

# PTTBS 1,5/S-PV - Double-level terminal block



3214686

<https://www.phoenixcontact.com/us/products/3214686>

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: 16 A, connection method: Push-in connection, 1st and 2nd level, Rated cross section: 1.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 1.5 mm<sup>2</sup>, 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
- In addition to the testing option in the double function shaft, all terminal blocks provide an additional test pick-off
- The compact design and front connection enable wiring in a confined space

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 3214686       |
| Packing unit                         | 50 pc         |
| Minimum order quantity               | 50 pc         |
| Sales key                            | BE22          |
| Product key                          | BE2214        |
| GTIN                                 | 4046356616164 |
| Weight per piece (including packing) | 8.254 g       |
| Weight per piece (excluding packing) | 8.1 g         |
| Customs tariff number                | 85369010      |
| Country of origin                    | PL            |

# PTTBS 1,5/S-PV - Double-level terminal block



3214686

<https://www.phoenixcontact.com/us/products/3214686>

## 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 |
|----------------------|-----|

### Electrical properties

|                                                 |        |
|-------------------------------------------------|--------|
| Rated surge voltage                             | 6 kV   |
| Maximum power dissipation for nominal condition | 0.56 W |

### Connection data

|                                 |                     |
|---------------------------------|---------------------|
| Number of connections per level | 2                   |
| Nominal cross section           | 1.5 mm <sup>2</sup> |

#### 1st and 2nd level

|                                                                   |                                                                                                              |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Connection method                                                 | Push-in connection                                                                                           |
| Stripping length                                                  | 8 mm ... 10 mm                                                                                               |
| Internal cylindrical gage                                         | A1 / B1                                                                                                      |
| Connection in acc. with standard                                  | IEC 60947-7-1                                                                                                |
| Conductor cross-section rigid                                     | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>                                                                 |
| Cross section AWG                                                 | 26 ... 16 (converted acc. to IEC)                                                                            |
| Conductor cross-section flexible                                  | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>                                                                 |
| Conductor cross-section, flexible [AWG]                           | 26 ... 16 (converted acc. to IEC)                                                                            |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>                                                                 |
| Flexible conductor cross-section (ferrule with plastic sleeve)    | 0.14 mm <sup>2</sup> ... 1 mm <sup>2</sup> (Using the AI-S 1-8 TQ ferrule, Item No. 1200293, is recommended) |
| Nominal current                                                   | 16 A                                                                                                         |
| Maximum load current                                              | 16 A (The maximum load current must not be exceeded by the total current of all connected conductors.)       |
| Nominal voltage                                                   | 500 V                                                                                                        |
| Nominal cross section                                             | 1.5 mm <sup>2</sup>                                                                                          |

#### 1st and 2nd level Connection cross sections directly pluggable

|                                                                   |                                              |
|-------------------------------------------------------------------|----------------------------------------------|
| Conductor cross-section rigid                                     | 0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| Flexible conductor cross-section (ferrule with plastic sleeve)    | 0.34 mm <sup>2</sup> ... 1 mm <sup>2</sup>   |

## Ex data

### Rated data (ATEX/IECEx)

# PTTBS 1,5/S-PV - Double-level terminal block



3214686

<https://www.phoenixcontact.com/us/products/3214686>

|                                                                          |                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Identification                                                           | Ex 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                                                 | 3214699 D-PTTBS 1,5/S<br>3030747 ATP-STTB 4<br>1204504 SZF 0-0,4X2,5<br>3022276 CLIPFIX 35-5<br>3022218 CLIPFIX 35                                                                                                                             |
| List of bridges                                                          | Plug-in bridge / FBS 2-3,5 / 3213014<br>Plug-in bridge / FBS 3-3,5 / 3213027<br>Plug-in bridge / FBS 4-3,5 / 3213030<br>Plug-in bridge / FBS 5-3,5 / 3213043<br>Plug-in bridge / FBS 10-3,5 / 3213056<br>Plug-in bridge / FBS 20-3,5 / 3213069 |
| Bridge data                                                              | 13 A / 1.5 mm <sup>2</sup>                                                                                                                                                                                                                     |
| Ex temperature increase                                                  | 40 K (17.6 A / 1.5 mm <sup>2</sup> )                                                                                                                                                                                                           |
| for bridging with bridge                                                 | 352 V                                                                                                                                                                                                                                          |
| - At bridging between non-adjacent terminal blocks                       | 220 V                                                                                                                                                                                                                                          |
| - At bridging between non-adjacent terminal blocks via PE terminal block | 220 V                                                                                                                                                                                                                                          |
| Rated insulation voltage                                                 | 320 V                                                                                                                                                                                                                                          |
| output                                                                   | (Permanent)                                                                                                                                                                                                                                    |

## Ex level General

|                      |        |
|----------------------|--------|
| Rated voltage        | 352 V  |
| Rated current        | 13.5 A |
| Maximum load current | 13.5 A |

## Ex connection data General

|                              |                                              |
|------------------------------|----------------------------------------------|
| Nominal cross section        | 1.5 mm <sup>2</sup>                          |
| Rated cross section AWG      | 16                                           |
| Connection capacity rigid    | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| Connection capacity AWG      | 26 ... 16                                    |
| Connection capacity flexible | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| Connection capacity AWG      | 26 ... 16                                    |
| output                       | (Permanent)                                  |

## Ex level Level 1

|                    |             |
|--------------------|-------------|
| Contact resistance | 1.7 mΩ      |
| output             | (Permanent) |

