

PTTBS 2,5-DIO/U-O - Component terminal block



3210295

<https://www.phoenixcontact.com/sg/products/3210295>

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Component terminal block, with integrated 1N4007 diode, nominal current: 0.5 A, number of connections: 4, connection method: Push-in connection, 1st and 2nd level, Rated cross section: 2.5 mm², cross section: 0.14 mm² - 4 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

Your advantages

- The compact design and front connection enable wiring in a confined space
- In addition to the testing option in the double function shaft, all terminal blocks provide an additional test pick-off
- 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

Commercial data

Item number	3210295
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	*****
Product key	BE2272
GTIN	4046356334501
Weight per piece (including packing)	12.5 g
Weight per piece (excluding packing)	12.5 g
Customs tariff number	85369010
Country of origin	CN

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Technical data

Notes

General	The max. current is determined by the diode. Installed: Diode 1N4007, reverse voltage: 1300 V, maximum continuous current: 0.5 A.
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Product properties

Product type	Component terminal block
Number of connections	4
Number of rows	2
Potentials	2

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated insulation voltage	500 V
Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

Number of connections per level	2
Nominal cross section	2.5 mm ²

1st and 2nd level

Stripping length	10 mm
Internal cylindrical gage	A3
Conductor cross section rigid	0.14 mm ² ... 4 mm ²
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm ² ... 4 mm ²
Conductor cross section, flexible [AWG]	26 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 2.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ²
Nominal current	0.5 A
Maximum load current	0.5 A
Nominal cross section	2.5 mm ²
Component type	Diode 1N4007
Reverse voltage	1300 V

1st and 2nd level Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm ² ... 4 mm ²
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm ² ... 2.5 mm ²

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Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm ² ... 2.5 mm ²
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Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	78 mm
Depth on NS 35/7,5	55 mm
Depth on NS 35/15	62.5 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

Electrical tests

Surge voltage test

Test voltage setpoint	9.8 kV
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes
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Mechanical tests

Attachment on the carrier

Result	Test passed
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Environmental and real-life conditions

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Long life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²)/Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

Ambient conditions

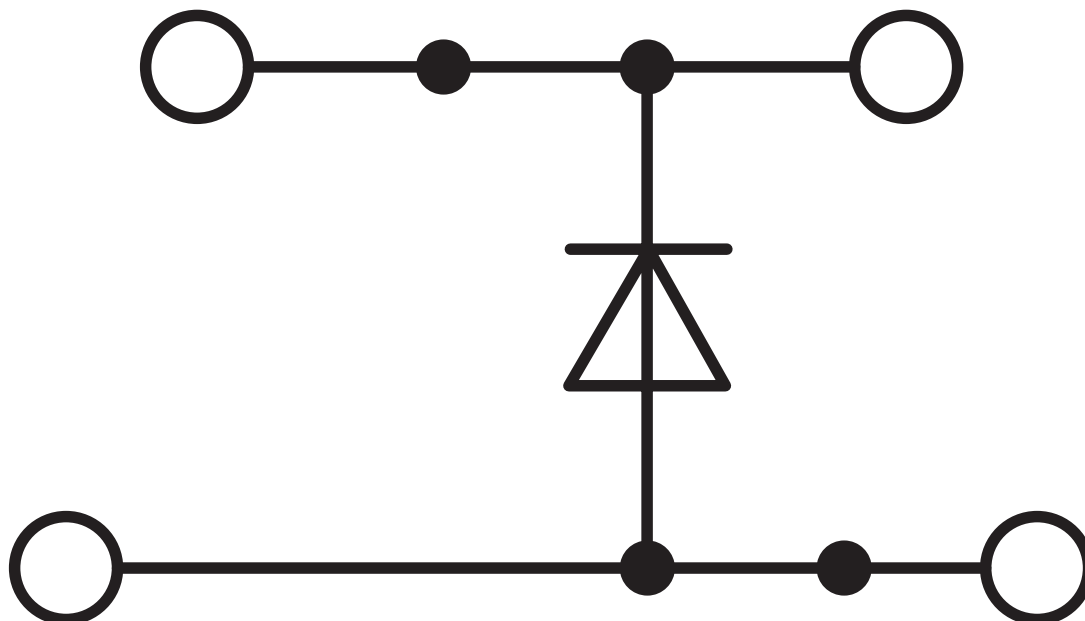
Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

Mounting

Mounting type	NS 35/7,5
	NS 35/15

Drawings

Circuit diagram



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Approvals

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 CSA Approval ID: 2030668				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	20 A	26 - 12	-
Use group C	300 V	20 A	26 - 12	-
Use group D	600 V	5 A	26 - 12	-

 EAC Approval ID: RU C-DE.BL08.B.00644				
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 cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	20 A	24 - 12	-
Use group C	300 V	20 A	24 - 12	-

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Classifications

ECLASS

ECLASS-11.0	27141127
ECLASS-12.0	27141127
ECLASS-13.0	27250114

ETIM

ETIM 9.0	EC000903
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	1d79c4fc-e7cb-4926-85f6-5a56bb684d74

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PHOENIX CONTACT SEA Pte. Ltd.

105 Eunos Avenue 3, #04-00

Singapore 409836

+65 6228 4900

marketing@phoenixcontact.com.sg