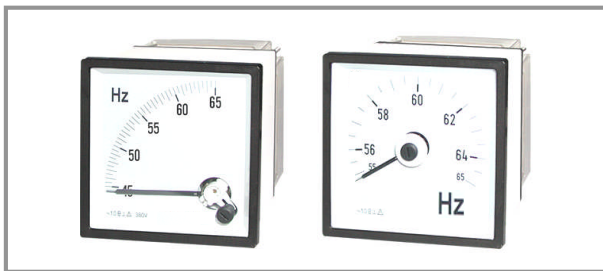


Moving Coil Frequency Meter Din panel, Analog meter

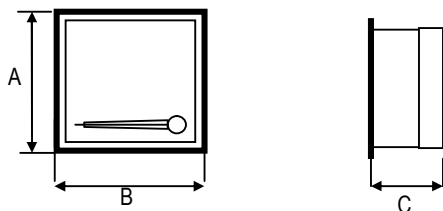


Application

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.

- Direct connection 50V, 100V, 220V, 380V, 415V, 440V or request.
- Frequency range 45-55Hz, 47-53Hz, 45-65Hz, 55-65Hz, 44-56Hz, 54-66Hz, 450-550Hz., 450-650Hz., 550-650Hz.
- more detail see ordering information.

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

Ordering Information.

1) Model

F48	Dimension	48x48 mm.	Scale	90 Degree
F72	Dimension	72x72 mm.	Scale	90 Degree
F80	Dimension	80x80 mm.	Scale	90 Degree
F96	Dimension	96x96 mm.	Scale	90 Degree
F120	Dimension	120x120 mm.	Scale	90 Degree
F144	Dimension	144x144 mm.	Scale	90 Degree
F48-240	Dimension	48x48 mm.	Scale	240 Degree
F72-240	Dimension	72x72 mm.	Scale	240 Degree
F80-240	Dimension	80x80 mm.	Scale	240 Degree
F96-240	Dimension	96x96 mm.	Scale	240 Degree
F120-240	Dimension	120x120 mm.	Scale	240 Degree
F144-240	Dimension	144x144 mm.	Scale	240 Degree

2) Input Type

Direct 50, 100, 110, 115, 120, 220, 380, 415V & customize
PT Rated 100,110, 115, 120V & customize

3) Scale Range

45-55Hz, 45-65Hz., 55-65Hz, 450-550Hz, 450-650Hz, 550-650Hz*
Factory standard range or specify when ordering or consult.

* please specify when ordering

4) Class

Class 1.0 is standard or others by request

Example

1) F96 Frequency Meter Input PT115kV/115V, Range 45-55Hz.*
class 1.0, Scale 90 Degree.

* Dimension 48, 72, 144, 80, 120 with External converter

* specify when ordering or consult.

- Front Dimension 144x144mm, 96x96mm, 72x72mm, 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 $\pm 1.0\%$ Or customize.
- 90 Degree and 240 degree.

Characteristic

Display

Scale Graduation	Coarse-fine
Pointer	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	Standard type screw clamp
Scale	Interchangeable scales and 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 turned by standard screw drivers tool.
Contact Protection	Finger-safe full cover included
Accuracy	1.0 or request.

Consumption

Voltage Path	3.3VA for direct connection.
Voltage Path	2.0VA for PT Rated.

Ambient Conditions

Operating Temperature	- 20 ... + 55 °C
Storage Temperature	- 40 ... + 70 °C
Relative Humidity	max. 95%
Frequency	45...65Hz.

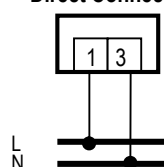
Compliance with Regulations

Protection	IP 52, front panel, Terminal IP20
Protection	Class 1

Size	48x48	72x72	96x96	144x144	80x80	120x120
90 Deg.	F48	F72	F96	F144	F80	F120
240 Deg.	F48-240	F72-240	F96-240	F144-240	F80-240	F120-240
Scale Length	37mm.	63mm.	97mm.	120mm.	63mm.	63mm.
	73mm.	113mm.	151mm.	225mm.	113mm.	113mm.
Weight	0.20 Kg.	0.25 Kg.	0.40 Kg.	0.55 Kg.	0.35 Kg.	0.45 Kg.
	0.25 Kg.	0.30 Kg.	0.45 Kg.	0.65 Kg.	0.40 Kg.	0.55 Kg.
Cutout	43x43	68x68	92x92	138x138	68x68	68x68
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

Wiring Diagram.

Direct Connection



PT Connection

