









DESCRIPTION

These are dynamometric type instruments, incorporating single element / two elements or three elements power measurement methods and specially designed to be operated in horizontal condition.

FEATURES / ADVANTAGES:

- ◆ Instruments with accuracy class 0.5% for 1Ph Watt, 1.5% for 3Ph, 2° for PF.
- ◆ Instruments with multiple scale available (refer table).
- ◆ Robust housing suitable for schools, workshops, field operations for continuous use.

ELECTRICAL SPECIFICATIONS

TYPE	MODEL	SCALE	POTENTIAL COIL (V)	CURRENT COIL (A)	ACCURACY
WATT METER WITH LOW POWER FACTOR COS $\phi = 0.2$	 # PORT LSDW - 1	SPDC DPSC TPDC	SPSC, DPSC, DPSC 75/150/300, 150/300/600	0.5/1, 1/2, 2.5/5, 5/10, 10/20	1.5%
	 WATT METER	 # PORT LSDW - 2	SPSC	75, 150, 300, 600	0.5, 1, 2, 2.5, 5, 10, 20
DPSC			75/150, 150/300, 300/600.		
TPSC			75/150/300, 150/300/600.		
DPDC		75, 150, 300, 600	0.5/1, 1/2, 2.5/5, 5/10, 10/20		
		75/150, 150/300, 300/600.			
		75/150/300, 150/300/600.			
 VAR METER	 PORT LSDW - 3	SPSC	75, 150, 300, 600	0.5, 1, 2, 2.5, 5, 10, 20	1.5%
		PORT LSDW - 4	SPSC		
	DPDC		75/150, 150/300, 300/600.	0.5/1, 1/2, 2.5/5, 5/10, 10/20	
	PORT LSDW - 5		SPSC	75, 150, 300, 600	
		SPDC	0.5/1, 1/2, 2.5/5, 5/10, 10/20		
 POWER FACTOR METER	 PORT LSDW - 8	SPSC	75, 150, 300, 600	0.5, 1, 2, 2.5, 5, 10	2°
		DPSC	75/150, 150/300, 300/600.		
		TPSC	75/150/300, 150/300/600.		
		DPDC	75, 150, 300, 600	0.5/1, 1/2, 2.5/5, 5/10, 10/20	
75/150, 150/300, 300/600.					
75/150/300, 150/300/600.					
 PORT LSDW - 9	SPSC	75, 150, 300, 600	0.5, 1, 2, 2.5, 5, 10,		

* 62.5/125/250/500V ON REQUEST
CENTRE ZERO WATT ON REQUEST

SELECTION OF RANGES :

Upper limit of measuring range for meters shall be one of the following values - 1, 1.2, 1.5, 2, 2.5, 3, 4, 5, 6, 7.5, 8 or their decimal multiples.

Example for selection of proper range

1) Formula for 1Phase active power

$$P(\max) = VI \cos \phi. \text{ Where } \cos \phi = 1.$$

$$\text{If Voltage} = 500V \text{ \& Current} = 2.5A \text{ calculated power} = 500 \times 2.5 \times 1 = 1.25kW.$$

If the calculated value is 1.25kW 0 - 1.2kW or 0 - 1.25kW shall be selected as a range for power.

2) Formula for 3Phase active power with PT & CT.

$$P(\max) = \sqrt{3}VI \cos \phi \times PTR \times CTR. \text{ Where } \cos \phi = 1.$$

$$\text{If Voltage} = 110V \text{ \& Current} = 5A \text{ PTR} = 400kV/110V \text{ CTR} = 1000A/5A$$

$$\text{calculated power} = \sqrt{3} \times 110 \times 5 \times (400 \times 1000 / 110) \times (1000 / 5) = 692MW.$$

If the calculated value is 692MW 0 - 600MW or 0 - 750MW shall be selected as a range for power.

Note : ■ All Wattmeters are calibrated at $\cos \phi = 1$ and Varmeter at $\sin \phi = 1$

■ All Low Power Factor Wattmeters are calibrated at $\cos \phi = 0.2$ lag.

■ Voltage & Current range other than specified can be supplied on request, if feasible.

MECHANICAL SPECIFICATIONS

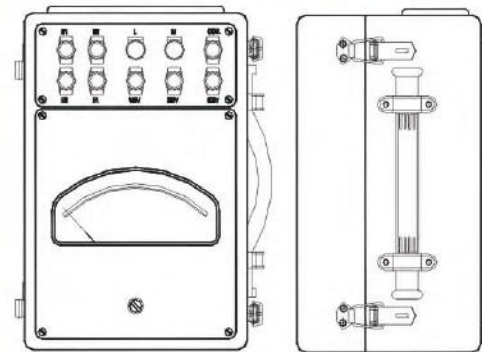


Fig. 1

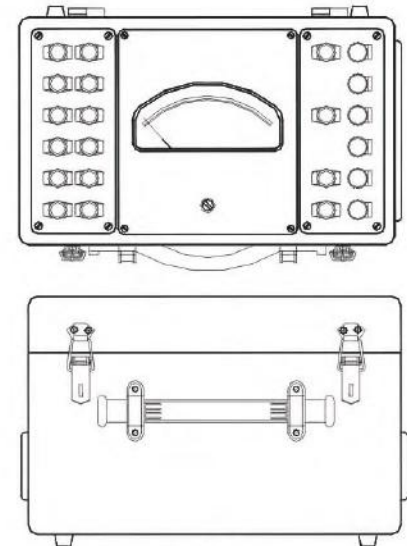


Fig. 2

SIZE	LENGTH mm	WIDTH mm	HEIGHT mm	HOUSING MATERIAL	MODEL IDENTIFICATION	SCALE		WEIGHT kg. (Approx.)
						LENGTH mm (Approx.)	DIVISION nos.	
1	300	200	155 / 190	Wooden Box	LSDW —	150	100 ~ 150	4 ~ 5
2	225	355	190 / 225	Wooden Box	LSDW —	150	100 ~ 150	5.5 ~ 7.5

Ordering information

1) Type 2) Model, Parameter, Phase, Range 3) Operating Voltage & PTR 4) Operating Current & CTR.