

POWER FACTOR METER

Application:

The panel meter is suitable for measuring the single phase power factor.

Important features:

- Full digital operation (Icom System).
- LED display range: ± 9999 , unit marking by LED.
- Preset delivery or connecting to external device can be set (monIcom option).
- The scale is linear in $\cos \varphi$.
- Plug in terminal blocks with screw.
- EMC compliance.



Illustration only.

Technical specifications:

Input: (at external power supply)

- Nominal input voltage range (CF < 1.2): from 0...5 V to 0...600 V AC
- Current consumption: max. 0.14 mA (at nominal voltage)
- Nominal input current range (CF < 2): from 0...0.025 A to 0...5 A AC
- Drop out voltage: 25 mV (at nominal current)
- Input measuring range: up to 120 % of the nominal value
- Input power factor range ($\cos \varphi$): -0.5...+0.5 (C: -60° ... L: $+60^\circ$)
- Input frequency range: 45...65 Hz
- Input insulation voltage: Cat. III. 1 kV (Test: 4300 V_{eff} 1 min)

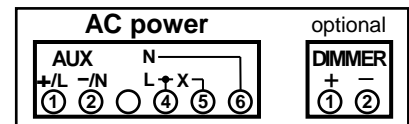
Display:

- Display colours: red (basic version), orange, yellow, green, blue, white LED
- Height of digits: 14 mm
- Brightness control: via dimming input on rear (optional)
- Dimmer input signal: 5V PWM, approx. 1 kHz
- Dimmer input isolation: Cat. III. 1 kV (Test: 4300 V_{eff} 1 min)
- Display update: 2 /s
- Accuracy: ± 0.5 % FS, ± 1 digit (20 %..120 % input range)

Other:

- Standards applied: IEC/EN 61010-1, IEC/EN 61326
- Auxiliary supply consumption: max. 2 W
- Wire cross-section of terminals: max. 2.5 mm²
- Working temperature: -10...+25...+60 °C
- Temperature coefficient: max. 200 ppm/°C
- Warm-up time: 15 min
- Storage temperature: -40...+80 °C
- Humidity: max. 85 %
- Vibration (acceleration): max. 2 g
- Dimension (HxWxD): 24 mm x 72 mm x 102 mm
- Case protection: from the front IP 40, from behind IP 20
- Case material: PC-GF
- Weight: approx. 0.3 kg

Connection diagram:

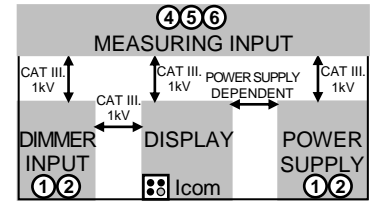


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Auxiliary Supply variations:

	(Voltage / Insulation)
5 V, 12 V, 24 V, 48 V DC ±50 %, converter	/ 1 kV
55...264 V, 47...440 Hz, and 72...370 V DC, converter	/ 3 kV
9...28 V DC	/ not isolated from display
At 55...264V AC input voltage range, self powered version is also available.	

Isolation scheme:



Ordering examples: (Input; Display: range, unit, colour; Auxiliary Supply)

CD40-72v-PF _ Input: 230 V, 5 A **_ Display:** -0.400...+0.400 cos φ, red **_ Aux:** 55..264 V AC converter
CD40-72v-PF _ Input: 400 V, 50/5 A **_ Display:** -0.500...+0.500 φ, green, dimmable, **_ Aux:** 24 V DC converter

On request for extra charge special ranges (Input, Display, Auxiliary Supply) are possible.

Outline and cut-out dimensions:

