

Pt 100 - RTD Converter



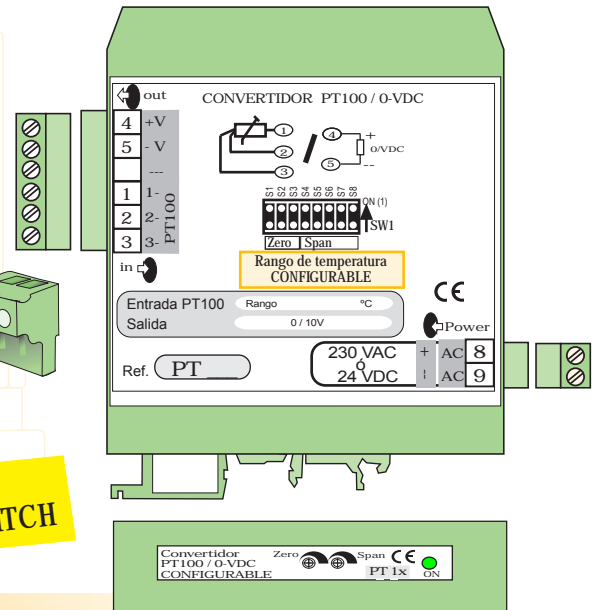
OUTPUT

0/10V
0/20mA

PLUG-IN CONNECTORS

LOW COST

CONFIGURABLE THROUGH MICROSWITCH



DESCRIPTION

Temperature signal converter captured by a probe PT100, of 2 or 3 wires at a proportional magnitude, in voltage or current output. The output is linearized with the temperature. They have SPAN and ZERO adjustment. They are presented in modular configuration to fit in DIN rail profiles, or in field box with IP65 protection. They meet EMC standards for industrial applications.



TECHNICAL CHARACT.

- Supply voltage	230 VAC (+/-10%) Ó 24 VDC (+/-10%)
- Working Temp.	- 10° ... +60° C
- Storage Temp.	-40 / +80 °C
- Temp. coefficient	50 ppm / °C
- Max. global error	< 0,1%
- Max linearity compensation error	< 0,08%
- Impedance in the compensation wire	0,1% cada 10 Ohm
- Warm up time	5 min.

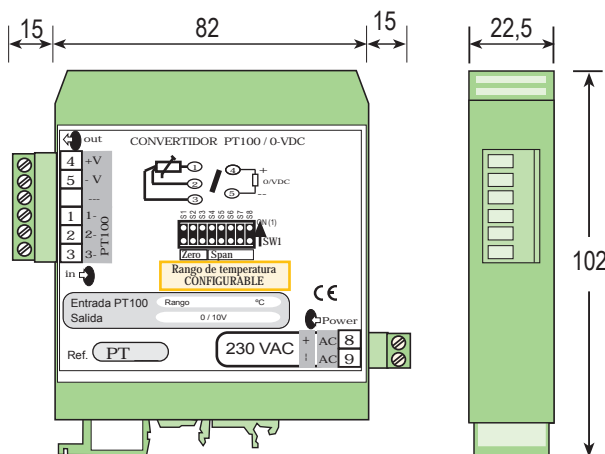
REGULATIONS COMPLIANCE

Electromagnetic Compatibility	2004 / 108 / CE
Low voltage for amb. industrial	2006/95/CEE
Electromagnetic emissions	UNE-EN 50081-2
Electromagnetic immunity	UNE-EN 50082-2
Waste electronics(WEEE)	2002 / 96 / CE

MECHANICAL

Protection:	IP 20
Connection wire:	<2,5 mm, 12 AWG
Box:	Polyamide UL94. V2
Weight: max.	75/120 gr.
Rail:	EN 50035, EN 50022

DIMENSIONS (mm)



MODELS

OUTPUT	24VDC	230VAC
0 / 20mA	PT00-DC	PT02 (*)
0 / 10V	PT10	PT12
-10 / +10V	PTM0	PTM2
OTHERS	PTE0	PTE2
(Pt100inc.) 0/10V	PT10i	PT12i

