

# Thermocouple- T/C ISOLATOR

1 and 2 CHANNEL

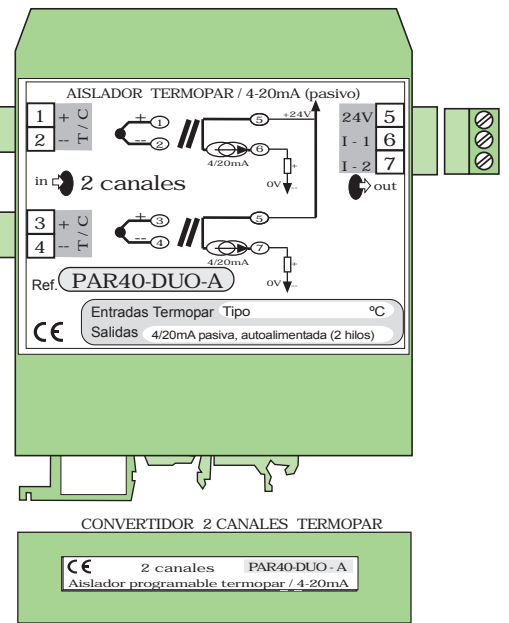
OUTPUT: 4/20mA

0/10V

Type K-J-E-N-T-R-S-mV ...

**LOW COST**

**PLUG-IN  
CONNECTORS**



## DESCRIPTION

- Universal ISOLATOR for THERMOCOUPLER probes, K-J-E-N-T-R-S .., to a 4/20mA or 0/10V proportional signal.
- The output is linearized with the temperature.
- Excelent EMC characteristics for industrial enviroments, allows transmission of temperature at a distance with a great reliability.
- The modular box is suitable for DIN EN rails, the box meets the EMC normative for industrial applications.

## INPUT

Thermocoupler K, J, E, N, T, R, S,  
(Range -5/+55mV)

Impedance Input >5MΩ

COLD JUNCTION COMPENSATION

DIGITAL ADJUST WITH BUTTONS

## OUTPUT

Lineal with the temperature 4/20mA PASSIVE

Max. Current 21,5mA

Nominal load 700Ω / 24VDC, 20mA

Max. Load 1000Ω / 30VDC, 20mA

Probe failure detector UPSCALE 21,5 mA

## 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

## SUPPLY

Protected against polarity inversion

Supply voltage 6,5 to 32 VDC

230 VAC (+/-10%)

Allowed ripple 4Vp-p 50/60Hz

## MECHANICAL CHARACTERISTICS

Protection: IP 20

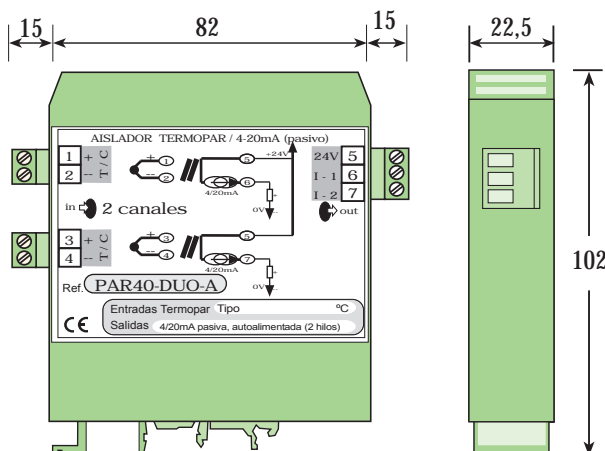
Connection wire: <2,5 mm, 12 AWG

Box: Polyamide UL94. V2

Weight: max. 90 / 120 gr.

Rail: EN 50035, EN 50022

## DIMENSIONS (mm)



## MODELS

OUTPUT	24VDC	230VAC
4 / 20mA	PAR40-A	PAR42-A
4/20mA(2channels)	PAR40-DUO-A	
0 / 10V	PAR10-A	PAR12-A
Special	PARE0-A	PARE2-A

