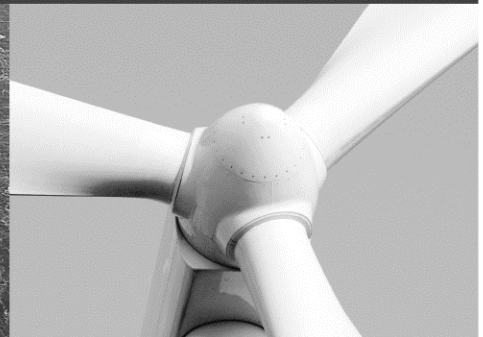
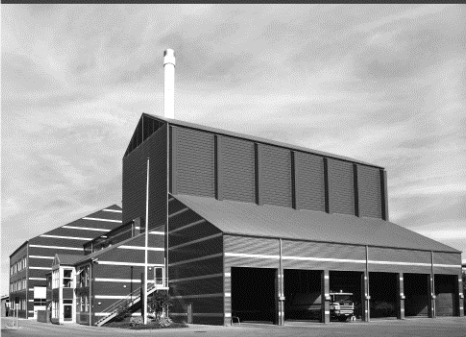




-power in control



## DATA SHEET



### Single frequency meters, types FQ, FTQ

- Robust and thoroughly tested construction
- DIN size compact design: Q72, Q96
- High immunity to 3<sup>rd</sup> harmonics
- Suitable for all types of generating sets



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Document no.: 4921210047L

**Available types**

Size	Pointer frequency meters (90°)	Reed frequency meters
72 x 72 mm	FQ72-x	FTQ72-x
96 x 96 mm	FQ96-x	FTQ96-x

**Construction**

**FQ:**

Pointer frequency meter consisting of a moving coil instrument with built-in electronics for converting the frequency to a voltage signal. Accurate and linear read-out. Exchangeable scale.

**FTQ:**

Reed frequency meter with one row of metal reeds vibrating at the applied frequency (resolution: 1/4 Hz). Available with 13 reeds (typically 47...53 Hz) or 21 reeds (typically 45...55 Hz). Exchangeable scale. Note: FTQ72-x only 47...53 Hz and 57...63 Hz.

**Technical specifications**

**Type: Pointer frequency meters FQ**

Accuracy<sup>1)</sup>: Class 0.5

Scale/measuring range: 45...55 Hz 55...65 Hz 45...65 Hz 360...440 Hz (others on request)

Measuring voltage: 100...230V AC ±15%  
400...440V AC ±15%

Consumption: 3...9 mA

Temperature: -10...55°C (nominal)  
-25...60°C (operating)  
-25...65°C (storage)

Shock test: 15 g – 6 times – 3 directions  
50 g/6 ms  
22 g/20 ms

EMC: IEC/EN 61000-6-2/3  
CE-marked for residential, commercial and light industry plus industrial environment

Protection: IP52<sup>2)</sup> To IEC/EN 60529

**Type: Reed frequency meters FTQ**

Accuracy<sup>1)</sup>: Class 0.5

Scale/measuring range: 45...55 Hz - 55...65 Hz -  
47...53 Hz - 57...63 Hz

Measuring voltage: 100-110-220-230-240-380-400-415-440V AC ±15%

Consumption: Max. 15 mA

Temperature: -10...55°C (nominal)  
-25...60°C (operating)  
-25...65°C (storage)

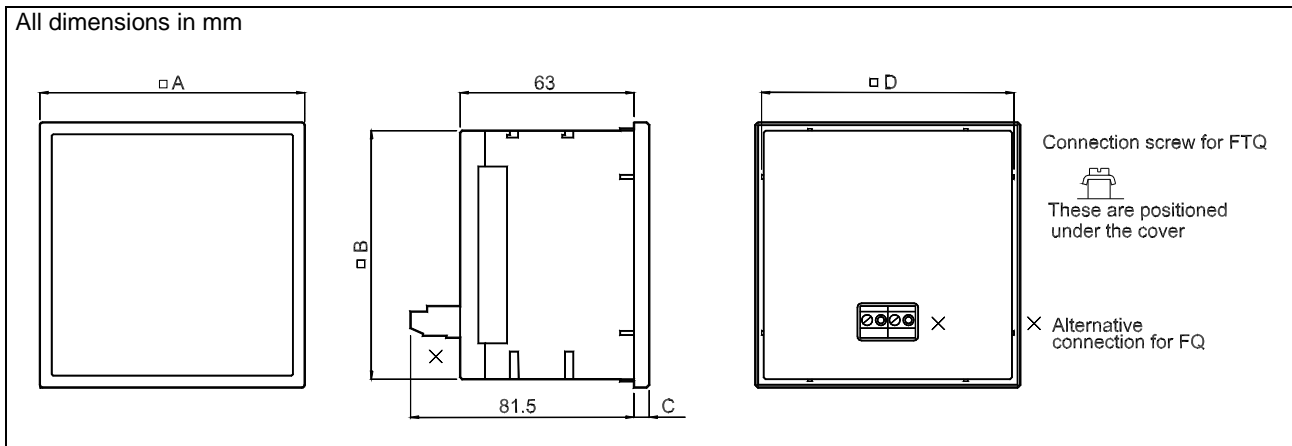
EMC: IEC/EN 61000-6-2/3  
CE-marked for residential, commercial and light industry plus industrial environment

Protection: IP52<sup>2)</sup> To IEC/EN 60529

<sup>1)</sup> -10...15...30...55°C, to IEC/EN 60051-1  
<sup>2)</sup> IP54 from front on request

**Further technical specifications:**  
See data sheet no. 4921210012

Dimensions



Type	A	B	C	D	Weight (approx. kg)
FQ72-x	72 x 72	66.5 x 66.5	5.5	68 x 68 + 0.7	0.189
FQ96-x	96 x 96	90 x 90	5.5	92 x 92 + 0.8	0.240
FTQ72-x	72 x 72	66.5 x 66.5	5.5	68 x 68 + 0.7	0.210
FTQ96-x	96 x 96	90 x 90	5.5	92 x 92 + 0.8	0.280

Available variants

Item no.	Variant no.	Variant description
2961410720	01	FQ72-x All frequency ranges and supply voltage incl. standard scale
2961410920	01	FQ96-x All frequency ranges and supply voltage incl. standard scale
2961460720	01	FTQ72-x 47...53 Hz, 57...63 Hz and all supply voltages incl. standard scale
2961460920	01	FTQ96-x 45...55 Hz, 55...65 Hz. All supply voltages incl. standard scale
2961460920	02	FTQ96-x 47...53 Hz, 57...63 Hz. All supply voltages incl. standard scale

Order specifications

Variants:

Mandatory information					Additional options to the standard variant	
Item no.	Type	Variant no.	Scale/measuring range	Measuring voltage	Option	Option

Example:

Mandatory information					Additional options to the standard variant	
Item no.	Type	Variant no.	Scale/measuring range	Measuring voltage	Option	Option
2961410920-01	FQ96-x	01	45...55 Hz	230V AC	IP54	

Due to our continuous development we reserve the right to supply equipment which may vary from the described.



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