

Double-level terminal block - PTTB 4



3211786

<https://www.phoenixcontact.com/nl/producten/3211786>

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.



Double-level terminal block, nom. voltage: 500 V, nominal current: 28 A, connection method: Push-in connection, 1st and 2nd level, Rated cross section: 4 mm², cross section: 0.2 mm² - 6 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

Your advantages

- In addition to the testing facility in the double function shaft, all terminal blocks provide an additional test connection
- The compact design and front connection enable wiring in a confined space
- 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
- Tested for railway applications

Double-level terminal block - PTTB 4



3211786

<https://www.phoenixcontact.com/nl/producten/3211786>

Technical Data

Product properties

Number of positions	2
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Number of connections	4
Number of rows	2
Potentials	2

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	1.02 W

Connection data

Number of connections per level	2
Nominal cross section	4 mm ²

1st and 2nd level

Stripping length	10 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid	0.2 mm ² ... 6 mm ²
Cross section AWG	24 ... 10
Conductor cross section flexible	0.2 mm ² ... 6 mm ²
Conductor cross section, flexible [AWG]	24 ... 12
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.25 mm ² ... 4 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.25 mm ² ... 4 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1 mm ²
Nominal current	28 A (with 4 mm ² conductor cross section)
Maximum load current	32 A (with 6 mm ² conductor cross section, rigid)
Nominal voltage	500 V
Nominal cross section	4 mm ²

1st and 2nd level Connection cross sections directly pluggable

Conductor cross section solid	0.5 mm ² ... 6 mm ²
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.5 mm ² ... 4 mm ²

Double-level terminal block - PTTB 4



3211786

<https://www.phoenixcontact.com/nl/producten/3211786>

Flexible conductor cross section (ferrule with plastic sleeve)	0.5 mm ² ... 4 mm ²
--	---

Ex data

Rated data (ATEX/IECEX)

ATEX certificate	PTB 09 ATEX 1112 U
IEC Ex certificate	IECEX PTB 10.0046 U
Identification	Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	3030462 D-STTB 4
	3030747 ATP-STTB 4
	1204517 SZF 1-0,6X3,5
	3022276 CLIPFIX 35-5
	3022218 CLIPFIX 35
	Plug-in bridge / FBS 2-6 / 3030336
	Plug-in bridge / FBS 3-6 / 3030242
	Plug-in bridge / FBS 4-6 / 3030255
	Plug-in bridge / FBS 5-6 / 3030349
	Plug-in bridge / FBS 10-6 / 3030271
	Plug-in bridge / FBS 20-6 / 3030365
Bridge data	23 A / 4 mm ²
Ex temperature increase	40 K (23 A / 4 mm ²)
Rated voltage	-
for bridging with bridge	440 V
- At bridging between non-adjacent terminal blocks	352 V
- At bridging between non-adjacent terminal blocks via PE terminal block	352 V
- At cut-to-length bridging	220 V
- At cut-to-length bridging with cover	352 V
- At cut-to-length bridging with partition plate	440 V
Rated insulation voltage	400 V

Ex level General

Rated current	23 A (4 mm ²)
Maximum load current	27 A (6 mm ²)

Ex connection data General

Nominal cross section	4 mm ²
Rated cross section AWG	12
Connection capacity rigid	0.2 mm ² ... 6 mm ²
Connection capacity AWG	24 ... 10
Connection capacity flexible	0.2 mm ² ... 4 mm ²
Connection capacity AWG	24 ... 12

Ex level Level 1

Contact resistance	0.67 mΩ
--------------------	---------

Double-level terminal block - PTTB 4



3211786

<https://www.phoenixcontact.com/nl/producten/3211786>

Ex level Level 2

Contact resistance	0.49 mΩ
--------------------	---------

Dimensions

Width	6.2 mm
End cover width	2.2 mm
Height NS 35/15	55 mm
Height NS 35/7,5	47.5 mm
Height	1.87 "
Length	83.5 mm

Material specifications

Color	gray
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

Result	Test passed
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

Double-level terminal block - PTTB 4



3211786

<https://www.phoenixcontact.com/nl/producten/3211786>

Mechanical strength

Result	Test passed
--------	-------------

Attachment on the carrier

DIN rail/fixing support	NS 35
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.2 mm ² / 0.2 kg
	4 mm ² / 0.9 kg
	6 mm ² / 1.4 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):2008-03
Spectrum	Service 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

Pulse shape	Semi-sinusoidal
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 ... 105 °C (max. short-term operating temperature RTI Elec.)
---------------------------------	---

Double-level terminal block - PTTB 4



3211786

<https://www.phoenixcontact.com/nl/producten/3211786>

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 (storage/transport)	30 % ... 70 %

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
----------------------------------	---------------

Mounting

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

Double-level terminal block - PTTB 4



3211786

<https://www.phoenixcontact.com/nl/producten/3211786>

Drawings

Circuit diagram



Phoenix Contact 2021 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT B.V.
Hengelder 56 6902 PA Zevenaar
Postbus 246 6900 AE Zevenaar
(0316) 59 17 20
sales@phoenixcontact.nl