(*)wide 45mm

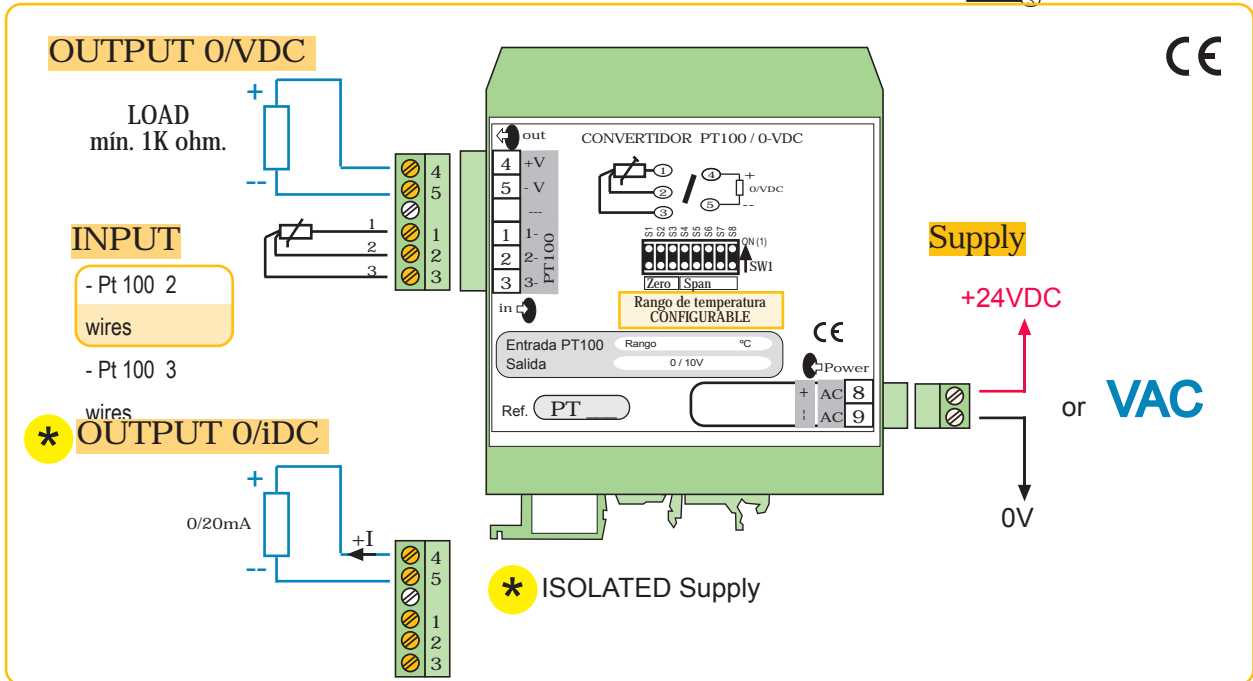
OUTPUT CURRENT

- Load resistance (24V)	max. 600 Ohm
- Max current (Opened probe)	25 mA
- Thermal drift	0,5 μ A / °C
- Protection against polarity inversion.	

OUTPUT

- Max current	10 mA
- Load resistance	min. 1K
- Max voltage (Opened probe)	14 V
- Thermal drift	0,2mV / °C
- Protection against shortcuts	

0 / 10 V OUTPUT



TEMP. RANGE CONFIGURATION (SW1)

CONFIGURABLE Temp.

SW1 ON (1)

