

# PT 2,5-QUATTRO-MT - Knife-disconnect terminal block



3210172

<https://www.phoenixcontact.com/au/products/3210172>

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.



Knife-disconnect terminal block, nom. voltage: 400 V, nominal current: 20 A, connection method: Push-in connection, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, mounting: 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
- The compact design and front connection enable wiring in a confined space
- In addition to the testing option in the double function shaft, all terminal blocks provide an additional test pick-off

## Commercial data

|                                      |                    |
|--------------------------------------|--------------------|
| Item number                          | 3210172            |
| Packing unit                         | 50 pc              |
| Minimum order quantity               | 50 pc              |
| Sales key                            | BE2231             |
| Product key                          | BE2231             |
| Catalog page                         | Page 79 (C-1-2019) |
| GTIN                                 | 4046356333610      |
| Weight per piece (including packing) | 11.25 g            |
| Weight per piece (excluding packing) | 10.582 g           |
| Customs tariff number                | 85369010           |
| Country of origin                    | PL                 |

# PT 2,5-QUATTRO-MT - Knife-disconnect terminal block



3210172

<https://www.phoenixcontact.com/au/products/3210172>

## Technical data

### Product properties

|                       |                           |
|-----------------------|---------------------------|
| Product type          | Disconnect terminal block |
| Product family        | PT                        |
| Number of positions   | 1                         |
| Number of connections | 4                         |
| Number of rows        | 1                         |
| 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                                                           | 4                                                            |
| Nominal cross section                                                                     | 2.5 mm <sup>2</sup>                                          |
| 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 current                                                                           | 20 A                                                         |
| Maximum load current                                                                      | 20 A (with 4 mm <sup>2</sup> conductor cross section, rigid) |
| Nominal voltage                                                                           | 400 V                                                        |
| Nominal cross section                                                                     | 2.5 mm <sup>2</sup>                                          |

### 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) | 0.5 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> |

### Dimensions

|                 |        |
|-----------------|--------|
| Width           | 5.2 mm |
| End cover width | 2.2 mm |

# PT 2,5-QUATTRO-MT - Knife-disconnect terminal block



3210172

<https://www.phoenixcontact.com/au/products/3210172>

|                    |         |
|--------------------|---------|
| Height             | 84 mm   |
| Depth on NS 35/7,5 | 36.5 mm |
| Depth on NS 35/15  | 44 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 1.5 mm <sup>2</sup> | 0.18 kA                             |
| Short-time withstand current 2.5 mm <sup>2</sup> | 0.3 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 |
|-----------------|-----|

## Mechanical tests

### Mechanical strength

# PT 2,5-QUATTRO-MT - Knife-disconnect terminal block



3210172

<https://www.phoenixcontact.com/au/products/3210172>

|        |             |
|--------|-------------|
| 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):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

|                                 |                                                                                                                              |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Ambient temperature (operation) | -60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.) |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------|

# PT 2,5-QUATTRO-MT - Knife-disconnect terminal block



3210172

<https://www.phoenixcontact.com/au/products/3210172>

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

# PT 2,5-QUATTRO-MT - Knife-disconnect terminal block

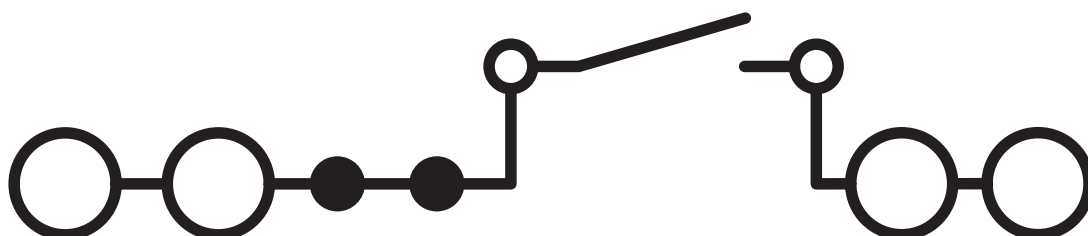


3210172

<https://www.phoenixcontact.com/au/products/3210172>

## Drawings

Circuit diagram



# PT 2,5-QUATTRO-MT - Knife-disconnect terminal block



3210172

<https://www.phoenixcontact.com/au/products/3210172>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/au/products/3210172>

### DNV

Approval ID: TAE000010T



### IECEE CB Scheme

Approval ID: DE1-65861

|  | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  | 400 V                 | 20 A                  | -                 | 0.2 - 2.5                   |



### 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 $\text{mm}^2$ |
|--------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| Use group B              |                       |                       |                   |                             |
| Only flexible conductors | 300 V                 | 20 A                  | 26 - 12           | -                           |
| Only rigid conductors    | 300 V                 | 16 A                  | 26 - 12           | -                           |
| Use group C              |                       |                       |                   |                             |
| Only flexible conductors | 300 V                 | 20 A                  | 26 - 12           | -                           |
| Only rigid conductors    | 300 V                 | 16 A                  | 26 - 12           | -                           |
| Use group D              |                       |                       |                   |                             |
|                          | 600 V                 | 5 A                   | 26 - 12           | -                           |



### LR

Approval ID: LR2371832TA



### NK

Approval ID: 14ME0912



### BV

Approval ID: 25278/C1 BV

# PT 2,5-QUATTRO-MT - Knife-disconnect terminal block



3210172  
<https://www.phoenixcontact.com/au/products/3210172>

|                                                                                   |                                                        |                                |                   |                               |
|-----------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------|-------------------|-------------------------------|
|  | <b>VDE Zeichengenehmigung</b><br>Approval ID: 40036792 |                                |                   |                               |
|                                                                                   | Nominal voltage U <sub>N</sub>                         | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|                                                                                   | 400 V                                                  | 20 A                           | -                 | 0.2 - 2.5                     |

|                                                                                   |                                               |
|-----------------------------------------------------------------------------------|-----------------------------------------------|
|  | <b>EAC</b><br>Approval ID: KZ7500651131219505 |
|-----------------------------------------------------------------------------------|-----------------------------------------------|

# PT 2,5-QUATTRO-MT - Knife-disconnect terminal block



3210172  
<https://www.phoenixcontact.com/au/products/3210172>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27250108 |
|-------------|----------|

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC000902 |
|----------|----------|

### UNSPSC

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

# PT 2,5-QUATTRO-MT - Knife-disconnect terminal block



3210172  
<https://www.phoenixcontact.com/au/products/3210172>

## 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%               |
| EF3.0 Climate Change                    |                                          |
| CO2e kg                                 | 0.082 kg CO2e                            |

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT PTY Ltd  
Unit 7, 2-8 South Street  
Rydalmere NSW 2116  
1300 786 411  
[customerservice@phoenixcontact.com.au](mailto:customerservice@phoenixcontact.com.au)