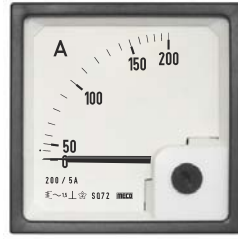
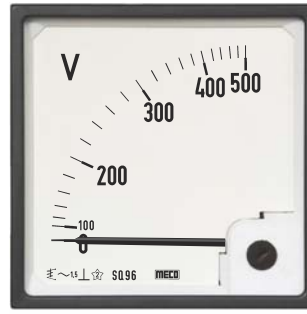




Interchangeable Scale



SQ72



SQ96

Model

Description
Movement Type
Accuracy
Self Consumption
Operating Voltage
Test Voltage
Construction & Design
Scale
Case/Housing Material
Bezel
Glass Faceplate
Mounting Fasteners/Clamps

SQ72, SQ96

Moving iron meter of 90° deflection with interchangeable scale facility
Moving iron spring-mounted jewel bearing suspension
±1.5% of full scale as per IS 1248; EN 60051
Ammeters (upto 5A AC) ≤ 0.6VA; Voltmeters (upto 500V AC) ≤ 5VA
600V RMS max.
2.5KV for 1 minute at 50 Hz
According to IS 1248; EN 60051
According to DIN 43802
White ABS, dimensions as per DIN 43700
Black ABS, dimensions as per DIN 43718
Flat Glass
Ergonomic easy mountable clamps and nuts for easy installation on Switchboards, Panels, Mosaics etc.

Temperature Conditions

- 10°C to + 55°C, RH < 90% (Operating) and
- 20°C to + 70°C, RH < 90% (Storage) EN60051

Front Protection

IP52 protection as per IS2147

Terminal Protection

Back cover for IP20 terminal protection as per IS2147 (optional)

Dimension and Panel Cutout						
— Optional Terminal Protection Cover						
Model	Dimensions (mm)					
	A	B	C	D	E ^{+0.8} _{-0.0}	F
SQ72 Voltmeter & Ammeter upto 20A	72	67	17	51.5	68	21
SQ72 Ammeter above 20A	72	67	23	51.5	68	-
SQ96 Voltmeter & Ammeter upto 20A	96	90	17	51.5	92	21
SQ96 Ammeter above 20A	96	90	23	51.5	92	-

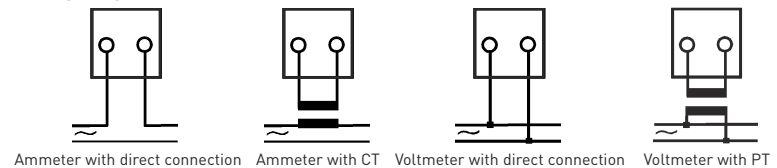
Ammeters						Voltmeters		
1 x In (A)		2 x In (A)		6 x In (A)		with PT		
Direct	with CT	Direct	with CT	Direct	with CT	Direct	Ratio and Scale	
1A	CTR/5A	1/2A	CTR/5A	1/6A	CTR/5A	50V	PTR/63.5V	10KV/—
5A	CTR/1A	5/10A	CTR/1A	5/30A	CTR/1A	60V	PTR/110V	15KV/—
10A	10/—	10/20A	10/20/—	10/60A	10/60/—	75V	PTR/230V	20KV/—
15A	15/—	15/30A	15/30/—	15/90A	15/90/—	110V	PTR/400V	25KV/—
20A	20/—	20/40A	20/40/—	20/120A	20/120/—	150V	PTR/440V	30KV/—
25A	25/—	25/50A	25/50/—	25/150A	25/150/—	250V	1KV/—	40KV/—
30A	30/—	30/60A	30/60/—	30/180A	30/180/—	300V	1.2KV/—	50KV/—
40A	40/—	40/80A	40/80/—	40/240A	40/240/—	500V	1.5KV/—	60KV/—
50A	50/—	50/100A	50/100/—	50/300A	50/300/—	600V	2KV/—	75KV/—
60A	60/—	60/120A	60/120/—	60/360A	60/360/—	750V	2.5KV/—	80KV/—
75A	75/—	75/150A	75/150/—	75/450A	75/450/—	1000V	3KV/—	and higher
80A	100/—	80/160A	100/200/—	80/480A	100/600/—	1500V	3.5KV/—	
100A	150/—	100/200A	150/300/—	100/600A	150/900/—		4KV/—	
	250/—		250/500/—		250/1500/—		5KV/—	
	400/—		400/800/—		400/2400/—		6KV/—	
	500/—		500/1000/—		500/3000/—		7.5KV/—	
	600/—		600/1200/—		600/3600/—		8KV/—	
	1000/—		1000/2000/—		1000/6000/—			
	1500/—		1500/3000/—		1500/9000/—			
	and higher		and higher		and higher			

Ordering Information: Model, Input Range, CTR/PTR, Scale

Notes

- Double stamping / non-standard marking available.
- Gaskets (optional) for vibration proof available.
- Terminal protection cover (optional) on request for Voltmeter & Ammeter upto 20 A.
- AC instruments calibrated @ 50Hz. (400Hz on request.)
- Other ranges subject to technical feasibility.

