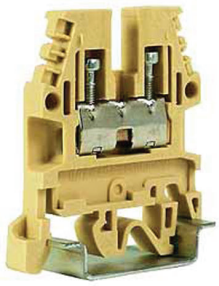
Automation Systems Interconnect, Inc
Innovative Interconnect and Interface Solutions

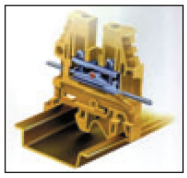
TC/PO, Thermcouple Terminal Block

With special connections

with UL94V-0 polyamide insulating body

- for thermocouple circuits
- universal mounting onto both PR/DIN and PR/3 type rails - according to IEC 60715 Std.. "G32" and "TH/35" types
- **CESI 02 ATEX 134 U** Ex e Ⓔx certificate I M2 / II 2 G D operating temperature range: –40 ÷ +80 °C
- when rail assemblies are to be manufactured for potentially explosive environments (Ex e) please refer to the indications given on page A14





Terminal block suitable for the connection of any type of conductor for thermocouple circuits. In fact, due to the excellent electrical contact which results, **thermocouple circuits of any type can be wired up without the intervention of any other compensation material.**

Such a solution allows, in addition to the running of one single item, the reduction of points of contact in the complete circuit.

In order to make the connection completely efficient and permanent the range of diameters of the connectable thermocouples must be within the 0.8 and 1.3 mm range.

The thermocouple circuits, even those with different diameters, stripped of their insulating protection for a length of 20 mm. are overlapped in the inside of the terminal block in such a way as to allow the direct flow of thermoelectrical e.m.f. without the intermediary of a metal body, as happens in normal circuits.

With the double clamping, assured by two screws and by the interposition of the pressure plate, the possibility of e.m.f. caused by lack of homogeneity of the contacts is reduced to more or less nothing.

beige version	**TC/PO** Cat. No. **TC500**
(Ex)i version	**TC/PO (Ex)i** Cat. No. **TC510**

TECHNICAL CHARACTERISTICS		
function / type		for thermocouple circuits
rated cross-section	(mm²)	-
connecting capacity		
flexible	(mm²)	-
rigid	(mm²)	thermocouples having 0,8 ÷ 1,3 mm diam.
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)	500 V / 630 V
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

APPROVALS

c UL us · KEMA KEUR · Ⓔx · UL BR

IEC Ex pending

ACCESSORIES		Type	Cat. No.
End sections	beige blue	**CB2/PT** **CB2/PT (Ex)i**	CB111 CBX13
Permanent cross connection		-	
Switchable cross connection		-	
Multiple common bar	250 mm	-	
Shunting screw and sleeve		-	
Coloured partition	red, green, white	**DFU/1**	DU01..
Cross connection barrier	red	-	
Test plug socket		-	
Test plug		-	
Numbering strip		**CNU/8/51**	NU0851
Cover for cross-connection		-	
Warning plate		-	
Marking tag	printed or blank	**CNU/8/51**	NU0851
End bracket		**BTU** for PR/DIN and PR/3 **BT/DIN/PO** for PR/DIN only **BT/3-BTO** for PR/3 only	BT005 BT001 BT003-BT007
Mounting rail according to IEC 60715 Std.	⊏⊐	**PR/DIN/AC** of steel **PR/DIN/AS** same with slots **PR/DIN/AL** of aluminium	PR001 PR004 PR002
	⌐¬	**PR/3/AC** for PR/DIN and PR/3 **PR/3/AS** same with slots	PR003 PR005