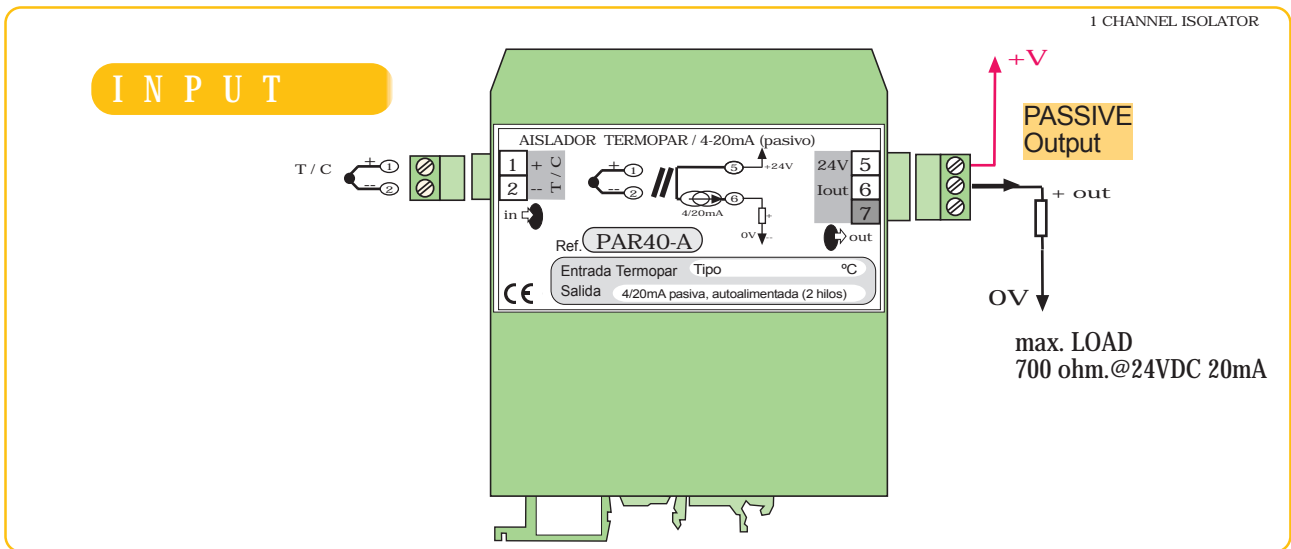
## PRECISION

Linearity	+/- 0,1% downsacle SPAN
Cold junction compensation	+/- 1,0%
INFLUENCES	
... of the Temp. compensation.	+/- 1,25°C/25°C
... of the thermal drfit	+/- 0,6% de SPAN/25°C
... of the wire	+/-0,4mV
... RFI 0,15.. 1000MHz, 10V or V/m	+/- 0,2% SPAN
... of supply	+/- 0,02% SPAN/V
... of the supply ripple.. 50/60Hz 4Vp-p	+/- 0,05% SPAN
Long term stability	+/- 0,1% SPAN/YEAR

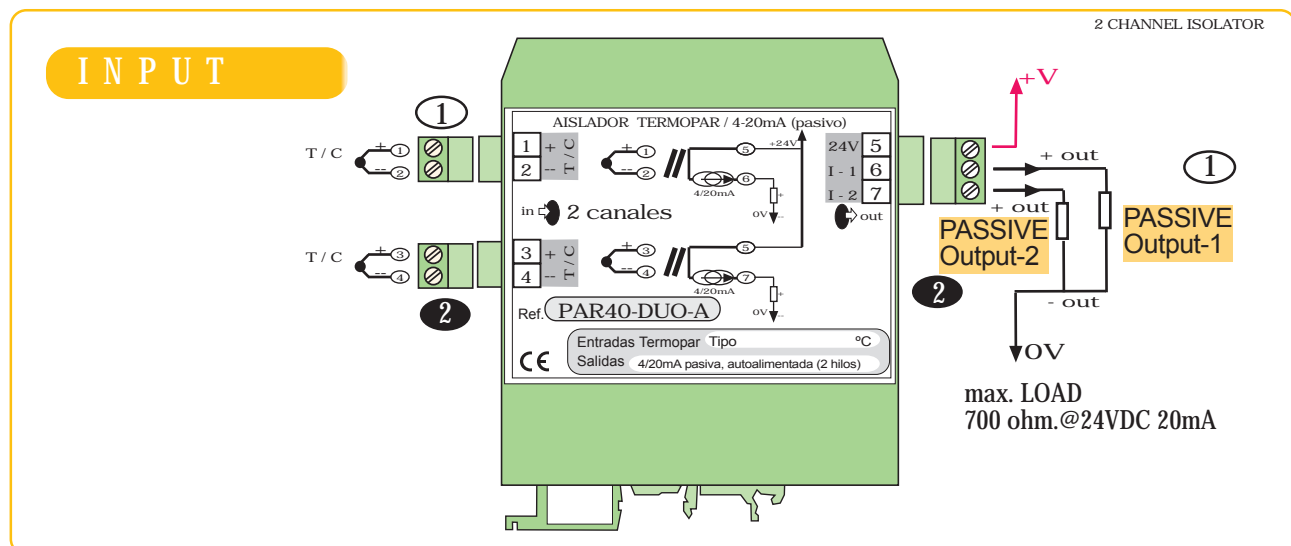
## TECHNICAL CHARCT.

