

# PTV 4 BK - Feed-through terminal block



1291849

<https://www.phoenixcontact.com/de/produkte/1291849>

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.

---



Feed-through terminal block, nom. voltage: 1000 V, nominal current: 32 A, number of connections: 2, connection method: Push-in connection, 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: black

---

## Your advantages

- Clear wiring, thanks to lateral conductor entry
- The compact design enables wiring in a confined space
- The Push-in connection terminal blocks are characterized by the system features of the CLIPLINE complete system
- In addition to the testing option in the double function shaft, all terminal blocks provide an additional test pick-off

# PTV 4 BK - Feed-through terminal block



1291849

<https://www.phoenixcontact.com/de/produkte/1291849>

## Technical data

### Product properties

|                       |                             |
|-----------------------|-----------------------------|
| Product type          | Feed-through terminal block |
| Product family        | PTV                         |
| Area of application   | Railway industry            |
|                       | Machine building            |
|                       | Plant engineering           |
|                       | Process industry            |
| Number of connections | 2                           |
| Number of rows        | 1                           |
| Potentials            | 1                           |

### Insulation characteristics

|                      |     |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution  | 3   |

### Electrical properties

|                                                 |        |
|-------------------------------------------------|--------|
| Rated surge voltage                             | 8 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>                                            |
| Stripping length                                                                                                  | 9 mm ... 11 mm                                               |
| Internal cylindrical gage                                                                                         | A4                                                           |
|                                                                                                                   | B3                                                           |
| 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)                                                 | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>                    |
| Flexible conductor cross section (ferrule with plastic sleeve)                                                    | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>                    |
| Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve) | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                  |
| Nominal current                                                                                                   | 32 A                                                         |
| Maximum load current                                                                                              | 36 A (with 6 mm <sup>2</sup> conductor cross section, rigid) |
| Nominal voltage                                                                                                   | 1000 V                                                       |
| Nominal cross section                                                                                             | 4 mm <sup>2</sup>                                            |

### Connection cross sections directly pluggable

|                                                                   |                                            |
|-------------------------------------------------------------------|--------------------------------------------|
| Conductor cross section rigid                                     | 0.75 mm <sup>2</sup> ... 6 mm <sup>2</sup> |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 1.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>  |
| Flexible conductor cross section (ferrule with plastic sleeve)    | 1.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>  |

# PTV 4 BK - Feed-through terminal block



1291849

<https://www.phoenixcontact.com/de/produkte/1291849>

## Ex data

### Rated data (ATEX/IECEx)

|                                                    |                                     |
|----------------------------------------------------|-------------------------------------|
| Identification                                     | Ex II 2 G Ex eb IIC Gb              |
| Operating temperature range                        | -60 °C ... 110 °C                   |
| Ex-certified accessories                           | 1088746 D-PTV 2,5/4                 |
|                                                    | 3030721 ATP-ST 4                    |
|                                                    | 1204517 SZF 1-0,6X3,5               |
|                                                    | 3022276 CLIPFIX 35-5                |
| 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 |
|                                                    | Plug-in bridge / FBS 50-6 / 3032224 |
| Bridge data                                        | 27 A / 4 mm²                        |
| Ex temperature increase                            | 40 K (27,3 A / 4 mm²)               |
| Rated voltage                                      | 550 V                               |
| for bridging with bridge                           | 550 V                               |
| - At bridging between non-adjacent terminal blocks | 352 V                               |
| - At cut-to-length bridging                        | 275 V                               |
| - At cut-to-length bridging with cover             | 275 V                               |
| - At cut-to-length bridging with partition plate   | 550 V                               |
| Rated insulation voltage                           | 500 V                               |
| output                                             | (Permanent)                         |

### Ex level General

|                      |              |
|----------------------|--------------|
| Rated current        | 27 A (4 mm²) |
| Maximum load current | 31 A (6 mm²) |
| Contact resistance   | 0.5 mΩ       |

### Ex connection data General

|                              |                   |
|------------------------------|-------------------|
| Nominal cross section        | 4 mm²             |
| Rated cross section AWG      | 12                |
| Connection capacity rigid    | 0.2 mm² ... 6 mm² |
| Connection capacity AWG      | 24 ... 10         |
| Connection capacity flexible | 0.2 mm² ... 6 mm² |
| Connection capacity AWG      | 24 ... 10         |

## Dimensions

|                 |         |
|-----------------|---------|
| Width           | 6.2 mm  |
| End cover width | 2.2 mm  |
| Height          | 50.8 mm |
| Depth           | 35.3 mm |

# PTV 4 BK - Feed-through terminal block



1291849

<https://www.phoenixcontact.com/de/produkte/1291849>

|                    |         |
|--------------------|---------|
| Depth on NS 35/7,5 | 36.8 mm |
| Depth on NS 35/15  | 44.3 mm |

## Material specifications

|                                                                         |             |
|-------------------------------------------------------------------------|-------------|
| Color                                                                   | black       |
| 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 | 2.2 kV      |
| Result                | Test passed |

## Mechanical properties

### Mechanical data

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

## Mechanical tests

### Mechanical strength

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

### Attachment on the carrier

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

### Test for conductor damage and slackening

|                |        |
|----------------|--------|
| Rotation speed | 10 rpm |
| Revolutions    | 135    |

# PTV 4 BK - Feed-through terminal block



1291849

<https://www.phoenixcontact.com/de/produkte/1291849>

|                                |                              |
|--------------------------------|------------------------------|
| 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):2018-05            |
| 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 <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                    | 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, no longer than 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

# PTV 4 BK - Feed-through terminal block



1291849

<https://www.phoenixcontact.com/de/produkte/1291849>

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

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT Deutschland GmbH

Flachmarktstraße 8

D-32825 Blomberg

+49 52 35/3-1 20 00

[info@phoenixcontact.de](mailto:info@phoenixcontact.de)