

# PTV 6-QUATTRO - Feed-through terminal block



1116871

<https://www.phoenixcontact.com/us/products/1116871>

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: 41 A, number of connections: 4, number of positions: 1, connection method: Push-in connection, Rated cross section: 6 mm<sup>2</sup>, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, color: gray

## 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

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1116871       |
| Packing unit                         | 50 pc         |
| Minimum order quantity               | 50 pc         |
| Sales key                            | BE23          |
| Product key                          | BE2313        |
| GTIN                                 | 4063151043902 |
| Weight per piece (including packing) | 24.9 g        |
| Weight per piece (excluding packing) | 25.14 g       |
| Customs tariff number                | 85369010      |
| Country of origin                    | CN            |

# PTV 6-QUATTRO - Feed-through terminal block



1116871

<https://www.phoenixcontact.com/us/products/1116871>

## Technical data

### Notes

#### General

|      |                                                                                              |
|------|----------------------------------------------------------------------------------------------|
| Note | The max. load current must not be exceeded by the total current of all connected conductors. |
|------|----------------------------------------------------------------------------------------------|

### Product properties

|                       |                             |
|-----------------------|-----------------------------|
| Product type          | Feed-through terminal block |
| Product family        | PTV                         |
| Area of application   | Railway industry            |
|                       | Machine building            |
|                       | Plant engineering           |
|                       | Process industry            |
| Number of positions   | 1                           |
| Number of connections | 4                           |
| Number of rows        | 1                           |

#### Insulation characteristics

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

### Electrical properties

|                                                 |        |
|-------------------------------------------------|--------|
| Rated surge voltage                             | 8 kV   |
| Maximum power dissipation for nominal condition | 1.31 W |

### Connection data

|                                                                                                                   |                                                               |
|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Number of connections per level                                                                                   | 4                                                             |
| Nominal cross section                                                                                             | 6 mm <sup>2</sup>                                             |
| Stripping length                                                                                                  | 10 mm ... 12 mm                                               |
| Internal cylindrical gage                                                                                         | A5                                                            |
| Connection in acc. with standard                                                                                  | IEC 60947-7-1                                                 |
| Conductor cross section rigid                                                                                     | 0.5 mm <sup>2</sup> ... 10 mm <sup>2</sup>                    |
| Cross section AWG                                                                                                 | 20 ... 8 (converted acc. to IEC)                              |
| Conductor cross section flexible                                                                                  | 0.5 mm <sup>2</sup> ... 10 mm <sup>2</sup>                    |
| Conductor cross section, flexible [AWG]                                                                           | 20 ... 8 (converted acc. to IEC)                              |
| Conductor cross-section flexible (ferrule without plastic sleeve)                                                 | 0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>                     |
| Flexible conductor cross section (ferrule with plastic sleeve)                                                    | 0.5 mm <sup>2</sup> ... 6 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> ... 4 mm <sup>2</sup>                     |
| Nominal current                                                                                                   | 41 A                                                          |
| Maximum load current                                                                                              | 52 A (with 10 mm <sup>2</sup> conductor cross section, rigid) |
| Nominal voltage                                                                                                   | 1000 V                                                        |
| Nominal cross section                                                                                             | 6 mm <sup>2</sup>                                             |

# PTV 6-QUATTRO - Feed-through terminal block



1116871

<https://www.phoenixcontact.com/us/products/1116871>

## Connection cross sections directly pluggable

|                                                                   |                                  |
|-------------------------------------------------------------------|----------------------------------|
| Conductor cross section rigid                                     | 1.5 mm² ... 10 mm²               |
| Conductor cross section, rigid [AWG]                              | 16 ... 8 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 4 mm² ... 6 mm²                  |
| Flexible conductor cross section (ferrule with plastic sleeve)    | 2.5 mm² ... 6 mm²                |

## 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                                                 | 1180930 D-PTV 6-QUATTRO             |
|                                                                          | 1182214 DS-PTV 6                    |
|                                                                          | 3022276 CLIPFIX 35-5                |
|                                                                          | 1212602 SZS 0,6X3,5 VDE             |
| List of bridges                                                          | Plug-in bridge / FBS 2-8 / 3030284  |
|                                                                          | Plug-in bridge / FBS 3-8 / 3030297  |
|                                                                          | Plug-in bridge / FBS 4-8 / 3030307  |
|                                                                          | Plug-in bridge / FBS 5-8 / 3030310  |
|                                                                          | Plug-in bridge / FBS 6-8 / 3032470  |
|                                                                          | Plug-in bridge / FBS 10-8 / 3030323 |
| Bridge data                                                              | 36 A (6 mm²)                        |
| Ex temperature increase                                                  | 40 K (35 A/6 mm²)                   |
| Rated voltage                                                            | 550 V                               |
| for bridging with bridge                                                 | 550 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                                   | 275 V                               |
| Rated insulation voltage                                                 | 500 V                               |
| output                                                                   | (Permanent)                         |

### Ex level General

|                      |               |
|----------------------|---------------|
| Rated current        | 35 A (6 mm²)  |
| Maximum load current | 45 A (10 mm²) |
| Contact resistance   | 0.7 mΩ        |

### Ex connection data General

|                              |                    |
|------------------------------|--------------------|
| Nominal cross section        | 6 mm²              |
| Rated cross section AWG      | 10                 |
| Connection capacity rigid    | 0.5 mm² ... 10 mm² |
| Connection capacity AWG      | 20 ... 8           |
| Connection capacity flexible | 0.5 mm² ... 10 mm² |
| Connection capacity AWG      | 20 ... 8           |

