

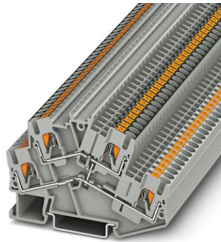
# PTTBS 2,5-PV - Double-level terminal block



3210211

<https://www.phoenixcontact.com/us/products/3210211>

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, with equipotential bonder, nom. voltage: 500 V, nominal current: 22 A, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 4 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
- Maximum efficiency in the smallest space - thanks to integrated level bridging, the connections are connected across levels
- Optimized for manual and automated wiring

## Commercial data

Item number	3210211
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE22
Product key	BE2214
GTIN	4046356330107
Weight per piece (including packing)	12.966 g
Weight per piece (excluding packing)	12.966 g
Customs tariff number	85369010
Country of origin	CN

# PTTBS 2,5-PV - Double-level terminal block



3210211

<https://www.phoenixcontact.com/us/products/3210211>

## Technical data

### Product properties

Product type	Multi-level terminal block
Product family	PTS
Number of connections	4
Number of rows	2
Potentials	1

### 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 <sup>2</sup>

#### 1 level

Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	26 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup>
Nominal cross section	2.5 mm <sup>2</sup>
Nominal current	22 A
Maximum load current	26 A (with 4 mm <sup>2</sup> conductor cross-section, rigid)
Nominal voltage	500 V

#### 1 level Connection cross sections directly pluggable

Conductor cross-section rigid	0.34 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

## Ex data

# PTTBS 2,5-PV - Double-level terminal block



3210211

<https://www.phoenixcontact.com/us/products/3210211>

## Rated data (ATEX/IECEX)

Identification	Ⓜ II 2 GD Ex eb IIC Gb
Operating temperature range (1)	-60 °C ... 85 °C
Operating temperature range (2)	-40 °C ... 110 °C
Ex-certified accessories	3038503 D-STTBS 2,5 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
Bridge data	16.5 A / 2.5 mm <sup>2</sup>
Ex temperature increase	40 K (20 A / 2.5 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	137.5 V
- At cut-to-length bridging with cover	352 V
Rated insulation voltage	400 V
output	(Permanent)

## Ex level General

Rated voltage	440 V
Rated current	20 A
Maximum load current	23 A

## Ex connection data General

Nominal cross section	2.5 mm <sup>2</sup>
Rated cross section AWG	14
Connection capacity rigid	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Connection capacity AWG	26 ... 12
Connection capacity flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Connection capacity AWG	26 ... 14
output	(Permanent)

## Ex level Level 1

Contact resistance	1.3 mΩ
output	(Permanent)

## Ex level Level 2

Contact resistance	1.3 mΩ
--------------------	--------

# PTTBS 2,5-PV - Double-level terminal block



3210211

<https://www.phoenixcontact.com/us/products/3210211>

output	(Permanent)
--------	-------------

Ex level PV connection

Contact resistance	1.2 mΩ
--------------------	--------

## 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))	125 °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)	27,5 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 $\leq 45$ K
Result	Test passed
Short-time withstand current 2.5 mm <sup>2</sup>	0.3 kA
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

# PTTBS 2,5-PV - Double-level terminal block



3210211

<https://www.phoenixcontact.com/us/products/3210211>

## 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 <sup>2</sup> / 0.2 kg
	2.5 mm <sup>2</sup> / 0.7 kg
	4 mm <sup>2</sup> / 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 <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

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	30g

# PTTBS 2,5-PV - Double-level terminal block



3210211

<https://www.phoenixcontact.com/us/products/3210211>

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

# PTTBS 2,5-PV - Double-level terminal block

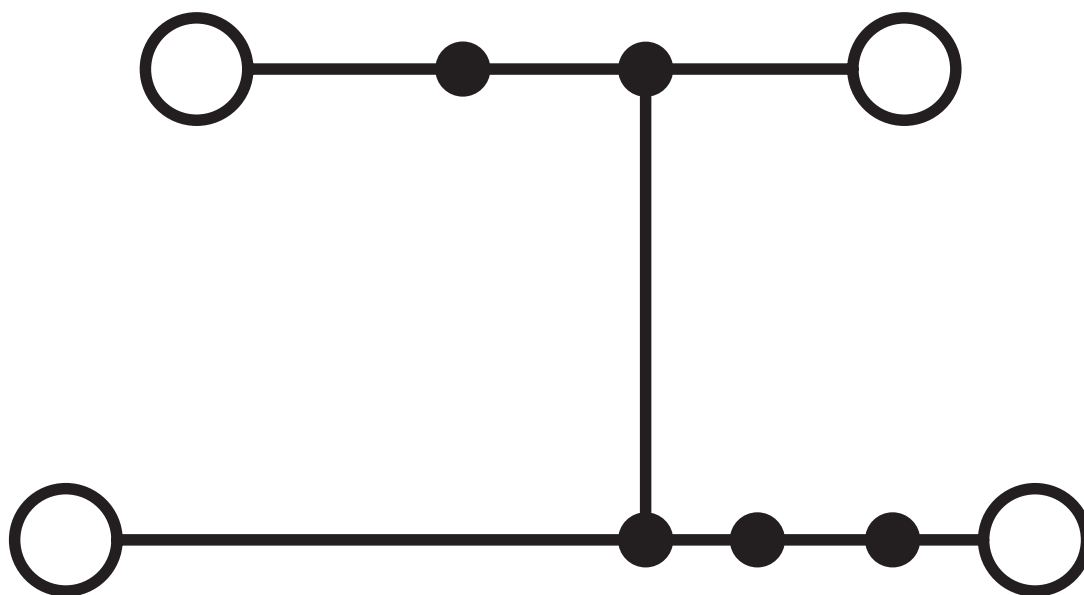


3210211

<https://www.phoenixcontact.com/us/products/3210211>

## Drawings

Circuit diagram



# PTTBS 2,5-PV - Double-level terminal block




3210211

<https://www.phoenixcontact.com/us/products/3210211>


## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3210211>

 <b>CSA</b> Approval ID: 158887				
	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	-


 <b>IECEE CB Scheme</b> 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

 <b>EAC</b> Approval ID: RU C-DE.BL08.B.00644				
---	--	--	--	--

 <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	20 A	24 - 12	-
C	300 V	20 A	24 - 12	-

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

 <b>NK</b> Approval ID: 14ME0912				
--	--	--	--	--

 <b>VDE Zeichengenehmigung</b> Approval ID: 40032222				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$

# PTTBS 2,5-PV - Double-level terminal block



3210211

<https://www.phoenixcontact.com/us/products/3210211>

keine	500 V	22 A	-	0.2 - 2.5
-------	-------	------	---	-----------

## ABS

Approval ID: 21-2192245-PDA

## DNV

Approval ID: TAE000010T



## cUL Recognized

Approval ID: E192998

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	300 V	20 A	24 - 12	-



## IECEx

Approval ID: IECEx SEV13.0005U



## UL Recognized

Approval ID: E192998

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	300 V	20 A	24 - 12	-



## ATEX

Approval ID: SEV13ATEX0159U



## CCC

Approval ID: 2020322313000631



## EAC Ex

Approval ID: KZ 7500525010101950

# PTTBS 2,5-PV - Double-level terminal block



3210211

<https://www.phoenixcontact.com/us/products/3210211>

## Classifications

### ECLASS

ECLASS-13.0	27250102
ECLASS-15.0	27250102

### ETIM

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

### UNSPSC

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

# PTTBS 2,5-PV - Double-level terminal block



3210211

<https://www.phoenixcontact.com/us/products/3210211>

## 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	0.06 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)