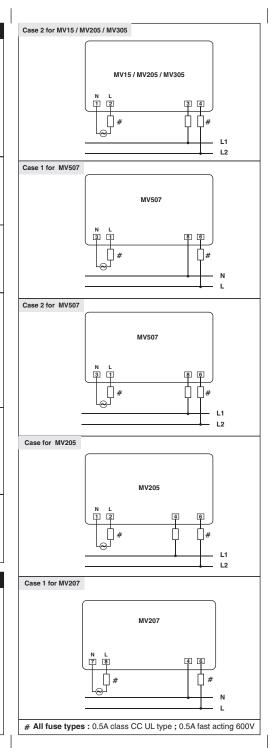
INSTALLATION GUIDELINES

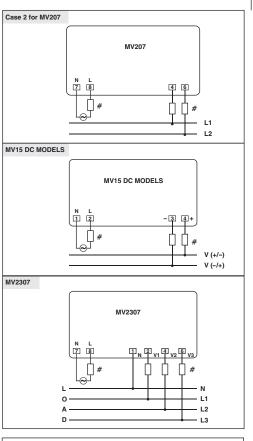
A CAUTION :

- This equipment, being built-in-type, normally becomes a part of main control panel and in such case the terminals do not remain accessible to the end user after installation and internal wiring.
- Conductors must not come in contact with the internal circuitry of the equipment or else it may lead to a safety hazard that may in turn endanger life or cause electrical shock to the operator.
- Circuit breaker or mains switch must be installed between power source and supply terminals to facilitate power 'ON' or 'OFF' function. However this switch or breaker must be installed in a convenient position normally accessible to the operator.
- Before disconnecting the secondary of the external current transformer from the equipment, make sure that the current transformer is short circuited to avoid risk of electrical shock and lighting.
- The equipment shall not be installed in environmental conditions other than those mentioned in this manual.
- The equipment does not have a built-in-type fuse. Installation of external fuse of rating 275V AC / 0.5Amp for electrical circuitry / battery is highly recommended.









Note: 1) For MV507 / MV207 / MV2307 when input ≤300V bargraph will be indicated in multiple of 100

2) For MV507 / MV207 / MV2307 when input >300V bargraph will be indicated in multiple of 200

MODE DESCRIPTION FOR MV2307:

- 1) Press (♥) key for 3sec. to toggle between L-L & L-N pages.
- 2) Page scrolling can be done with every press of the key.

(Specifications subject to change as development is a continuous process.)

Selec Controls Pvt. Ltd., India

Factory Address:

EL-27/1, Electronic Zone, TTC Industrial Area, MIDC, Mahape, Navi Mumbai - 400 710, INDIA.

Tel. No.: +91-22-28476443 / 1882

Fax No.: +91-22-28471733 | Toll free: 1800 227 353 | Website: www.selec.com | Email: sales@selec.com

Doc. name : Operating / 1203 / MV Series OP372-V01 (Page 2 of 2)