# PTV 6-QUATTRO - Feed-through terminal block



1116871

<https://www.phoenixcontact.com/us/products/1116871>

## Dimensions

|                    |         |
|--------------------|---------|
| Width              | 8.2 mm  |
| End cover width    | 2.2 mm  |
| Height             | 84.7 mm |
| Depth              | 57.6 mm |
| Depth on NS 35/7,5 | 59.1 mm |
| Depth on NS 35/15  | 66.6 mm |

## Material specifications

|                                                                         |                 |
|-------------------------------------------------------------------------|-----------------|
| Color                                                                   | gray (RAL 7042) |
| Flammability rating according to UL 94                                  | V0              |
| Insulating material group                                               | I               |
| Insulating material                                                     | PA 6.6          |
| 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 | 8 kV        |
| Result                | Test passed |

### Temperature-rise test

|                                                |                                     |
|------------------------------------------------|-------------------------------------|
| Requirement temperature-rise test              | Increase in temperature $\leq 45$ K |
| Result                                         | Test passed                         |
| Short-time withstand current 6 mm <sup>2</sup> | 0.72 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 |
|-----------------|-----|

# PTV 6-QUATTRO - Feed-through terminal block



1116871

<https://www.phoenixcontact.com/us/products/1116871>

## 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 slackening

|                                |                              |
|--------------------------------|------------------------------|
| Rotation speed                 | 10 rpm                       |
| Revolutions                    | 135                          |
| Conductor cross section/weight | 0.5 mm <sup>2</sup> / 0.3 kg |
|                                | 6 mm <sup>2</sup> / 1.4 kg   |
|                                | 10 mm <sup>2</sup> / 2 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               | 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):2018-05 |
| 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

# PTV 6-QUATTRO - Feed-through terminal block



1116871

<https://www.phoenixcontact.com/us/products/1116871>

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

# PTV 6-QUATTRO - Feed-through terminal block

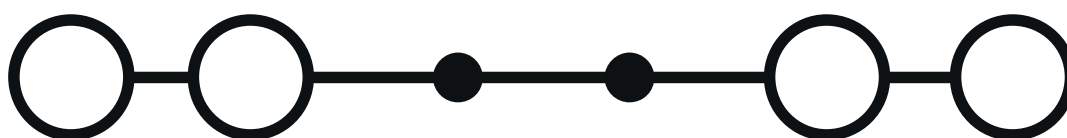


1116871

<https://www.phoenixcontact.com/us/products/1116871>

## Drawings

Circuit diagram



# PTV 6-QUATTRO - Feed-through terminal block



1116871

<https://www.phoenixcontact.com/us/products/1116871>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1116871>

|                                                                                   |                                                  |                       |                   |                             |
|-----------------------------------------------------------------------------------|--------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>IECEE CB Scheme</b><br>Approval ID: DE1-67001 |                       |                   |                             |
|                                                                                   | Nominal voltage $U_N$                            | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                   | 1000 V                                           | 41 A                  | -                 | 0.5 - 10                    |

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

|                                                                                   |                                                |
|-----------------------------------------------------------------------------------|------------------------------------------------|
|  | <b>cULus Recognized</b><br>Approval ID: E60425 |
|-----------------------------------------------------------------------------------|------------------------------------------------|

|                                                                                     |                                                          |                       |                   |                             |
|-------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>VDE approval of drawings</b><br>Approval ID: 40056061 |                       |                   |                             |
|                                                                                     | Nominal voltage $U_N$                                    | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                     | 1000 V                                                   | 41 A                  | -                 | 0.5 - 10                    |

|                                                                                     |                                                |
|-------------------------------------------------------------------------------------|------------------------------------------------|
|  | <b>cULus Recognized</b><br>Approval ID: E60425 |
|-------------------------------------------------------------------------------------|------------------------------------------------|

|                                                                                     |                                             |
|-------------------------------------------------------------------------------------|---------------------------------------------|
|  | <b>CCC</b><br>Approval ID: 2021122313114374 |
|-------------------------------------------------------------------------------------|---------------------------------------------|

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
|  | <b>IECEx</b><br>Approval ID: IECExPTB20.0037U |
|-------------------------------------------------------------------------------------|-----------------------------------------------|

|                                                                                     |                                            |
|-------------------------------------------------------------------------------------|--------------------------------------------|
|  | <b>ATEX</b><br>Approval ID: PTB20ATEX1016U |
|-------------------------------------------------------------------------------------|--------------------------------------------|

|                                                                                     |                                                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------|
|  | <b>UKCA-EX</b><br>Approval ID: CSAE 22UKEX1099U |
|-------------------------------------------------------------------------------------|-------------------------------------------------|

|                                                                                     |                                                   |
|-------------------------------------------------------------------------------------|---------------------------------------------------|
|  | <b>EAC Ex</b><br>Approval ID: KZ 7500525010101950 |
|-------------------------------------------------------------------------------------|---------------------------------------------------|

# PTV 6-QUATTRO - Feed-through terminal block

1116871

<https://www.phoenixcontact.com/us/products/1116871>



# PTV 6-QUATTRO - Feed-through terminal block



1116871

<https://www.phoenixcontact.com/us/products/1116871>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27141120 |
| ECLASS-13.0 | 27250101 |

### ETIM

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

### UNSPSC

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

# PTV 6-QUATTRO - Feed-through terminal block



1116871  
<https://www.phoenixcontact.com/us/products/1116871>

## 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)