FQ, FTQ

Single frequency meters

Data sheet

49212100470

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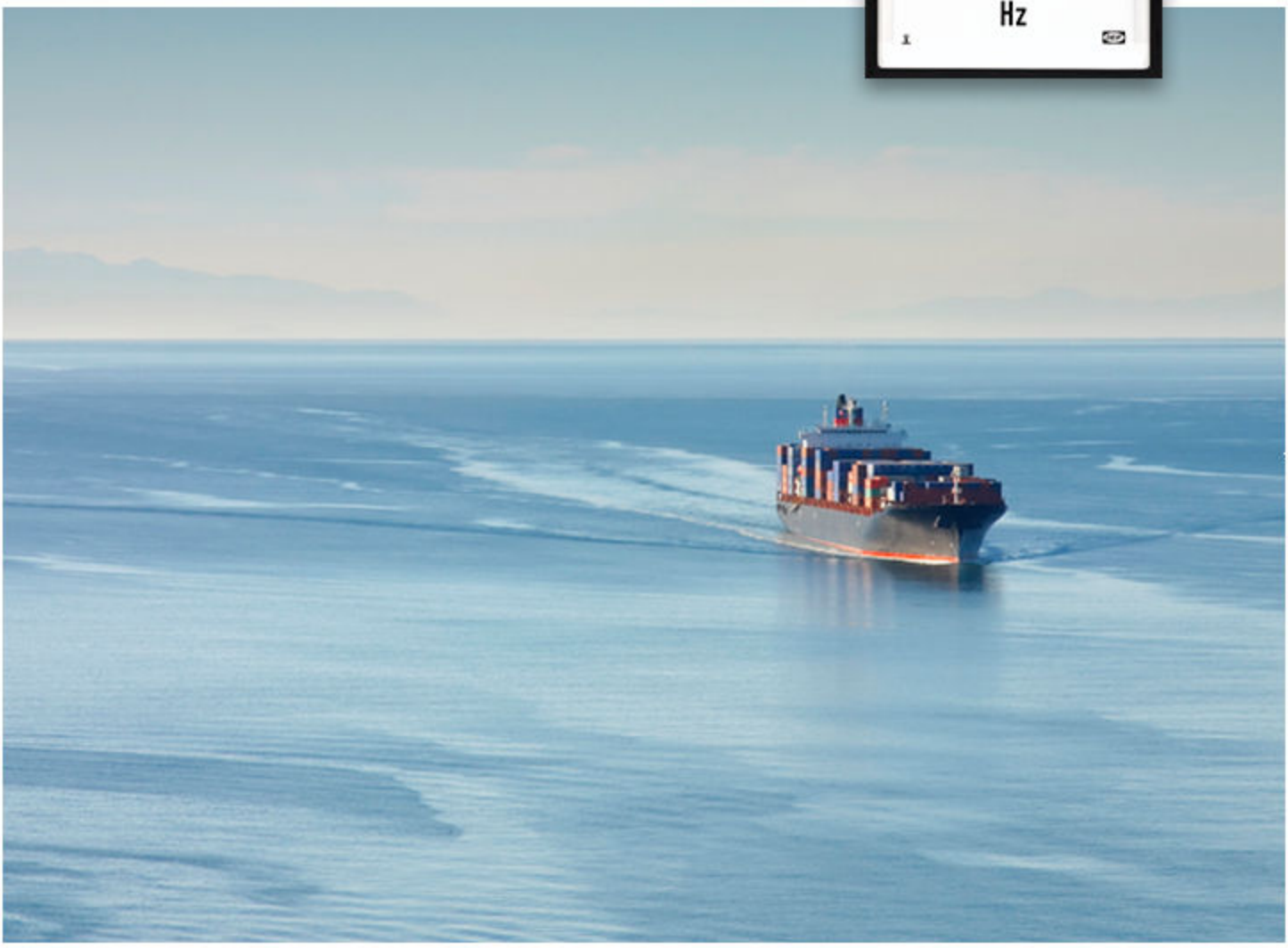


1. About the meters

1.1 Application

The FQ and FTQ meters are single frequency meters. All meters have high accuracy and immunity to 3rd harmonics. The meters are suitable for all types of gensets and have a robust and thoroughly tested construction.

The **FQ** single frequency meter consists of one moving coil instrument with built-in electronics to convert the frequency to a voltage signal. Accurate and linear read-out. Changeable scale.

The **FTQ** reed frequency meter consists of one row of metal reeds that vibrate at the selected frequency (resolution is ¼ Hz). The meter is available with 21 reeds, typically 45 to 55 Hz. All FTQ meters must precondition at nominal voltage for 10 minutes to get accurate measurements.

