

48LA, 72LA, 96LA, 144LA, 48LV, 72LV, 96LV 144LV

The instruments are suitable for measurement of AC current or voltage.
Type 48L..., 72L... and 96L... are with interchangeable scale.

Technical data:

Movement: Moving-iron movement with spring-type oilfilled bearing, practically vibration-free oil damping.

Instrument case: Made of non-flammable plastic according to UL 94-V1 or metal on request. On special request voltmeters as well as ammeters up to 6A will be supplied with plastic terminal cover.

Scale length: 40 mm (48L...), 62 mm (72L...), 102 mm (96L...), 136 mm (144L...).

Permanent overloading: 1.2 -fold current res. voltage.

Class of accuracy: 1.5

Frequency range: 15...50...100 Hz

Weight: 0.15 kg (48L...), 0.2 kg (72L...), 0.35 kg (96L...), 0.8 kg (144L...).

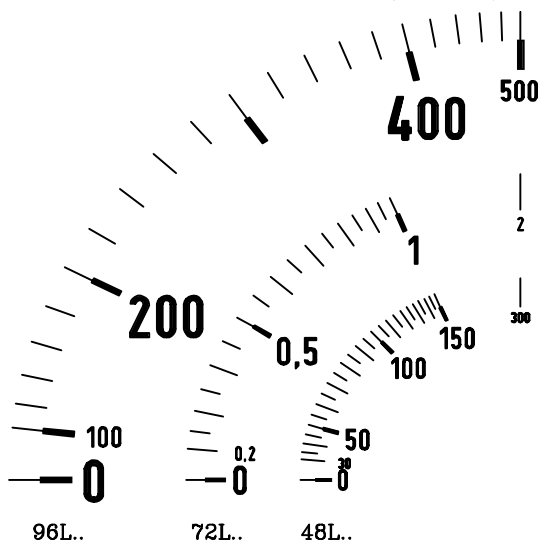
Fixing elements: plastic clips (Ganz Type) or two spring-type fastening clips (DIN 43835 "A") f. metal case instruments



AMMETERS		Plastic case			Metal case		
Frame dimensions		48x48 mm	72x72 mm	96x96 mm	72x72 mm	96x96 mm	144x144 mm
Measuring range	Cat. No.	Type 48 LA	Type 72 LA	Type 96 LA	Type 72 LA	Type 96 LA	Type 144 LA
		2015-13-...	1640-13-...	1636-13-...	1561-13-...	1560-13-...	2299-13-...
		consumption	consumption	consumption	consumption	consumption	consumption
400 / 800 mA	001	max. 0.5 VA	max. 0.5 VA	max. 0.5 VA	max. 0.5 VA	max. 0.5 VA	max. 0.7 VA
500 / 1000 mA	002	↓	↓	↓	↓	↓	↓
600 / 1200 mA	003						
800 / 1600 mA	004						
1 / 2 A	005						
1.2 / 2.4 A	006						
1.5 / 3 A	007						
2 / 4 A	008						
2.5 / 5 A	009						
3 / 6 A	010						
4 / 8 A	011						
5 / 10 A	012						
6 / 12 A	013						
8 / 16 A	014						
10 / 20 A	015						
12 / 24 A	016						
15 / 30 A	017						
20 / 40 A	018						
25 / 50 A	019						
30 / 60 A	020						
40 / 80 A	021	max. 1.5 VA	max. 2 VA	max. 2 VA	max. 2 VA	max. 2 VA	max. 2,5 VA
50 / 100 A	022	↓	↓	↓	↓	↓	↓
60 / 120 A	023	----					
100 / 200 A	024	----					
* 1 / 2 A	C03	max. 0.5 VA	max. 0.5 VA	max. 0.5 VA	max. 0.5 VA	max. 0.5 VA	max. 0.7 VA
* 5 / 10 A	C04	max. 0.5 VA	max. 0.5 VA	max. 0.5 VA	max. 0.5 VA	max. 0.5 VA	max. 0.7 VA

* For connection to current transformer, the ratio of which must be given.

Scales (M=1:1)



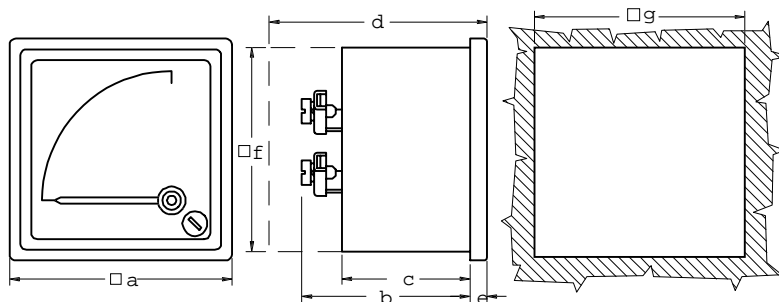
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VOLTMETERS		Plastic case			Metal case		
Frame dimensions		48x48 mm	72x72 mm	96x96 mm	72x72 mm	96x96 mm	144x144 mm
Measuring range	Cat. No.	Type 48 LV	Type 72 LV	Type 96 LV	Type 72 LV	Type 96 LV	Type 144 LV
		2015-13-...	1640-13-...	1636-13-...	1561-13-...	1560-13-...	2299-13-...
		consumption	consumption	consumption	consumption	consumption	consumption
6 V	101	max. 3 VA	max. 3 VA	max. 3 VA	max. 3 VA	max. 3 VA	max. 3.5 VA
8 V	102	↓	↓	↓	↓	↓	↓
10 V	103						
12 V	104						
15 V	105						
20 V	106						
25 V	107						
30 V	108						
40 V	109						
50 V	110						
60 V	111						
80 V	112						
100 V	113						
120 V	114						
150 V	115						
200 V	116						
250 V	117						
300 V	118						
400 V	119						
500 V	120						
600 V	121						
**.../100 V	C05						
**.../110 V	C06						

** For connection to voltage transformer, the ratio of such must be given.

Outline drawing



Type\Dim. (mm)	a	b1	b2	c1	c2	*d	e	f	g
48LV	48	57.5	----	41.5	----	63	5.5	44	45 ^{+0.6}
48LA 400mA-15A 48LA 20A -50A		60.5							
72LV	72	57.5	62	41.5	51	c+25	5.5	66	68 ^{+0.7}
72LA 400mA-20A 72LA 25A -100A		60.5	69			----			
96LV	96	57.5	62	41.5	51	c+25	5.5	90	92 ^{+0.8}
96LA 400mA-20A 96LA 25A - 100A		60.5	69			----			
144LV	144	----	77		65	----	7	135	138 ⁺¹
144LA 400mA-20A 144LA 25A - 100A		----	88			----			

b1, c1 refers to plastic case instrument

b2, c2 refers to metal case instrument

* case with terminal cover

Order specification: -Moving-iron ammeter

- Frame size: 72x72 mm
- Case: plastic
- Range: 50 / 10 A
- CT: 600/5 A
- Scale: 0...600/1200 A

Ordering data: -Moving-iron ammeter

- Type: 72LA
- Cat. No.: 640-13-CO4
- CT: 600/5 A
- Scale: 0...600/1200 A



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