CONVERTER 1 and 2 Channel
Pt 100 - RTD
OUTPUT 4/20mA
LOW COST

CONFIGURABLE Temperature range

DESCRIPTION
Temperature signal converter for PT100, 2 or 3-wire proportional 4-20 mA signal. The output is linearized with temperature. With adjustable SPAN and ZERO. The front LED indicates that 4-20 mA current flows. If not, the 4-20 mA loop is open. The modular box is designed to fit in DIN EN rail profiles. Meets the EMC standards for industrial applications.

TECHNICAL CHARACTERISTICS
- Supply voltage 230 VAC (+/-10%) OR 24 VDC (+/-10%)
- Operating temperature -10 ... +60 °C
- Storage temperature -40 / +80 °C
- Temperature coefficient 50 ppm / °C
- Maximum global error <0.1%
- Maximum linearity compensation error <0.08%
- Effect of lead resistance compensation 0.1% for 10 Ohm
- Warm up time 5 minutes
- Adjustable through SPAN and ZERO

OUTPUT
- Voltage Standard (2-wire) 24 VDC (16 .. 30V)
- Load impedance (24V) Max. 600 Ohm
- Maximum intensity (probe Opening) 25 mA
- Temperature drift 0.5 uA / °C
- Protection against inverse polarity.

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

MODELS

<table>
<thead>
<tr>
<th>OUTPUT</th>
<th>24VDC</th>
<th>230VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 / 20mA (*)</td>
<td>PT40</td>
<td>PT42</td>
</tr>
<tr>
<td>(2 canales)</td>
<td>PT40-DUO</td>
<td></td>
</tr>
<tr>
<td>Pt100 inc. (*)</td>
<td>PT40i</td>
<td>PT42i</td>
</tr>
</tbody>
</table>
CONNECTIONS PT40 - DUO. (Self-powered by Output: 6 ..32VDC)

**INPUT**
- Pt 100  2 hilos
- Pt 100  3 hilos

**OUTPUT PASSIVE**
LOAD máx. 600 ohm.

**INPUT**
- Pt 100  2 hilos
- Pt 100  3 hilos

( Autoalim. 6 ..32VDC, for output)

**OUTPUT ACTIVE**
LOAD máx. 600 ohm.

**CONVERTIONS PT40 y PT42 (c/ Range temp. configured)**

**RANGE OF TEMPERATURE SETTINGS (SW1)**

<table>
<thead>
<tr>
<th>ZERO Table (*)</th>
<th>Gain table = Incr. T (**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>S2</td>
</tr>
<tr>
<td>-----</td>
<td>----</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

(*) The values in °C, corresponding to the central point of the adjustable “ZERO” “SPAN”, ranging from - / +10%

(eg, to 175 °b0 C, the corresponding adjustment range, serious 158 .. 192 °C)

(eg, range -25 / +150 °C, in the gain table 175°C)

(**) The value of the gain table, is equivalent to the increase between the min value and max. operating range T.

Tmin