

Moving Iron AC Volt & Amp Meter Din panel, Analog meter



Application

Square panel meters for alternating current system. All panel meters are direct indication of measuring input. They are suitable to use on the distribution panel, control panel, switchboard panel, power plant, mimic board, machines and others.

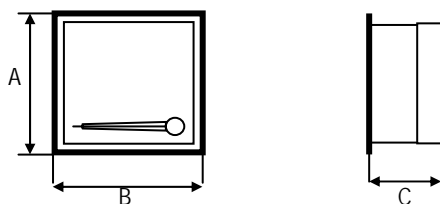
The instruments has designed for industrial applications which required precise, reliable and robust instruments for the display range and indicating. Each measuring instrument is suited for one of the following measuring tasks:

- AC voltage direct connection 0-150V, 0-300V, 0-500V, 0-600V or request.
- AC voltage PT connection 100, 110, 115, 120 v ac or request.
- AC current direct 1, 2.5, 5, 10, 20, 25, 30, 40, 50, 100A.
- AC current transformers connection / 1 A or / 5 A with 2 times over scale as a standard or 5 times over scale.
- More detail see ordering information.

Description

Analog Panel Meter with Moving-Iron Movement and Spring-Loaded Pivot Bearings. Adjustments and balancing are especially easy for these rugged, compact instruments. Complete balancing of the model can be accomplished alone from factory. The pre-selection of measuring ranges is accomplished with clearly arranged numbering on ordering detail of the instruments. Zeroing Knobs at the front meter's panel allow for precision zero adjustments. Measuring instruments for the remaining ranges are balanced to a standard value prior to shipment. Precision balancing can be performed at the factory upon request.

Dimension



Size	A	B	C
48x48	48	48	65
72x72	72	72	65
96x96	96	96	65
144x144	144	144	65
80x80	80	80	65
120x120	120	120	65

- Dimension 144x144, 120x120, 96x96, 80x80, 72x72, 48x48mm.
- DIN43700, DIN43802, DIN43718, IEC1010, IEC473, IEC51, BS89
- Polycarbonate, self extinguishing and drip-proof per UL94V-0
- Rugged housing-non combustible, plastic-heat resistance.
- Accuracy $\pm 1.5\%$ Or class1.0 Or customize.
- 90 Degree and 240 Degree.
- Ammeter with over scale x2, x3, x5 for 90 degree.

Characteristic

Display

Scale Graduation
Pointer

Coarse-fine
Beam pointer with knife-edge comply with
DIN 43802, parts 2 through 4.

Mechanical Design

Housing Material

Polycarbonate, self-extinguishing and drip-proof per
UL94V-0

Mounting Fasteners
Scale

Standard type screw clamp
Interchangeable scales
Scales may only be replaced under voltage-free
conditions !

Replaceable

Bezels and glass face plates, May only be replaced
under voltage-free conditions!

Terminals

M4 screw terminals with self-lifting terminal clips.
Screws can be turned with standard screw drivers
tool.

Contact Protection
Accuracy

Finger-safe full cover included
1.5, 1.0 or request.

Consumption

Ammeter
Ammeter
Volt meter
Volt meter

0.7VA for CT/1A.
1.2VA for CT/5A.
3.3VA for 500V.
2.0VA for PT Rated.

Ambient Conditions

Operating Temperature
Storage Temperature
Relative Humidity
Frequency

- 20 ... + 55 °C
- 40 ... + 70 °C
max. 95%
45...65Hz.

Compliance with Regulations

Protection
Protection

IP 52 front panel, Terminal IP20
Class 1

Size (mm.)	48x48	72x72	96x96	144x144	80x80	120x120
90 Deg.	AC48	AC72	AC96	AC144	AC80	AC120
240 Deg.	AC48-240	AC72-240	AC96-240	AC144-240	AC80-240	AC120-240
Scale Length	37mm. 73mm.	63mm. 113mm.	97mm. 151mm.	120mm. 225mm.	72mm. 136mm.	108mm. 196mm.
Weight	0.20 Kg. 0.25 Kg.	0.25 Kg. 0.30 Kg.	0.40 Kg. 0.45 Kg.	0.55 Kg. 0.65 Kg.	0.30 Kg. 0.35 Kg.	0.45 Kg. 0.55 Kg.
Cutout (mm.)	43x43	68x68	92x92	138x138	74x74	112x112
Max Voltage	300 V	600 V	600 V	600 V	600 V	600 V
Test Voltage	2.2 kV	3.25 kV	3.25 kV	3.25 kV	3.25 kV	3.25 kV

Order Information

1) Model

AC48	Dimension	48x48 mm.	Scale	90 Degree
AC72	Dimension	72x72 mm.	Scale	90 Degree
AC96	Dimension	96x96 mm.	Scale	90 Degree
AC144	Dimension	144x144mm.	Scale	90 Degree
AC80	Dimension	80x80 mm.	Scale	90 Degree
AC120	Dimension	120x120mm.	Scale	90 Degree
AC48-240	Dimension	48x48 mm.	Scale	240 Degree
AC72-240	Dimension	72x72 mm.	Scale	240 Degree
AC96-240	Dimension	96x96 mm.	Scale	240 Degree
AC144-240	Dimension	144x144mm.	Scale	240 Degree
AC80-240	Dimension	80x80 mm.	Scale	240 Degree
AC120-240	Dimension	120x120mm.	Scale	240 Degree

2) Input Type

AC Volt Meter

0-150V, 0-300V, 0-500V, 0-600V & customize

PT Rated $\frac{?}{100}$, $\frac{?}{110}$, $\frac{?}{115}$, $\frac{?}{120V}$ & customize

? please specify when ordering

AC Amp Meter

Direct 1, 2.5, 5, 10, 15, 20, 25, 30, 40, 50,60, 75, 100A¹

CT Connection $\frac{?}{1A}$, $\frac{?}{5A}$

¹ for AC48 max 60A.

? please specify when ordering

3) Range

AC Volt Meter

AC Amp Meter

Factory standard range or specify when ordering or consult.

For Amp Meter 2times over scale is standard from factory others by request.

4) Class

AC Volt Meter

AC Amp Meter

Class 1.5 is standard or others by request

Example

1) AC96 AC Volt Meter Input PT115kV/115V, Range 0-130kV*
 class 1.5, Scale 90 Degree.

2) AC96 AC Am Meter Input CT100/5A, Range 0-100A*
 2xOver scale, class 1.5, Scale 90 Degree.

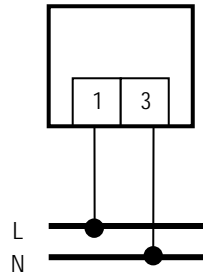
* factory standard range or specify when ordering or consult.

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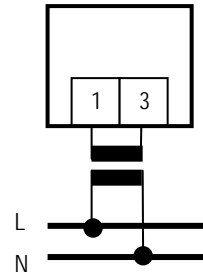
Wiring Diagram

AC Volt Meter.

Direct Connection

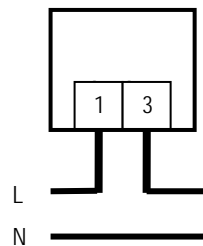


PT Connection



AC Current Meter.

Direct Connection



CT Connection

