


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.

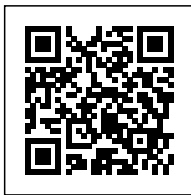
Besides the management of a single article, this solution permits the reduction of the contact points in the overall circuit. The range of diameters of the conductors connectable, to make the connection in question fully effective and permanent, must be between 0.8 and 1.3 mm.

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.

Screw terminal block for thermocouples connection, blue color

Series	TC
Code	TC510
Type	TC/PO (Ex)i
Colour	blue
TECHNICAL FEATURES	
Function/Type	Thermocouple connector
Rated cross-section	1 mm ²
Connecting capacity	
Flexible wire	0.34-1 mm ²
Rigid wire	0.34-1 mm ²
Wire with ferrule - ferrule type	-
Characteristics according to European standard IEC EN 60947-7-1	
Maximum voltage AC/DC	800 V
Maximum current (rated cross-section)	13.5 A
Caliber	-
Characteristics according to UL	
Maximum voltage AC/DC	600 V
Maximum current (rated cross-section)	15 A
Section (min-max)	20-14 (AWG)
Tightening torque value (UL)	5.5 lb.in
Characteristics according to ATEX directive and IEC ex standard	
Maximum voltage AC/DC	400 / 630 V
Maximum current (rated cross-section)	<1 A
Service temperature Min/Max	-40 °C / +110 °C
Rated impulse withstand voltage / pollution degree	8 kV / 3
Insulation stripping length	13 mm
Tightening torque value (nom. / max.)	0.4 / 0.8 Nm
Width (pitch)	5.5 mm
Length	40.5 mm
Height mounted on TH35-7.5/TH35-15/G32	47 / 55 / 51 mm
Insulation material temperature index (EN 60216-1)	130 °C
Plastic material	Polyamide UL94V-0
ACCESSORIES	
End section	
Grey	CB2/PT (cod. CB111)
Blue	CB2/PT (Ex)i (cod. CBX13)
Beige	CB2/PT/GR (cod. CB111GR)
Thickness	1.5 mm
Cross-connection	
Model A)	-
Model B)	-
Rated current carrying capacity IEC/ATEX	-
Cross-connection identification strip	-
Internal removable cross-connection	-
Switchable cross-connection	-
Multiple cross-connection bar	-
Shunting screw and sleeve (Standard / Exe)	-
Protection cover	-
Coloured partition plate	DFU/1/R (cod. DU01R)
Cross-connection barrier	-
Test plug socket	-
Modular test plug	-
End section for modular test plug	-
Marking	
Single marking tag	CNU/8/51 (cod. NU0851S) – CNU/10/61 (cod. NU1061S)
End bracket	
TH35 screw type	BT/3 (cod. BT003)
TH35 snap-fit type	BTO (cod. BT007)
TH35 and G32 snap-fit type	BTU (cod. BT005)
Mounting rail	
IEC 60715/TH35	PR/3/...
IEC 60715/G32	-
APPROVALS AND MARKINGS	



* Suitable for thermocouple sensors
* Cold junction compensation is not required

PRODUCT DESCRIPTION

TC/PO(Ex) Screw terminal block for thermocouples connection, blue color