

electrical measurements of process

temperature measurements

10 000 points

ICO 62



The function of measurement, the range, the thresholds as well as the specific scalings are programmable. The configured parameters are protected from all inopportune modifications.

These aircraft are equipped with two relays of thresholds.

- Format 96 x 24 mm
- Function, ranges, thresholds and scale programmable.
- 2 thresholds with exit relay.

functions

Measure
The ICO 62 allow measurements of voltage, running, resistance of process and temperature measurement using resistor probes Pt or of thermocouples.

They are equipped:

- blocking of measurement
- memorizing of the maximum and minimum.

Scaling.....
The value to be displayed is entered using the keyboard, while the value of corresponding measurement can either be introduced in the same way or measured by the instrument. This possibility is interesting for the corrections of errors on temperature ranges.

Thresholds.....
Programming of two thresholds and their hysteresis.
Capacity breaking of the associated relay 250 V - 1 A or 60 VA to 50 Hz, 150 V - 1 A or 30 W in D.C.

In the course of measurement, each threshold can be visualized and modified.

Temperature measurements.....

Sensor	Range (1)	Resolution	Accuracy (2)
Probe Pt 100	- 200 to + 500°C	0,1°C	0,1 % + 0,2°C
	- 220 to + 1 200°C	1 °C	0,1 % + 2 °C
Probe Pt 100	- 200 to + 500°C	1 °C	0,1 % + 0,2°C
Thermocouple K	- 100 to + 1 000°C + 1 000 to + 1 372°C	0,1°C 1 °C	0,1 % + 0,4°C 0,1 % + 1 °C
T	- 100 to + 400°C	0,1°C	0,1 % + 0,4°C
Platinel	- 100 to + 1 400°C	0,1°C	0,1 % + 0,4°C
J	- 120 to + 999°C	0,1°C	0,1 % + 0,4°C
L	- 40 to + 900°C	0,1°C	0,1 % + 0,4°C
R	- 50 to + 120°C	1 °C	0,1 % + 2 °C
	+ 120 to + 1 768°C	1 °C	0,1 % + 1 °C
S	- 50 to + 450°C	1 °C	0,1 % + 2 °C
	+ 450 to + 1 768°C	1 °C	0,1 % + 1 °C

(1)For a type of determined sensor, the commutation of range and the change of resolution can be automatic.
Possibility of going beyond of range. Display in C or F.

(2) ± (% reading + °C numbers)on 1 year without junction of reference.The typical error brought by the junction of reference AN8002 is of 0,3°C.

DIGITAL PANEL METERS

Electrical measurements of process.....

Function	Range (3)	Resolution	Accuracy (4)	Remarks
DC voltage	50 mV	10 μ V	0,1 % + 10 μ V	Input resistance > 1 000 M > 1 000 M 1 M 1 M
	500 mV	100 μ V	0,1 % + 100 μ V	
	5 V	1 mV	0,1 % + 1 mV	
	50 V	10 mV	0,1 % + 10 mV	
D.C current	4-20 mA ou 0-50 mA	10 μ A	0,2 % + 10 μ A	shunt AN 8005/10
Resistance	250	100 m	0,1 % + 100 m	Current of measurement 200 μ A
	2 500	1	0,1 % + 1	

(3) Extended from measurement : - 40 to + 110 % range

(4) \pm (% reading + a number of units) on 1 year.

Protection of the programming

Two possible levels by software:

- For all the programming,
- Protection or not of the threshold values.

General characteristics

Display
From -1999 to 9999 with indication,
LED red,yellow or green,of 14 mm.

Speed of measurement : 2,5 measures/s.

Temperature coefficient
10 % accuracy/ $^{\circ}$ C.

Climatic Environment
Nominal field : 0 to 50 $^{\circ}$ C, 20 to 80 %
RH without condensation.

Acceptable maximal voltage.....
600 V \pm on the ranges 5 V and 50 V ;

250 V~ on the ranges 50 mV, 500 mV
and thermocouples ;
20 V~ on the entries of measurement of resistance

Common mode
Rejection 110 dB to 50 Hz on the range
50 mV.

Acceptable maximal voltage : 250 V

Rejection of series mode
60 dB to 50 Hz on the range 50 mV.

Isolated power supply
230 V (\pm 10 %) 50 to 60 Hz.
Others power supply :
5 V \pm 10 %,

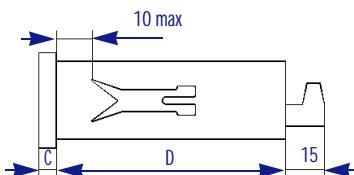
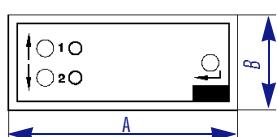
9 to 18 V,
18 to 36 V,
36 to 72 V,
24 V \pm 10 %,
48 V~, \pm 10 %,
115 V \pm 10 %.

Presentation.....
Case ABS. Weight : approximately 300g.
Sealing : IP 40.

Connecting.....
Removable screwing connectors supplied
with instrument.

Dimension

Dimensions in mm



Case	A	B	C	D	Cut out panel
96 x 24	96	24	5	103	92.0 ^{+0.8} ₋₀ x 22.2 ^{+0.3} ₋₀

accessories

External shunt
AN 8005 : 10 , 500 mV, accuracy
0,1 %. Skewerable module on the
connector of entry for measurements in
4-20 mA (current max.: 100 mA).
Dimensions : 25 x 27,5 x 14,8 mm.

Protective circuit
Circuit RC of protection of the contacts
of alarm for cut on inductive circuits
(250 V~ max.) ER42062.

Compensation of junction of reference.....
AN 8002 : modulate screwed on the back,
transportable connector block remotely.
Typical error : 0,3 $^{\circ}$ C.
Max.error : 0,5 $^{\circ}$ C.
Dimensions : 25 x 27,5 x 14,8 mm.

instructions to order

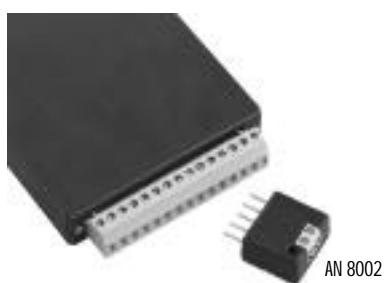
Configurable indicator ICO62



Références
to defer above

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

Display	Red	R
	Green	V
	Yellow	J



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The characteristics above can be modified without prior notice G 04 2