

PTTB 2,5 - Double-level terminal block



3210567

<https://www.phoenixcontact.com/us/products/3210567>

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: 22 A, 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 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
- Tested for railway applications

Commercial data

Item number	3210567
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE22
Product key	BE2214
GTIN	4046356418980
Weight per piece (including packing)	10.74 g
Weight per piece (excluding packing)	10.028 g
Customs tariff number	85369010
Country of origin	PL

PTTB 2,5 - Double-level terminal block



3210567

<https://www.phoenixcontact.com/us/products/3210567>

Technical data

Product properties

Product type	Multi-level terminal block
Product family	PT
Area of application	Railway 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	0.77 W

Connection data

Number of connections per level	2
Nominal cross section	2.5 mm ²
Rated cross section AWG	12

1st and 2nd level

Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 60947-7-1
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
Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve)	0.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ²
Nominal current	22 A (with 2.5 mm ² conductor connection cross section)
Maximum load current	26 A (with 4 mm ² conductor cross section, rigid)
Nominal voltage	500 V
Nominal cross section	2.5 mm ²

1st and 2nd level Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm ² ... 4 mm ²
-------------------------------	--

PTTB 2,5 - Double-level terminal block



3210567

<https://www.phoenixcontact.com/us/products/3210567>

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

Ex data

Rated data (ATEX/IECEx)

Identification	Ex II 2 G Ex eb IIC Gb
Operating temperature range (1)	-60 °C ... 85 °C
Operating temperature range (2)	-40 °C ... 110 °C
Ex-certified accessories	3211634 D-PTTB 2,5 3030747 ATP-STTB 4 1204517 SZF 1-0,6X3,5 3022276 CLIPFIX 35-5 3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-5 / 3030161 Plug-in bridge / FBS 3-5 / 3030174 Plug-in bridge / FBS 4-5 / 3030187 Plug-in bridge / FBS 5-5 / 3030190 Plug-in bridge / FBS 10-5 / 3030213 Plug-in bridge / FBS 20-5 / 3030226 Plug-in bridge / FBS 50-5 / 3038930
Bridge data	16 A / 2.5 mm²
Ex temperature increase	40 K (18 A / 2.5 mm²)
for bridging with bridge	440 V
- At bridging between non-adjacent terminal blocks	352 V
- At cut-to-length bridging	166 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
output	(Permanent)

Ex level General

Rated voltage	440 V
Rated current	18 A
Maximum load current	22 A

Ex connection data General

Nominal cross section	2.5 mm²
Rated cross section AWG	14
Connection capacity rigid	0.14 mm² ... 4 mm²
Connection capacity AWG	26 ... 12
Connection capacity flexible	0.14 mm² ... 2.5 mm²
Connection capacity AWG	26 ... 14
output	(Permanent)

Ex level Level 1

PTTB 2,5 - Double-level terminal block



3210567

<https://www.phoenixcontact.com/us/products/3210567>

Contact resistance	1.2 mΩ
output	(Permanent)

Ex level Level 2

Contact resistance	0.92 mΩ
--------------------	---------

Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	68 mm
Depth	45.8 mm
Depth on NS 35/7,5	47.5 mm
Depth on NS 35/15	55 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	7.3 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
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

PTTB 2,5 - Double-level terminal block



3210567

<https://www.phoenixcontact.com/us/products/3210567>

Test voltage setpoint	1.89 kV
Result	Test passed

Mechanical properties

Mechanical data

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

Mechanical tests

Mechanical strength

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

Attachment on the carrier

DIN rail/fixing support	NS 35
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
	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):2008-03
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):2008-03
---------------	-------------------------------------

PTTB 2,5 - Double-level terminal block



3210567

<https://www.phoenixcontact.com/us/products/3210567>

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 %

Standards and regulations

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

Mounting

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

PTTB 2,5 - Double-level terminal block

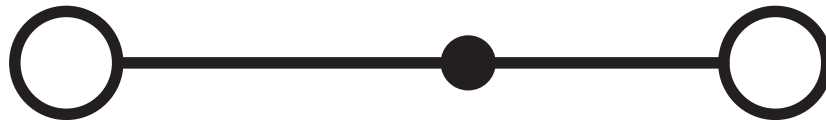


3210567

<https://www.phoenixcontact.com/us/products/3210567>

Drawings

Circuit diagram



PTTB 2,5 - Double-level terminal block



3210567

<https://www.phoenixcontact.com/us/products/3210567>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3210567>

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

CB IECEE CB Scheme Approval ID: DE1-66980				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	500 V	22 A	-	0.2 - 2.5

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

cULus 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	-
C	300 V	20 A	26 - 12	-
D	600 V	5 A	26 - 12	-

LR Approval ID: LR2371832TA				
--------------------------------	--	--	--	--

ClassNK Approval ID: 22ME0007				
----------------------------------	--	--	--	--

BV				
----	--	--	--	--

PTTB 2,5 - Double-level terminal block



3210567

<https://www.phoenixcontact.com/us/products/3210567>

Approval ID: 25278/C1 BV



VDE Zeichengenehmigung

Approval ID: 40032222

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	500 V	22 A	-	0.2 - 2.5

ABS

Approval ID: 21-2192245-PDA



NK

Approval ID: 14ME0912

DNV

Approval ID: TAE000010T



EAC Ex

Approval ID: RU C-DE.AB72.B.02351



IECEx

Approval ID: IECExPTB10.0021U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Only flexible conductors	440 V	18 A	-	0.14 - 2.5
Only rigid conductors	440 V	22 A	-	0.14 - 4



ATEX

Approval ID: PTB09ATEX1111U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Only flexible conductors	440 V	18 A	-	0.14 - 2.5
Only rigid conductors	440 V	22 A	-	0.14 - 4



CCC

PTTB 2,5 - Double-level terminal block



3210567

<https://www.phoenixcontact.com/us/products/3210567>

Approval ID: 2020322313000631



UKCA-EX

Approval ID: CSAE 22UKEX1096U



EAC Ex

Approval ID: KZ 7500525010101950

PTTB 2,5 - Double-level terminal block



3210567

<https://www.phoenixcontact.com/us/products/3210567>

Classifications

ECLASS

ECLASS-13.0	27250102
ECLASS-15.0	27250102

ETIM

ETIM 9.0	EC000897
----------	----------

UNSPSC

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

PTTB 2,5 - Double-level terminal block



3210567
<https://www.phoenixcontact.com/us/products/3210567>

Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%
EF3.0 Climate Change	
CO2e kg	0.104 kg CO2e

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