

# For thermocouples

- for thermocouple circuits
- universal mounting for both PR/DIN and PR/3 rails which meet IEC 60715 norms, "G32" and TH/35 types
- Certificate **CESI 02 ATEX 134 U** EX e I M2 / II 2 G D operating temperature range: -40 – +80 °C
- maximum operating temperature 100°C



<b>standard version</b>		<b>TC/PO</b> Cat. No. <b>TC500</b>
<b>grey version</b>		<b>TC/PO/GR</b> Cat. No. <b>TC500GR</b>
<b>(Ex)i version</b>		<b>TC/PO (Ex)i</b> Cat. No. <b>TC510</b>
<b>TECHNICAL CHARACTERISTICS</b>		
function/type		for thermocouple circuits
rated cross-section	(mm <sup>2</sup> )	-
connecting capacity		
flexible	(mm <sup>2</sup> )	-
rigid	(mm <sup>2</sup> )	Ø 0.8–1.3 mm thermocouples
rated voltage / rated current / gauge	conf. to IEC 60947-7-1	800 V / - / -
rated voltage / rated current / AWG / tightening torque value	UL	600 V / 15 A / 20-14 AWG / 5.5 lb.in.
(Ex e) rated voltage  /	(V)	400 V / 630 V / <1A
rated impulse withstand voltage / pollution degree		8 KV / 3
insulation stripping length	(mm)	20
tightening torque value (test / max)	(Nm)	0.4 / 0.8
height / width / thickness	TH/35 7.5 mm	47 / 40.5 / 5.5
height / width / thickness	TH/35 15 mm	55 / 40.5 / 5.5
height / width / thickness	G32	51 / 40.5 / 5.5
<b>APPROVALS</b>		
<b>ACCESSORIES</b>		<b>Type</b> <b>Cat. No.</b>
End sections	beige grey blue	<b>CB2/PT</b> CB111 <b>CB2/PT/GR</b> CB111GR <b>CB2/PT (Ex)i</b> CBX13
Permanent cross connection		-
Switchable cross connection		-
Multiple common bar	250 mm	-
Shunting screw and sleeve		-
Coloured partition	red, green, white	<b>DFU/1</b> DU01..
Cross connection barrier	red	-
Test plug socket		-
Test plug		-
Numbering strip		-
Cover for cross-connection		-
Warning plate		-
Marking tag	printed or blank	<b>CNU/8/51</b> NU0851
End bracket		<b>BTU</b> for PR/DIN and PR/3 BT005 <b>BT/DIN/PO</b> for PR/DIN only BT001 <b>BT/3-BTO</b> for PR/3 only BT003-BT007



terminal block suitable for connecting any type of conductor for thermocouple circuits. In fact it is possible, thanks to the excellent electrical contact that results from it, **to clamp thermocouples of any type without interposing any compensation material.** Besides the management of a single article, this solution permits the reduction of the contact points in the overall circuit.

The range of diameters of the conductors connectable, to make the connection in question fully effective and permanent, must be between 0.8 and 1.3 mm.

The thermocouple circuits, also of a different diameter, stripped of the insulating sleeve for a length of 20 mm, must be placed one on top of another in the terminal block so as to enable the direct passage of thermoelectric E.M.F. without going through a metal body, as happens in normal circuits.

With the double clamping, ensured by two screws and by the interposition of the pressure plate, the possibility of EMFs determined by the non-uniformity of the contacts is reduced almost to zero.