

ICO 61

Programmable digital panel meter for electrical signals

ICO 61 is a 10,000 programmable digital panel meter 96 x 24 mm for electrical signals.

Description

ICO 61 is a 10,000 programmable digital panel meter 96 x 24 mm for electrical measurements. It is possible to change the configuration of measurement type, range, limits and scaling. The configuration of these parameters is protected against any inopportune modifications.

- Panel meter size: 96 mm x 24 mm
- IP40 protected
- Programmation through 3 front keys
- Measurement hold function
- Registration of maximum and minimum value of a measurement burst
- Measurement, display and scaling of:
    - DC and AC voltage up to 400 V
    - DC current up to 2,000 A with an external shunt
    - AC current up to 200 A + Current transformer, with secondary current of 1 A or 5 A
    - Frequency up to 5,000 Hz
- 2 programmable limits with relays output
- 9 different power supplies available

Specifications

Electrical measurement indicator

Type	Range	Resolution	Accuracy (1 year) (23°C ±1°C)	Input impedance
DC voltage	500 mV 5 V 50 V 400 V	100 µV 1 mV 10 mV 100 mV	0.1% + 100 µV 0.1% + 1 mV 0.1% + 10 mV 0.1% + 0.1 V	> 100 MΩ 1.1 MΩ 1 MΩ 1 MΩ
AC voltage	500 mV 5 V 50 V 400 V	100 µV 1 mV 10 mV 100 mV	0.7% + 1 mV 0.5% + 6 mV 0.5% + 60 mV 0.5% + 0.6 V	1 MΩ 1 MΩ 1 MΩ 1 MΩ
DC current	4-20 mA or 0-50 mA 1 A (2) 5 A (2)	10 µA 1 mA 1 mA	0.2% + 10 µA	shunt 10 Ω included external shunt 100 mV external shunt 100 mV
AC current	1 A (2) 5 A (2)	1 mA 1 mA		external shunt 100 mV external shunt 100 mV
Frequency (3)	5 to 500 Hz 5 to 5000 Hz	0.1 Hz 1 Hz	0.1% + 0.1 Hz 0.1% + 1 Hz	10 MΩ 10 MΩ

Temperature coefficient: ≤ 10% accuracy/°C

Continuous mode: -40 to 100 % range
Alternate mode: 4 to 100 % range from 25 to 500 Hz without D.C component (possible measurements up to 10 kHz on some ranges with less precision)

(1) Extended measurement range: -40 to +110% range
(2) With external shunts
(3) Two levels of input voltage: 50 mV~ to 50 V~ and 5 V~ to 250 V~

Frequency:
- 70 V peak on low entry level (50 mV to 50 V)
- 570 V peak on entry high level (5 V to 250 V)

Further features

Ranging	Automatic
Measurement hold	Short-circuit on the rear panel
Scaling	The value is to be entered using keyboard, while the value of measurement corresponding can be is introduced of the same way, is measured by the instrument.

	This possibility is very interesting for error corrections on temperature ranges.
Sampling rate	2.5 samples / s

General specifications

Size	99 x 36 x 120 mm
Weight	300 g
Display	From -1999 to 9999, with 14 mm red, yellow or green indication LED
Supply	230 V at ±10% (50/60 Hz) Other power supplies available in option

Environmental specifications

Reference range	23°C ±1°C (20 to 75 % w/o condensing)
Operating reference range	0 to 50°C (RH: 20 to 75 % w/o condensing)
Limit operating range	-10°C to +50°C (RH: 10 to 80 % w/o condensing)
Indice de protection	IP40 in ABS case IP65 in watertight metallic case

Safety

Protections	- Protection of unit programming by access code. - Protection of the threshold values by safety function programming

Models and accessories

Instrument:

Ordering reference code: ICO51-Power supply-Display-Enclosure

Power supply:

48 V~	9
230 V~	8
115 V~	7
24 V~	6
36 to 72 V-	5
18 to 36 V-	4
9 to 18 V-	3
5 V-	2

Display:

Red	R
Green	V

Accessories:

AN8002	Cold Junction Compensation Module
AN8003	Shunt 1 A - 100 mV
AN8004	Shunt 5 A - 100 mV
AN8005	Shunt 4-20 mA (50 ohms)
AN5844	Current transformer 2/1 A
AN5845	Current transformer 20/1 A
AN5846	Current transformer 200/1 A
ER42062-001	RC protection circuit