



# FERRODYNAMIC POWER FACTOR METERS



## 96FQa, 96FQb, 144sFQa, 144sFQb

For measuring power factor ( $\cos\phi$ ) in AC.

The ...FQa type can be used in single-phase and the ...FQb type in three-phase balanced load system.

### Technical data

**Movement:** Iron-core, ferrodynamic, spring-type oil filled pivot bearing

**Class of accuracy:** 2.5

**Instrument case:** steel-plate

**Scale length:** 85 mm (96FQ...), 140 mm (144sFQ...)

**Operating range:**  $0.2 \times I_N - 1.2 \times I_N$

**Frequency range:** 45 ... 50 ... 60 Hz ( ...FQb ), 49,5...50...50,5 Hz ( ...FQa )

**Permanent overloading:** 1.2 x rated current and 1.2 x rated voltage at  $\cos\phi=1$

**Consumption:** max. 12 VA in the current section and max. 20 mA in the voltage section

**Protection:** casing IP50 and terminals IP00

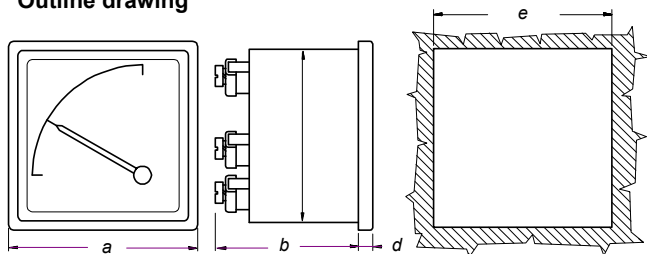
**Weight:** 0.8 kg (96FQ...), 1.2 kg (144sFQ...)

**Fixing elements:** with two spring-type fastening clips (DIN 43835 "B")



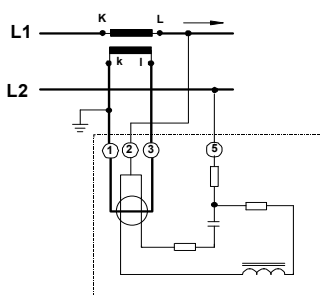
Rated secondary voltage of voltage transformer	Single phase ~ cap. 0.4-1-0.4 ind.		Single phase ~ cap. 0.8-1-0.2 ind.		Three-phase balanced ≡ cap. 0.4-1-0.4 ind.		Three-phase balanced ≡ cap. 0.8-1-0.2 ind.	
	Rated secondary curr. of current transformer		Rated secondary curr. of current transformer		Rated secondary curr. of current transformer		Rated secondary curr. of current transformer	
	... / 5 A	... / 1 A	... / 5 A	... / 1 A	... / 5 A	... / 1 A	... / 5 A	... / 1 A
	Type: 96FQa 144sFQa				Type: 96FQb 144sFQb			
... / 100 V	x	x	x	x	x	x	x	x
... / 110 V	x	x	x	x	x	x	x	x
230 V	x	x	x	x	x	x	x	x
400 V	x	x	x	x	x	x	x	x
500 V	---	---	---	---	x	x	x	x

Outline drawing

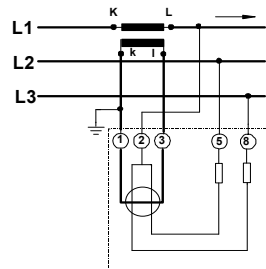


Dim(mm)	a	b	c	d	e
Type					
96FQa	96 x 96	120	90	7	92 <sup>+0.8</sup>
96FQb		90			
144sFQ...	144 x 144	162	136	7	138 <sup>+1</sup>

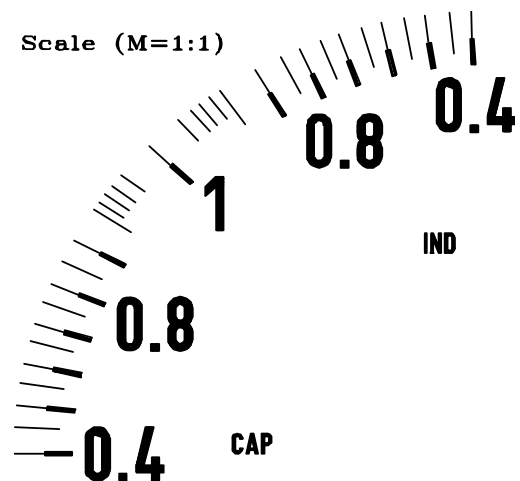
Connection diagrams:



144sFQa



144sFQb



### Ordering data:

- Power factor meter type:  
**96FQb** 400V, 5A  
cap. 0.4 - 1 - 0.4 ind.