Zero Span

Adjustables

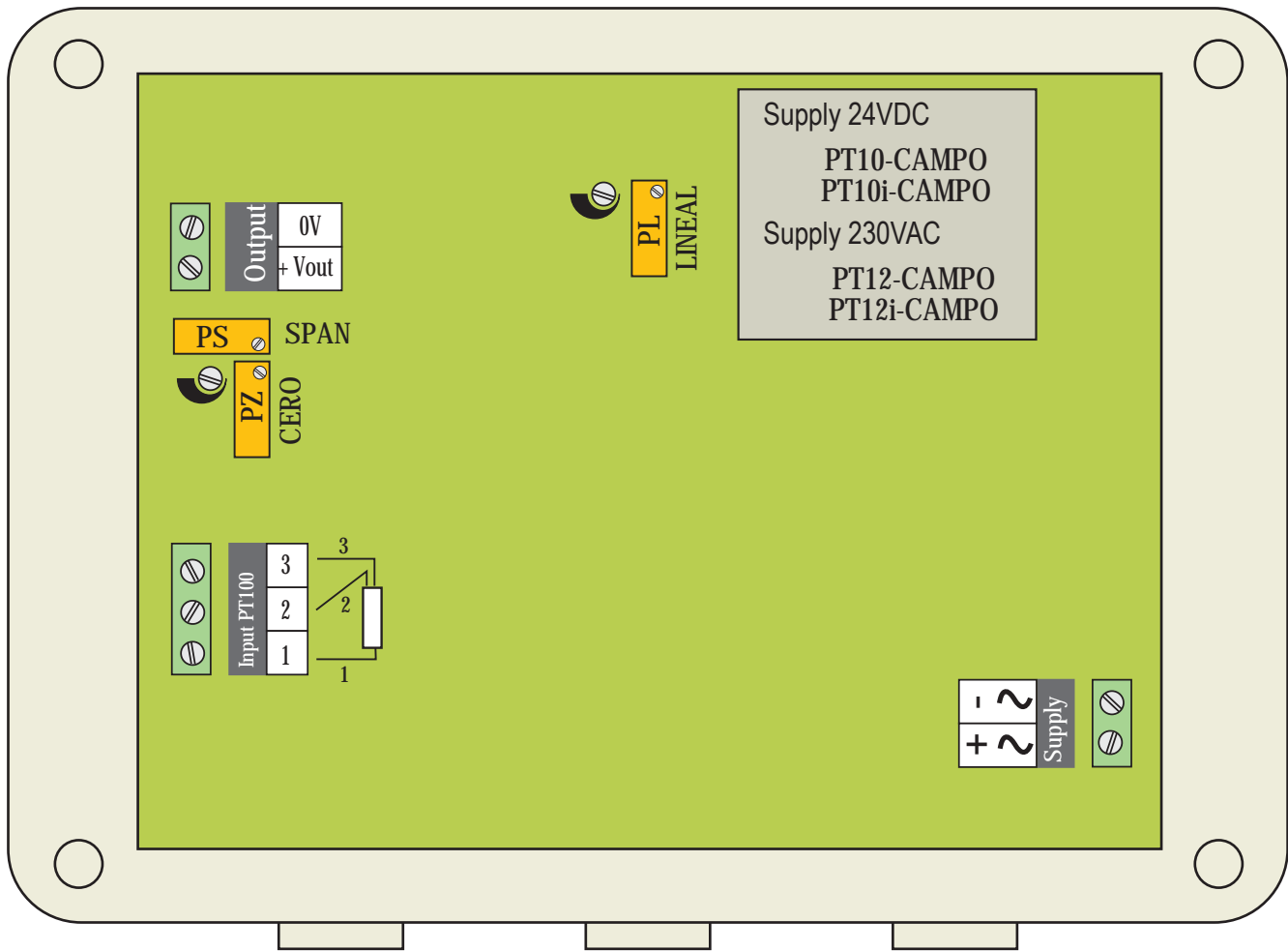
Zero table (*)				Gain table = Incr. T ^a (*)					
S 1	S 2	S 3	°C	S 4	S 5	S 6	S 7	S 8=1	S 8=0
0	0	0	0°C	1	0	0	0	25°C	147°C
1	0	0	-10°C	0	0	0	0	30°C	175°C
0	1	0	-20°C	1	0	1	0	35°C	202°C
1	1	0	-30°C	0	0	0	0	42°C	241°C
0	0	1	-40°C	1	1	0	1	48°C	277°C
1	0	1	-50°C	0	1	0	1	58°C	333°C
0	1	1	-60°C	1	0	1	1	70°C	410°C
1	1	1	-70°C	0	0	1	1	83°C	485°C
				1	1	1	1	100°C	600°C
				0	1	1	1	120°C	700°C

(*) The values in °C correspond to the center point of the adjustable "ZERO" - "SPAN", with a variation of - / + 10%

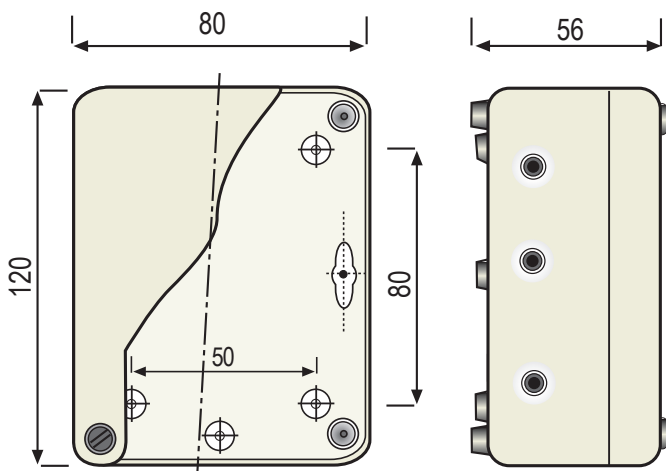
(Eg, for 175 ° C, the corresponding setting range would be 158 .. 192 ° C)

(**) The value of the Gain Table equals the increase between the min. And max. Of the operational T^a range.
(Eg, -25 / + 150 ° C, in the GAIN table would be 175 ° C)

CONNECTIONS FOR FIELD BOX (VOLTAGE OUTPUT)



DIMENSIONS (mm)



MECHANICAL CHARACT.

Body	ABS
Protection	IP55 (IECV529)
Material temp. in a continuous use	-40°C / +80°C +60°C
Crash resistance	good
Color	gray (RAL 7035)
Gasket	poliuretane
Not toxic, self stinguishing	
Dimensions	120 x 80 x 56
Connectors	PG7 poliamide

MODELS

OUTPUT	24VDC	230VAC
0 / 10V	PT10-CAMPO	PT12-CAMPO
(Pt100 inc.) 0 / 10V	PT10i-CAMPO	PT12i-CAMPO