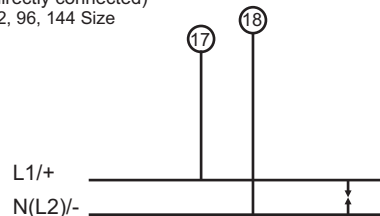




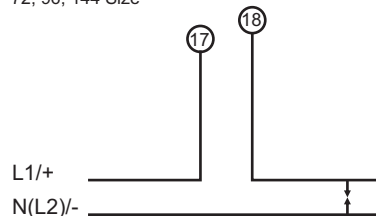
Connections

★ For 48 size, terminal numbers 17 & 18 are to be replaced by 11 & 12 respectively.

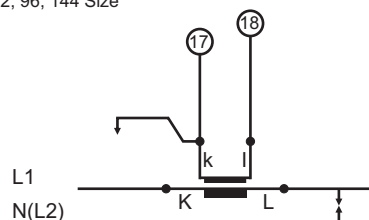
AC/DC Voltage & FM (Frequency meter)
(directly connected)
72, 96, 144 Size



AC/DC Current (directly connected)
72, 96, 144 Size

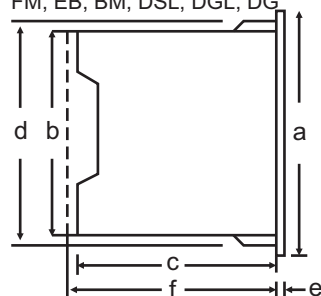


AC current (for use on current transformer)
72, 96, 144 Size

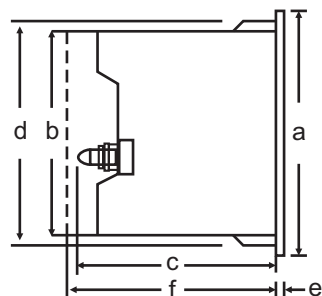


Dimensions

For DE Voltmeters & Ammeters upto
30A/For DS Voltmeter & Ammeters <6A
FM, EB, BM, DSL, DGL, DG



For DE Ammeters >30A/For
DS Ammeters 6- 100 A



Type		48X48*	72X72	96X96	144X144	
Dimensions (in mm)						
Bezel	a	48	72	96	144	*only DE. DS & DG.
Case	b	43.5	66	90	136	
Depth	c*	53	53	53	53	
	d	44.5	67.5	91.5	137.5	
	e	5.5	5.5	5.5	5.5	
		45 ^{+0.6}	68 ^{+0.7}	92 ^{+0.8}	138 ⁺¹	
Cutout size						
Depth with back cover	f**	64	64	64	64	
	*	C = 62mm, for I >30A & up to 60A /*C = 68mm, for I= 6 to 60 A				
	*	C = 67mm, for I >60A /*C = 78mm, for I> 60A				
	**	f = 69.5mm, for I >60A				
	**	f = 75 mm, for DE 48,I > 30 A/75 mm /** f = 75mm, for DS 48,1 >A.				
Weight approx		0.1 kg.	0.16kg	0.2kg.	0.4kg.	

Instruction Sheet

For Analogue Panel Meters type DE, DS, EB & BM, DSL, DGL, DG, FM

1.0 General:

This meter complies with International standard IEC 1010-1 Amendment 2 for safety and is conforming to routine tests as per IEC 51. The test equipment used is traceable to National/ International standards.

This product must be used after mounting in panel with hardware supplied, with wires permanently connected to terminals as specified.

2.0 Meaning of Symbols :



Caution hot surface



EU conformity mark

3.0 Safety specifications (IEC1010-1 A2)

- * Indoor use
- * Altitude up to 2000 m
- * Temp. -10 to +55°C
- * Maximum relative humidity 80% for temperature up to 31°C decreasing linearly to 50% relative humidity at 40°C & further linear decrease to 25% relative humidity at 55°C
- * Basic Insulation
- * Pollution degree 2
- * Installation Categories (over voltage category): For DE, DS, Size 72, 96 & 144 - 600V CAT III
Size 48 - 300V CAT III
For EB, BM, DGL, DG, FM, DSL, - 300V CAT III

4.0 Equipment Installation:

- * Due consideration should be given to space behind the meter to allow for bends in connecting cables.
- * Ensure that wires do not remain under tension.
- * The products do not have internal protection against overload & short circuit. Hence external safety protection should be provided. It is recommended to install protective device near equipment.
- * DS meter millivolt ranges :- Please use lead wires having total resistance of 35 milliohms.
- * For IP-65 :- Meter Should be installed with IP65 Gasket behind the bezel on the case.

5.0 Operation & Maintenance :

- * Equipment must be installed & maintained by suitably qualified person.
- * If equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- * CTs must not be opened when on load.
- * Instruments with damaged bezels or window glasses must be disconnected from mains.
- * Back cover must be snapped into place for protection against accidental contact.
- * Disconnect supply before replacing scales, bezels or window glasses.
- * There are no user serviceable parts in this product. Please contact at the address given, for clarifications if any.

6.0 Equipment Rating :

As per information on Sticker & Dial of the instrument.

Instruction Sheet

For Analogue Panel Meters type DE, DS, EB, & BM, DSL, DGL, DG, FM

1.0 General:

This meter complies with International standard IEC 1010-1 Amendment 2 for safety and is conforming to routine tests as per IEC 51. The test equipment used is traceable to National/ International standards.

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