## Ex level Level 2

|                    |             |
|--------------------|-------------|
| Contact resistance | 1.4 mΩ      |
| output             | (Permanent) |

## Ex level PV connection

# PTTBS 1,5/S-PV - Double-level terminal block



3214686

<https://www.phoenixcontact.com/us/products/3214686>

|                    |        |
|--------------------|--------|
| Contact resistance | 1.7 mΩ |
|--------------------|--------|

## Dimensions

|                    |         |
|--------------------|---------|
| Width              | 3.5 mm  |
| End cover width    | 2.2 mm  |
| Height             | 78.8 mm |
| Depth on NS 35/7,5 | 48.2 mm |
| Depth on NS 35/15  | 55.7 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 1.5 mm² | 0.18 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 |
|-----------------|-----|

# PTTBS 1,5/S-PV - Double-level terminal block



3214686

<https://www.phoenixcontact.com/us/products/3214686>

## 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 |
|                                | 1.5 mm <sup>2</sup> / 0.4 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

|                                |                                     |
|--------------------------------|-------------------------------------|
| Specification                  | DIN EN 50155 (VDE 0115-200):2008-03 |
| 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

# PTTBS 1,5/S-PV - Double-level terminal block



3214686

<https://www.phoenixcontact.com/us/products/3214686>

|                                          |                                                                                                                              |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 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

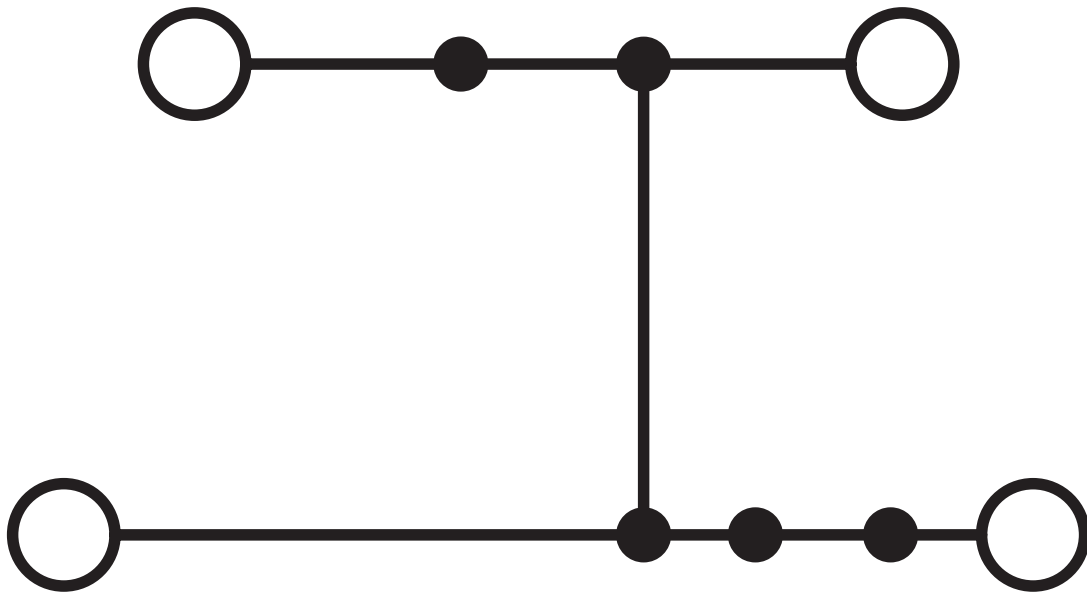
|                                  |               |
|----------------------------------|---------------|
| Connection in acc. with standard | IEC 60947-7-1 |
|----------------------------------|---------------|

## Mounting

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

## Drawings

Circuit diagram



# PTTBS 1,5/S-PV - Double-level terminal block



3214686

<https://www.phoenixcontact.com/us/products/3214686>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3214686>

### DNV

Approval ID: TAE000010T



### CSA

Approval ID: 13631

|   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| B |                       |                       |                   |                             |
|   | 300 V                 | 15 A                  | 26 - 14           | -                           |
| C |                       |                       |                   |                             |
|   | 300 V                 | 15 A                  | 26 - 14           | -                           |
| D |                       |                       |                   |                             |
|   | 600 V                 | 5 A                   | 26 - 14           | -                           |



### 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 $\text{mm}^2$ |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| B |                       |                       |                   |                             |
|   | 300 V                 | 15 A                  | 26 - 14           | -                           |
| C |                       |                       |                   |                             |
|   | 300 V                 | 15 A                  | 26 - 14           | -                           |
| D |                       |                       |                   |                             |
|   | 600 V                 | 5 A                   | 26 - 14           | -                           |



### LR

Approval ID: LR2371832TA



### NK

Approval ID: 14ME0912



### IECEx

Approval ID: IECEx SEV13.0005U



# PTTBS 1,5/S-PV - Double-level terminal block



3214686

<https://www.phoenixcontact.com/us/products/3214686>



**ATEX**

Approval ID: SEV13ATEX0159U



**CCC**

Approval ID: 2020322313000631



**EAC Ex**

Approval ID: KZ 7500525010101950

# PTTBS 1,5/S-PV - Double-level terminal block



3214686

<https://www.phoenixcontact.com/us/products/3214686>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27250102 |
| ECLASS-15.0 | 27250102 |

### ETIM

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

### UNSPSC

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

# PTTBS 1,5/S-PV - Double-level terminal block



3214686

<https://www.phoenixcontact.com/us/products/3214686>

## 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% |
|-------------------------------------|----------------------------|

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](mailto:info@phoenixcon.com)