

Power Factor (cosØ) Meters

Power factor meters are suitable for the measurement of power factor (cosØ). DIN96,72 meters are self contained whilst smaller units are connected to a separate converter unit and calibrated as a complete unit to individual requirements. The converter unit has nger-proof terminal covers and can be remotely DIN rail mounted.

All meters have a jewel and pivot movement which ensure reliability and accuracy. The power factor meters are available in short scale (90°,240°,) only. Scales are non-linear, bi-directional and are calibrated from 0.5 lead to 0.5 lag.



2. General Technical Requirements

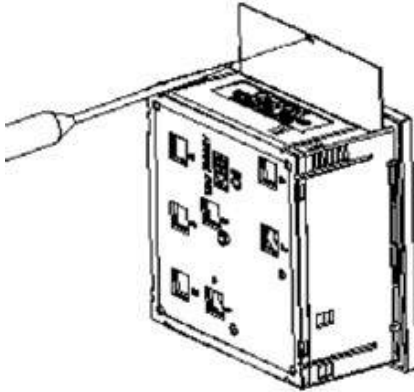
type	Parameters and technical indicators
response time	90 ° or 240 °: ≤ 4 seconds
Flame retardant grade of plastic parts	UL94(V0)
Shell protection level	Front panel: IP40; Other: IP20
Security level	CAT III 600V
class of pollution	two

Working environment conditions	Temperature: -10 °C~55 °C Humidity: 5%~90% RH, no condensation
Storage environment conditions	Temperature: -25 °C~70 °C Humidity: 5%~95% RH, no condensation
Overload capacity	Continuous overload: 1.2 times rated value Short term overload: Voltage: 2 times rated value, 5 seconds Current: 10 times rated value, 5 seconds
The measured voltage component	± 15% of rated value
Quantity usage range	20% to 120% of rated value

3. Specific model specifications

Model	Wiring method/accuracy level			angle	Structural method
	Single phase	Three phase three wire balanced type			
SPF-72	Class 2.5	Class 2.5		90°	Integrated type
SPF-96	Class 2.5	Class 2.5		90°	Integrated type
SPF-72-240	Class 2.5	Class 2.5		240°	Integrated type
SPF-96- 240	Class 2.5	Class 2.5		240°	Integrated type

4. square instrument dial replacement instructions



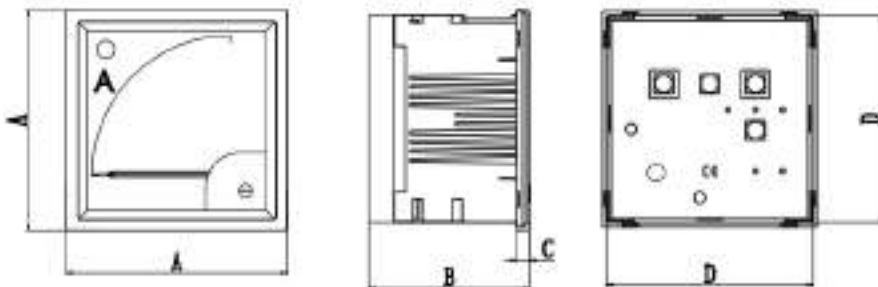
Installation method

6.1 square

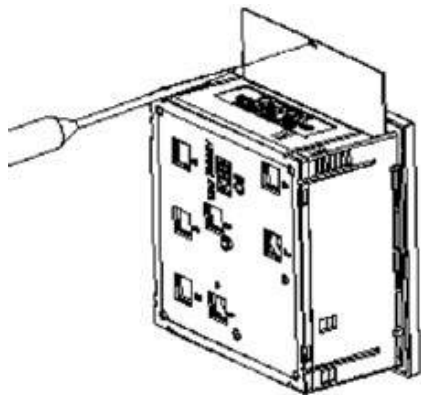
Model	Installation
72, 96	clamps

5.Outline and mounting dimensions

5.1 square



4. square instrument dial replacement instructions



Installation method

6.1 square

Model	Installation
72, 96	clamps

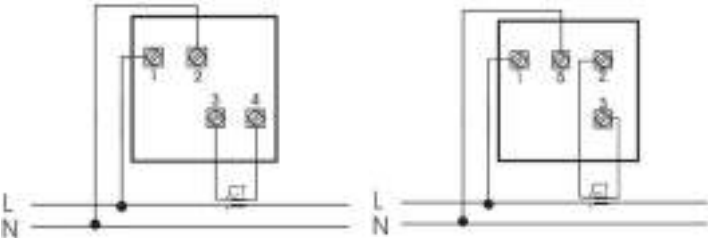
Dimension: mm

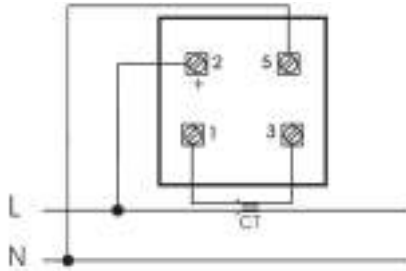
Model	A(mm)	B(mm)	c(mm)	E(mm)
96	96	71	6	92
72	72	71	6	68

6. Wiring diagram

6.1 Single phase wiring method

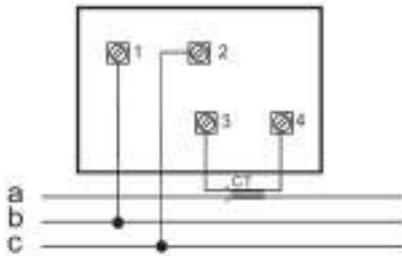
SPF-96; SPF-80; SPF-72



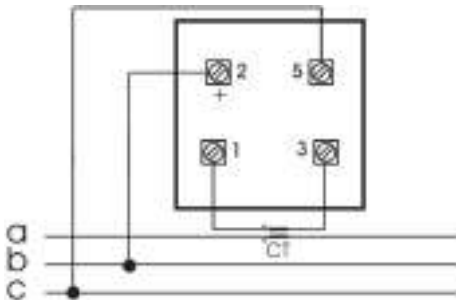
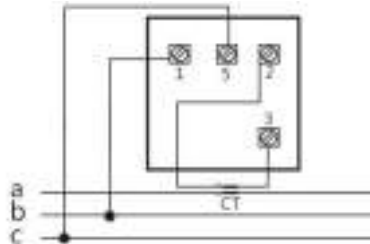


6.2 Three phase three wire wiring method

SPF-96; SPF-80; SPF-72; HL-S96; HL-S72



SPF-96-240; HL-S96G (240°)



7. Precautions

- 7.1. Connect cables according to the wiring diagram.
- 7.2. Before connecting cables, be sure to cut off the power supply of the measurement object.
- 7.3. Do not apply voltage beyond the voltage range, which will cause the instrument to fail.
- 7.4. Do not use in the condition of dew.
- 7.5. When using the device around the exposed or live part, do not touch the part to which the voltage is applied. In this case, you are advised to use protective tools such as rubber gloves.