

# PTTB 4 - Double-level terminal block



3211786

<https://www.phoenixcontact.com/us/products/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 mm<sup>2</sup>, cross section: 0.2 mm<sup>2</sup> - 6 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, color: gray



## Your advantages

- Time-saving conductor connection thanks to tool-free direct-connection technology
- Convenient plugging with lower insertion force
- High conductor pull-out forces due to the spring design
- Vibration-resistant and maintenance-free conductor connection
- Full flexibility thanks to the standardized CLIPLINE complete bridging, marking, and testing accessories
- High space savings thanks to the compact integration of two separate circuits in a single terminal block
- Optimized for manual and automated wiring

## Commercial data

Item number	3211786
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE22
Product key	BE2214
GTIN	4046356482707
Weight per piece (including packing)	16.29 g
Weight per piece (excluding packing)	15.2 g
Customs tariff number	85369010
Country of origin	CN

# PTTB 4 - Double-level terminal block



3211786

<https://www.phoenixcontact.com/us/products/3211786>

## Technical data

### Product properties

Product type	Multi-level terminal block
Product family	PT
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Number of positions	2
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 <sup>2</sup>

### 1st and 2nd level

Connection method	Push-in connection
Stripping length	10 mm ... 12 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.25 mm <sup>2</sup> ... 4 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup>
Nominal cross section	4 mm <sup>2</sup>
Nominal current	28 A (with 4 mm <sup>2</sup> conductor cross-section)
Maximum load current	32 A (with 6 mm <sup>2</sup> conductor cross-section, rigid)
Nominal voltage	500 V

1st and 2nd level Connection cross sections directly pluggable

# PTTB 4 - Double-level terminal block



3211786

<https://www.phoenixcontact.com/us/products/3211786>

Conductor cross-section rigid	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>

## Ex data

### Rated data (ATEX/IECEX)

Identification	⊕ 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	3030462 D-STTB 4 3030747 ATP-STTB 4 1204517 SZF 1-0,6X3,5 3022276 CLIPFIX 35-5 3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-6 / 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 <sup>2</sup>
Ex temperature increase	40 K (23 A / 4 mm <sup>2</sup> )
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
output	(Permanent)

### Ex level General

Rated voltage	440 V
Rated current	23 A (4 mm <sup>2</sup> )
Maximum load current	27 A (6 mm <sup>2</sup> )

### Ex connection data General

Nominal cross section	4 mm <sup>2</sup>
Rated cross section AWG	12
Connection capacity rigid	0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Connection capacity AWG	24 ... 10
Connection capacity flexible	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Connection capacity AWG	24 ... 12
output	(Permanent)

# PTTB 4 - Double-level terminal block



3211786

<https://www.phoenixcontact.com/us/products/3211786>

## Ex level Level 1

Contact resistance	0.67 mΩ
output	(Permanent)

## Ex level Level 2

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

## Dimensions

Width	6.2 mm
End cover width	2.2 mm
Height	83.5 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

Result	Test passed
Short-time withstand current 4 mm <sup>2</sup>	0.48 kA
Result	Test passed

### Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

## Mechanical properties

### Mechanical data

# PTTB 4 - Double-level terminal block



3211786

<https://www.phoenixcontact.com/us/products/3211786>

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

## Mechanical tests

### Mechanical strength

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

### Attachment on the carrier

DIN rail/fixing support	NS 35
Result	Test passed

### Test for conductor damage and slacking

Rotation speed	10 rpm
Revolutions	135
Conductor cross-section/weight	0.2 mm <sup>2</sup> / 0.2 kg
	4 mm <sup>2</sup> / 0.9 kg
	6 mm <sup>2</sup> / 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	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 <sup>2</sup> ) <sup>2</sup> /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

# PTTB 4 - Double-level terminal block



3211786

<https://www.phoenixcontact.com/us/products/3211786>

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 4 - Double-level terminal block

3211786

<https://www.phoenixcontact.com/us/products/3211786>

## Drawings

Circuit diagram



# PTTB 4 - Double-level terminal block





3211786


<https://www.phoenixcontact.com/us/products/3211786>

## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3211786>


 <b>CSA</b> Approval ID: 158887				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	300 V	30 A	24 - 10	-
C	300 V	30 A	24 - 10	-
D	600 V	5 A	24 - 10	-

 <b>IECEE CB Scheme</b> Approval ID: DE1-65853				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	500 V	28 A	-	0.2 - 4

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	300 V	28 A	24 - 10	-
C	300 V	28 A	24 - 10	-
D	600 V	5 A	24 - 10	-

 <b>LR</b> Approval ID: LR2371832TA				
---	--	--	--	--

 <b>NK</b> Approval ID: 22ME0007				
--	--	--	--	--

 <b>VDE Gutachten mit Fertigungsüberwachung</b> Approval ID: 40036696				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	500 V	28 A	-	0.2 - 4

# PTTB 4 - Double-level terminal block



3211786

<https://www.phoenixcontact.com/us/products/3211786>



**PRs**

Approval ID: TE/2107/880590/21

**ABS**

Approval ID: 21-2192245-PDA

**DNV**

Approval ID: TAE000010T



**EAC Ex**

Approval ID: KZ 7500525010101950



**IEC Ex**

Approval ID: IECExPTB10.0046U

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine				
Only flexible conductors	440 V	23 A	-	0.2 - 4
Only rigid conductors	440 V	27 A	-	0.2 - 6



**ATEX**

Approval ID: PTB09ATEX1112U

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine				
Only flexible conductors	440 V	23 A	-	0.2 - 4
Only rigid conductors	440 V	27 A	-	0.2 - 6



**CCC**

Approval ID: 2020322313000631



**UKCA-EX**

Approval ID: CSAE 22UKEX1100U

# PTTB 4 - Double-level terminal block



3211786

<https://www.phoenixcontact.com/us/products/3211786>

## Classifications

### ECLASS

ECLASS-13.0	27250102
ECLASS-15.0	27250102

### ETIM

ETIM 10.0	EC000897
-----------	----------

### UNSPSC

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

# PTTB 4 - Double-level terminal block



3211786

<https://www.phoenixcontact.com/us/products/3211786>

## 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%
-------------------------------------	----------------------------

### EF3.1 Climate Change

CO2e kg	0.217 kg CO2e
---------	---------------

Phoenix Contact 2026 © - 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](mailto:info@phoenixcon.com)