- Working Temp.	- 10° ... +60° C
- Storage Temp.	-40 / +80 °C
- T <sup>a</sup> coefficient	50 ppm / °C
- Max. global error	< 0,1%
- Max. linearity compensation error	< 0,08%
- Impedance in the compensation wire	0,1% each 10 Ohm
- Warm up time	5 min.
- RESPONSE TIME	1sg, 90% of F.S.
- TESTED ISOLATION	250VDC

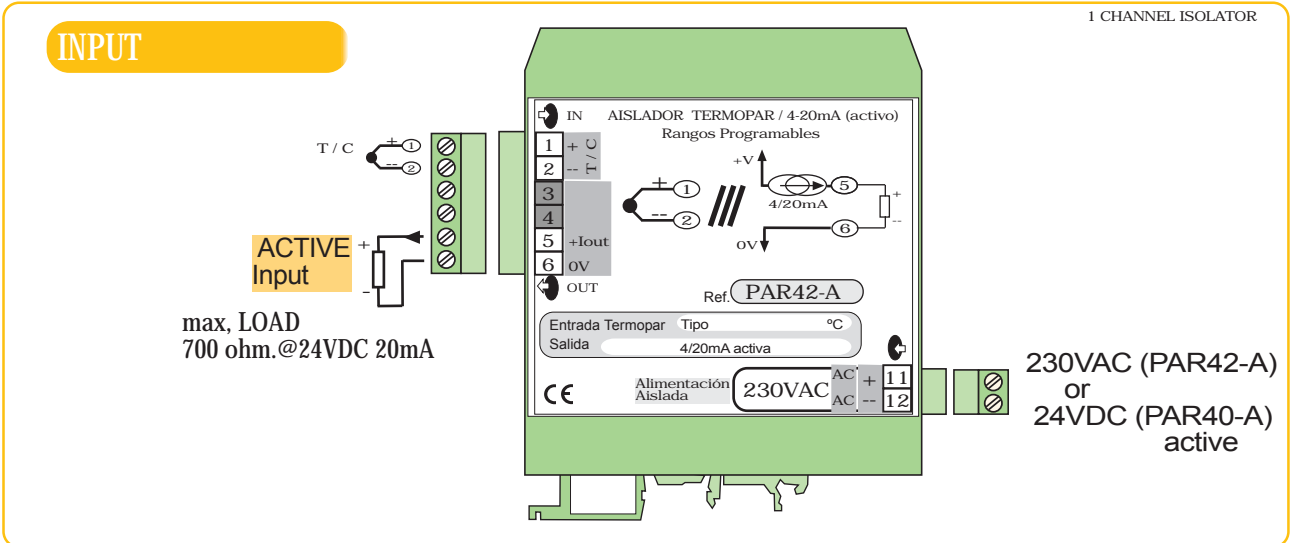
### PAR40 - A. CONNECTIONS (Self-Supplied. 6 ..32VDC, to 2 wires)



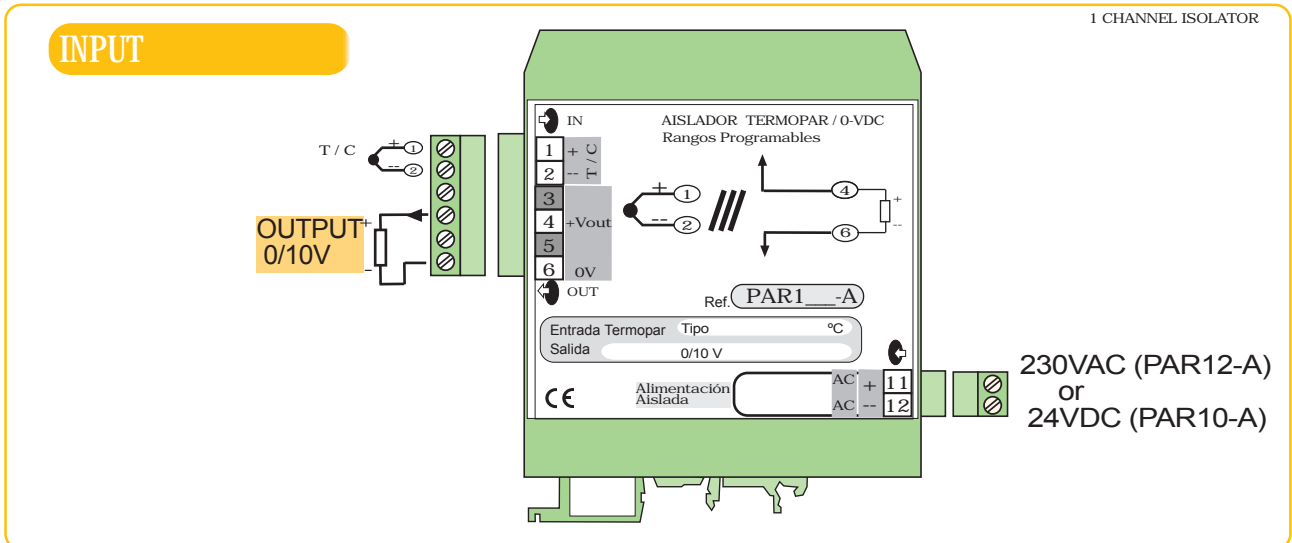
### PAR40 - DUO - A. CONNECTIONS (Self-Supplied. 6 ..32VDC, to 2 wires)



## PAR42 -A.CONNECTIONS (Supply 230VAC) and PAR40-A ACTIVE (Supply



## PAR10-A and PAR12 -A. (Supply 24VDC and 230VA) CONNECTIONS



## PAR2-A.CONNECTIONS (Supply 230VAC)

(e.g. "SPECIALCASE")

