

PCI

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Analogue Meters FQ3x07 series

FQ - Moving-iron panel Voltmeter FQ3207 & FQ3307

- For measurement of phase and line-to-line voltages in three phase system
- Easy selecting of desired voltage with a selector switch
- Good read-out survey on larger distance
- Resistance to mechanical vibrations
- Protective cover for terminals (optional)

Energy sector

 **Iskra**[®]

PROPERTIES

- For measurement of phase and line-to-line voltages in three phase system
- Easy selecting of desired voltage with a selector switch
- Good read-out survey on larger distance
- Resistance to mechanical vibrations
- Protective cover for terminals (optional)

APPLICATION

Moving-iron instruments are intended for installation in supervision panels of power distribution and transformer stations or wherever a.c. voltages are to be measured.

CONSTRUCTION

The mechanism is a sprung pivot bearing type with silicon oil damping.

They work in a range from 15 Hz to 100 Hz and measure true RMS values independently on the signal form of voltage.

A non-linear graduation at the beginning of the scale allows reading from approximately 15 % of measuring range onwards.

It is possible to choose between two different sizes:

- FQ3207 – front frame dimensions are 96 x 96 mm
- FQ3307 – front frame dimensions are 72 x 72 mm

MEASURING RANGE:

VOLTMETERS:

Measuring range (V)	6	10	15	25	40	60	100	150	250	300	400	500	600
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Measuring range (V)	x V / 100 V		x V / 110 V		for connection to transformer							
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Instruments for connection to instrument transformers have the following measuring ranges:

1 – 1.2 – 1.5 – 2 – 2.5 – 3 – 4 – 5 – 6 – 7.5 (8) and decade multiples.

TECHNICAL DATA

ACCURACY:

accuracy class 1.5

DESIGN:

Material of housing: PC
uninflammable, according to **UL 94 V-0**

Enclosure protection: Case IP 52, terminal contacts IP 00
(IP 20 for connection terminals)
according to **EN 60529**

Operating position Vertical

Installation category (Vrms): CAT III 600V

Consumption: Voltmeters 1.5 ... 4 VA

AMBIENT CONDITIONS

JVF (DIN 40 040)

Climatic conditions:

Standards **EN 60051-1**

EN 60051-2

EN 60051-9

Temperature:

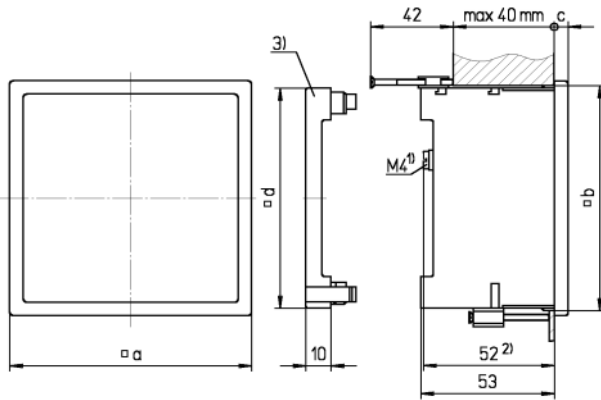
Reference range of operation +18 ... +28°C

Nominal range of operation -25 ... +55°C

Storing -40 ... +70°C

Humidity up to 80% (without condensing)

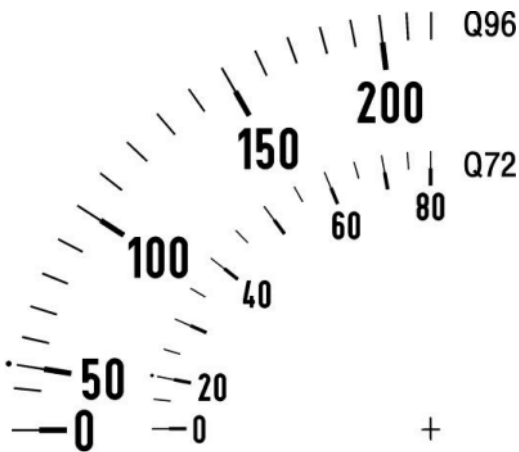
DIMENSIONAL DRAWING



Picture 1: Dimensional drawing FQ3207 & FQ3307 (all dimensions are in mm)

3) Protective cover (on special request)

SCALE



Picture 2: Drawing of scale: FQ3207 & FQ3307 (voltmeters)

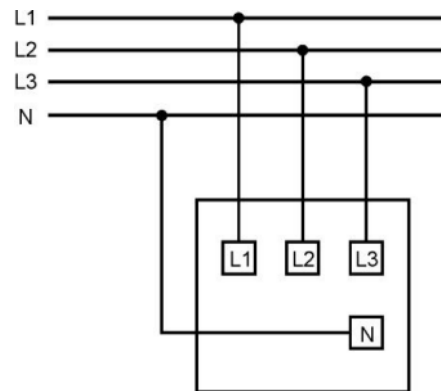
DATA FOR ORDERING

- Instrument type,
- Measuring range and scale,
- Transmission ratio of instrument transformer.

Type		FQ3207	FQ3307
Bezel (mm)	□ a	96	72
Panel cut-out (mm)	□ b	92 ^{+0.8}	68 ^{+0.8}
Bezel height (mm)	c	5.5	5.5
Protect cover (mm)	□ d	90	66.5
Scales length (mm)		92	62
Weight approx. (kg)		0.2	0.18

Table 1: Dimensions and weight

CONNECTION DIAGRAM



Picture 3: Connection diagram for FQ3x07

ORDERING EXAMPLE:

- Voltmeter FQ3207, 0 - 600 V
- Voltmeter FQ3207, 110/0.1 kV - 150 kV

When ordering scales, state same data as when ordering the instrument.

- Scale for voltmeter FQ3207, 110/0.1 kV - 150 kV