Available types

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

2. Technical specifications

2.1 Electrical specifications

Specifications	FQ	FTQ
Accuracy*	Class 0.5	
Scale/measurement range	45 to 55 Hz 55 to 65 Hz 45 to 65 Hz 360 to 440 Hz Others are available on request	45 to 55 Hz 55 to 65 Hz
Measuring voltage	100 to 230 V AC ±15% 400 to 440 V AC ±15%	100, 110, 220, 230, 240, 380, 400, 415, 440 V AC ±15%
Consumption	Up to 2 VA	

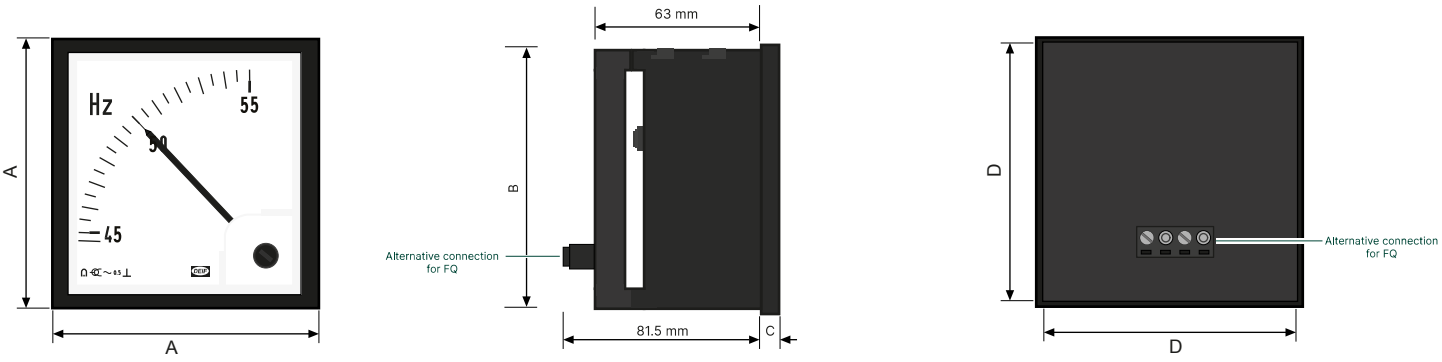
NOTE * At nominal temperature to IEC/EN 60051-1

2.2 Environmental specifications

Specifications	FQ	FTQ
Nominal temperature	-10 to +55 °C	
Operating temperature	-25 to +60 °C	
Storage temperature	-25 to +65 °C	
Shock	15 g, 6 times, 3 directions 50 g/6 ms 22 g/20 ms	-
EMC	To IEC/EN 61000-6-2/3 CE-marked for residential, commercial and light industry plus industrial environment.	
Protection	IP52 To IEC/EN 60529*	

NOTE * IP54 front protection available on request.

2.3 Dimensions



NOTE FTQ: Connecting screw is under the cover.

Dimensions

Type	Dimensions			
	A [mm]	B [mm]	C [mm]	D [mm]
FQ72-x	72 x 72	66.5 x 66.5	5.5	68 x 68 + 0.7
FQ96-x	96 x 96	90 x 90	5.5	92 x 92 + 0.8
FTQ96-x	96 x 96	90 x 90	5.5	92 x 92 + 0.8

Weight

Type	Weight
FQ72-x	189 g
FQ96-x	240 g
FTQ96-x	280 g

3. Ordering

3.1 Available variants

Item no.	Variant no.	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.
2961460920	01	FTQ96-x. 45 to 55 Hz, 55 to 65 Hz. All supply voltages incl. standard scale.

3.2 Order specifications

Variants

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

Example

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

4. Legal information

Disclaimer

DEIF A/S reserves the right to change any of the contents of this document without prior notice.

The English version of this document always contains the most recent and up-to-date information about the product. DEIF does not take responsibility for the accuracy of translations, and translations might not be updated at the same time as the English document. If there is a discrepancy, the English version prevails.

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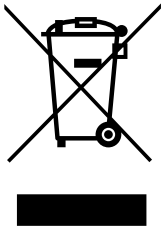
5. End-of-life

Disposal of waste electrical and electronic equipment

WEEE symbol



All products that are marked with the crossed-out wheeled bin (the WEEE symbol) are electrical and electronic equipment (EEE). EEE contains materials, components and substances that can be dangerous and harmful to people's health and to the environment. Waste electrical and electronic equipment (WEEE) must therefore be disposed of properly. In the EU, the disposal of WEEE is governed by the WEEE directive issued by the European Parliament. DEIF complies with this directive.

You must not dispose of WEEE as unsorted municipal waste. Instead, WEEE must be collected separately, to minimise the load on the environment, and to improve the opportunities to recycle, reuse and/or recover the WEEE. In the EU, local governments are responsible for facilities to receive WEEE. If you need more information on how to dispose of DEIF WEEE, please contact DEIF.