Wiring Diagram

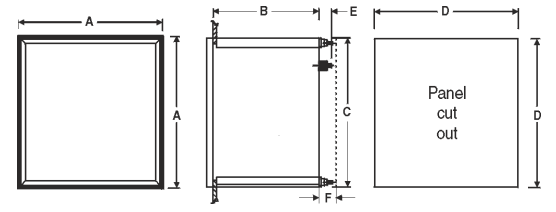


MODELS	SCALE LENGTH (mm)	REFER DRAWING	A	B	C	D	E	F	EXT. BOX # DRAWING
SQ72 (VOLTMETER & AMMETER UPTO 20A)	64	1	72	51.5	67	68	17	19	-
SQ72 (AMMETER ABOVE 20A)	64	1	72	51.5	67	68	23	19	-
M72,F72,C72, (72QF11,31)	60	1	72	37	66	68	13	19.5	5
72QW11,31,32,33, (72QV11,31,32,33)	60	1	72	37	66	68	13	19.5	4
72LW11,31,32,33, (72LV11,31,32,33)	110	1	72	37	66	68	13	22	4
ML72,MLC72 (Voltmeter),72LF11(#),72LF31(#),FL72(#)	110	1	72	37	66	68	13	22	-
MLC72 (Ammeter)	110	1	72	62	66	68	16	18	-
SQ96 (VOLTMETER & AMMETER UPTO 20A)	97	1	96	51.5	90	92	17	19	-
SQ96 (AMMETER ABOVE 20A)	97	1	96	51.5	90	92	23	19	-
M96 (Above 10A, E=18)	90	1	96	30	90	92	13	19.5	-
96QW11,31,32,33, (96QV11,31,32,33)	90	1	96	102	90	92	16	12	-
96LW11,31,32,33, (96LV11,31,32,33), 96LF11,31,FL96	155		-						
C96,96QF11,31,F96,M96 (4-20mA DC)	90	1	96	48	90	92	13	19.5	-
ML144,MLC144,144LF11,31,FL144	230	1	144	54	136	138	4	19	-
144QF11,31,F144	140	1	144	66	136	138	16	14	-
144QW11,31,32,33 (144QV11,31,32,33)	140	2	144	116	136	138	-	-	-
144LW11,31,32,33 (144LV11,31,32,33)	230	2	144	103	136	138	-	-	-
ML110,MLC110,110LF11,31,FL110	175	3	----As Per Drawing----						-
110LW,11,31,32,33, (110LV11,31,32,33)	175	3	----As Per Drawing----						4
ML96/MLC96 (Above 10A, E=18)	155	1	96	48	90	92	13	22	-

MODELS	SCALE LENGTH (mm)	REFER DRAWING	A	B	C	D	E	F	G	H	I	J	L	O	R	EXT. BOX # DRAWING
MR60,CR60	57	6	60	60	33	24	48	48	51.5	12	-	-	54	4BA	4.5	5 (CR60)
MR65,CR65	68	6	81	81	33	22	64	64	64	12	-	-	67	4BA	4.5	5 (CR65)
MR100,CR100	80	6	100	80	34	21	84	64	63	12	-	7	67	4BA	4.5	5 (CR100)
MR120,CR120	96	6	120	100	38	25	100	80	65	12	-	16	67	4BA	4.5	5 (CR120)

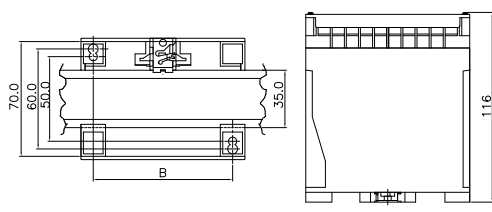
Dimensions (mm)

1

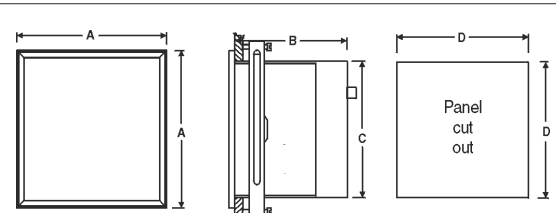


4 Dimension of DIN Series Power Line Transducers

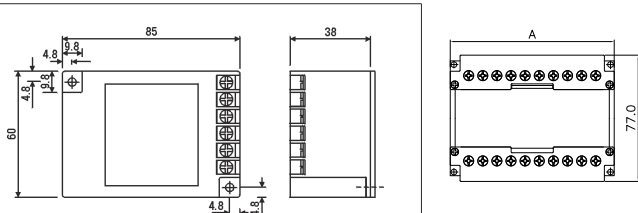
Case Size	A	B
I	75	60
II	100	85
III	150	135



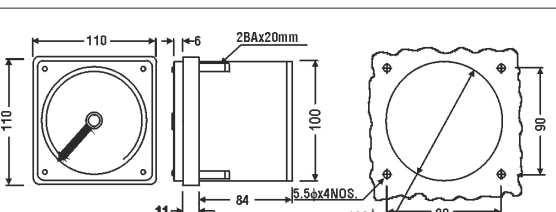
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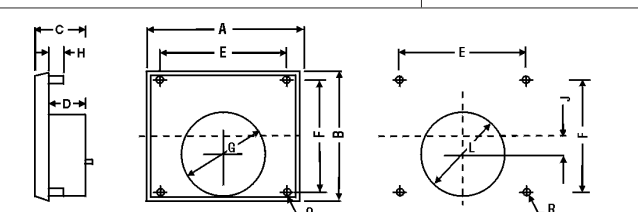
5



3



6



Note : # For ranges greater than 100 mA & upto 5A AC use Models CR60, CR65, CR100, CR120, 72LF11,72LF31,FL72 & C72 with External CT Box supplied with the instruments (Drawing 5).