

## Disconnect terminal block - PTC 2,5-TWIN-TG - 3270091

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Disconnect terminal block, nom. voltage: 400 V, nominal current: 20 A, connection method: Push-in connection, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 26 - 12, length: 67.8 mm, width: 5.2 mm, color: gray, mounting: NS 35/7,5, NS 35/15

### Your advantages

- ✓ The Push-in connection terminal blocks are characterized by the system features of the CLIPLINE complete system and by easy and tool-free wiring of conductors with ferrules or solid conductors
- ✓ The compact design and front connection enable wiring in a confined space
- ✓ In addition to the testing facility in the double function shaft, all terminal blocks provide an additional test connection



### Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4046356959940

### Technical data

#### General

Note	The max. load current must not be exceeded by the total current of all connected conductors. Current and voltage are determined by the plug used.
Number of levels	1
Number of connections	3
Potentials	1
Nominal cross section	2.5 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III

# Disconnect terminal block - PTC 2,5-TWIN-TG - 3270091

## Technical data

### General

Insulating material group	I
Maximum power dissipation for nominal condition	0.77 W
Designation	Level 1 above 1+2 below 1
Maximum load current	20 A (with 4 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	20 A
Nominal voltage U <sub>N</sub>	400 V
Open side panel	Yes
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	4.8 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.14 mm <sup>2</sup> / 0.2 kg
	2.5 mm <sup>2</sup> / 0.7 kg
	4 mm <sup>2</sup> / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.14 mm <sup>2</sup>
Tractive force setpoint	10 N
Conductor cross section tensile test	2.5 mm <sup>2</sup>
Tractive force setpoint	50 N
Conductor cross section tensile test	4 mm <sup>2</sup>
Tractive force setpoint	60 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 6,4 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	4 mm <sup>2</sup>
Short-time current	0.48 kA
Conductor cross section short circuit testing	1.5 mm <sup>2</sup>
Short-time current	0.18 kA
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Result of thermal test	Test passed

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### General

Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 2, bogie-mounted
Test frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}/\text{Hz}$
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3

### Dimensions

Width	5.2 mm
End cover width	2.2 mm
Length	67.8 mm
Height NS 35/7,5	36.5 mm
Height NS 35/15	44 mm

### Connection data

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## Technical data

### Connection data

Connection	1 level
Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	26
Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm <sup>2</sup>
Internal cylindrical gage	A3

### Standards and Regulations

Connection in acc. with standard	IEC 60947-7-1
Flammability rating according to UL 94	V0
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Circuit diagram



# Disconnect terminal block - PTC 2,5-TWIN-TG - 3270091

## Approvals

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CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

#### Ex Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
		D	
Nominal voltage UN	300 V		
Nominal current IN	10 A		
mm <sup>2</sup> /AWG/kcmil	24-12		

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
		D	
Nominal voltage UN	300 V		
Nominal current IN	10 A		
mm <sup>2</sup> /AWG/kcmil	24-12		

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
		D	
Nominal voltage UN	300 V		
Nominal current IN	10 A		
mm <sup>2</sup> /AWG/kcmil	24-12		

EAC		RU C- DE.AI30.B.01102	
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cULus Recognized			
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