

PTTB 2,5-2DIO/O-UL/O-UR BK - Component terminal block



3211444

<https://www.phoenixcontact.com/us/products/3211444>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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

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 option in the double function shaft, all terminal blocks provide an additional test pick-off

Commercial data

Item number	3211444
Packing unit	50 pc
Minimum order quantity	50 pc
Product key	BE2272
GTIN	4055626348742
Weight per piece (including packing)	13.05 g
Weight per piece (excluding packing)	12.61 g
Country of origin	CN

PTTB 2,5-2DIO/O-UL/O-UR BK - Component terminal block



3211444

<https://www.phoenixcontact.com/us/products/3211444>

Technical data

Notes

General	The max. current is determined by the diode. Installed: Diode 1N 4007, reverse voltage: 1300 V, maximum continuous current: 0.5 A.
---------	--

Product properties

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

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated insulation voltage	500 V
Rated surge voltage	6 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

Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A4 B3
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
-------------------------------	--

PTTB 2,5-2DIO/O-UL/O-UR BK - Component terminal block



3211444

<https://www.phoenixcontact.com/us/products/3211444>

Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² ... 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.34 mm² ... 2.5 mm²

Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	68 mm
Depth on NS 35/7,5	47.5 mm
Depth on NS 35/15	55 mm

Material specifications

Color	black (RAL 9005)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °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
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	7.3 kV
Result	Test passed
Short-time withstand current 2.5 mm²	0.3 kA
Short-time withstand current 4 mm²	0.48 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes
-----------------	-----

Mechanical tests

Attachment on the carrier

DIN rail/fixing support	NS 35
-------------------------	-------

PTTB 2,5-2DIO/O-UL/O-UR BK - Component terminal block



3211444

<https://www.phoenixcontact.com/us/products/3211444>

Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross-section/weight	0.14 mm ² / 0.2 kg
	0.2 mm ² / 0.2 kg
	2.5 mm ² / 0.7 kg
	4 mm ² / 0.9 kg
Result	Test passed

Environmental and real-life conditions

Aging

Temperature cycles	192
Result	Test passed

Needle-flame test

Time of exposure	30 s
Result	Test passed

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) 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):2018-05
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

PTTB 2,5-2DIO/O-UL/O-UR BK - Component terminal block



3211444

<https://www.phoenixcontact.com/us/products/3211444>

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

PTTB 2,5-2DIO/O-UL/O-UR BK - Component terminal block

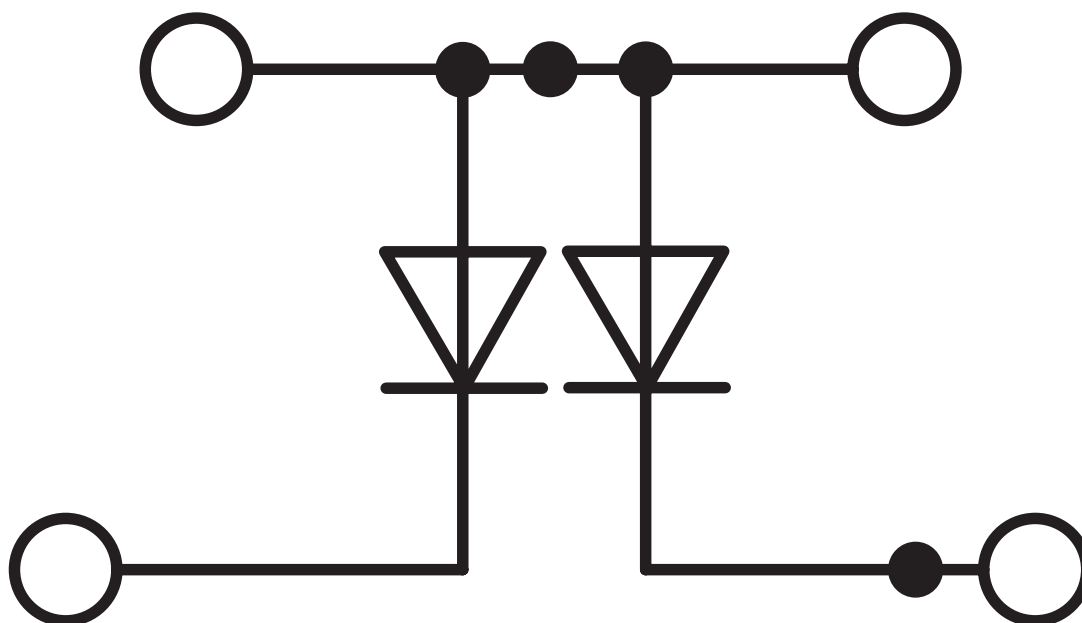


3211444

<https://www.phoenixcontact.com/us/products/3211444>

Drawings

Circuit diagram



PTTB 2,5-2DIO/O-UL/O-UR BK - Component terminal block



3211444

<https://www.phoenixcontact.com/us/products/3211444>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3211444>



EAC

Approval ID: RU C-DE.BL08.B.00644



cULus Recognized

Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	20 A	26 - 12	-
Current determined by the diode	300 V	0.5 A	26 - 12	-
C				
	300 V	20 A	26 - 12	-
Current determined by the diode	300 V	0.5 A	26 - 12	-

PTTB 2,5-2DIO/O-UL/O-UR BK - Component terminal block



3211444

<https://www.phoenixcontact.com/us/products/3211444>

Classifications

ECLASS

ECLASS-13.0	27250114
ECLASS-15.0	27250114

ETIM

ETIM 9.0	EC000903
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

PTTB 2,5-2DIO/O-UL/O-UR BK - Component terminal block



3211444

<https://www.phoenixcontact.com/us/products/3211444>

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	bac2e836-436f-4b58-8c26-fcb1192180bd

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com