

# PT 16 N-PE - Protective conductor terminal block



3212147

<https://www.phoenixcontact.com/us/products/3212147>

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.



Protective conductor terminal block, number of connections: 2, connection method: Push-in connection, Rated cross section: 16 mm<sup>2</sup>, cross section: 0.5 mm<sup>2</sup> - 25 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, color: green-yellow

## Your advantages

- Time-saving conductor connection thanks to tool-free direct-connection technology
- Vibration-resistant and maintenance-free conductor connection
- Full flexibility thanks to the standardized CLIPLINE complete bridging, marking, and testing accessories
- Meet the requirements of DIN EN 60947-7-2 or IEC 60947-7-2 for protective conductor connections
- High level of safety thanks to the low-resistance connection to the ground potential via the top-hat rail
- Direct contacting with the DIN rail enables fast, error-free grounding without additional wiring effort.

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 3212147       |
| Packing unit                         | 50 pc         |
| Minimum order quantity               | 50 pc         |
| Sales key                            | BE22          |
| Product key                          | BE2221        |
| GTIN                                 | 4046356494847 |
| Weight per piece (including packing) | 43.2 g        |
| Weight per piece (excluding packing) | 42.958 g      |
| Customs tariff number                | 85369010      |
| Country of origin                    | PL            |

# PT 16 N-PE - Protective conductor terminal block



3212147

<https://www.phoenixcontact.com/us/products/3212147>

## Technical data

### Product properties

|                       |                       |
|-----------------------|-----------------------|
| Product type          | Ground terminal block |
| Product family        | PT                    |
| Area of application   | Railway industry      |
|                       | Machine building      |
|                       | Plant engineering     |
| Number of connections | 2                     |
| 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 | 0 W  |

### Connection data

|                                                                   |                                                                |
|-------------------------------------------------------------------|----------------------------------------------------------------|
| Grounding foot                                                    | Yes                                                            |
| Number of connections per level                                   | 2                                                              |
| Nominal cross section                                             | 16 mm <sup>2</sup>                                             |
| Connection method                                                 | Push-in connection                                             |
| Note                                                              | Please observe the current carrying capacity of the DIN rails. |
| Stripping length                                                  | 18 mm ... 20 mm                                                |
| Internal cylindrical gage                                         | A7                                                             |
| Connection in acc. with standard                                  | IEC 60947-7-2                                                  |
| Conductor cross-section rigid                                     | 0.5 mm <sup>2</sup> ... 25 mm <sup>2</sup>                     |
| Cross section AWG                                                 | 20 ... 4 (converted acc. to IEC)                               |
| Conductor cross-section flexible                                  | 0.5 mm <sup>2</sup> ... 25 mm <sup>2</sup>                     |
| Conductor cross-section, flexible [AWG]                           | 20 ... 4 (converted acc. to IEC)                               |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>                     |
| Flexible conductor cross-section (ferrule with plastic sleeve)    | 0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>                     |
| Nominal cross section                                             | 16 mm <sup>2</sup>                                             |

### Connection cross sections directly pluggable

|                                                                   |                                            |
|-------------------------------------------------------------------|--------------------------------------------|
| Conductor cross-section rigid                                     | 2.5 mm <sup>2</sup> ... 25 mm <sup>2</sup> |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 2.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> |
| Flexible conductor cross-section (ferrule with plastic sleeve)    | 2.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> |

### Ex data

#### Rated data (ATEX/IECEx)

|                |                         |
|----------------|-------------------------|
| Identification | Ex II 2 GD Ex eb IIC Gb |
|----------------|-------------------------|

# PT 16 N-PE - Protective conductor terminal block



3212147

<https://www.phoenixcontact.com/us/products/3212147>

|                                 |                       |
|---------------------------------|-----------------------|
| Operating temperature range (1) | -60 °C ... 85 °C      |
| Operating temperature range (2) | -40 °C ... 110 °C     |
| Ex-certified accessories        | 3212060 D-PT 16 N     |
|                                 | 1206612 SZF 3-1,0X5,5 |
|                                 | 3022276 CLIPFIX 35-5  |
|                                 | 3022218 CLIPFIX 35    |
| output                          | (Permanent)           |

## Ex connection data General

|                              |                                            |
|------------------------------|--------------------------------------------|
| Nominal cross section        | 16 mm <sup>2</sup>                         |
| Rated cross section AWG      | 6                                          |
| Connection capacity rigid    | 0.5 mm <sup>2</sup> ... 25 mm <sup>2</sup> |
| Connection capacity AWG      | 20 ... 4                                   |
| Connection capacity flexible | 0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> |
| Connection capacity AWG      | 20 ... 6                                   |

## Dimensions

|                    |         |
|--------------------|---------|
| Width              | 12.2 mm |
| End cover width    | 2.2 mm  |
| Height             | 75.4 mm |
| Depth on NS 35/7,5 | 52.6 mm |
| Depth on NS 35/15  | 60.1 mm |

## Material specifications

|                                                                         |              |
|-------------------------------------------------------------------------|--------------|
| Color                                                                   | green-yellow |
| 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       |

## Mechanical properties

### Mechanical data

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

# PT 16 N-PE - Protective conductor terminal block



3212147

<https://www.phoenixcontact.com/us/products/3212147>

## Environmental and real-life conditions

### 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              | $6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$      |
| Acceleration           | 3.12g                                          |
| Test duration per axis | 5 h                                            |
| Test directions        | X-, Y- and Z-axis                              |

### 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.)   |

### 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 60947-7-2 |
|----------------------------------|---------------|

## Mounting

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

# PT 16 N-PE - Protective conductor terminal block

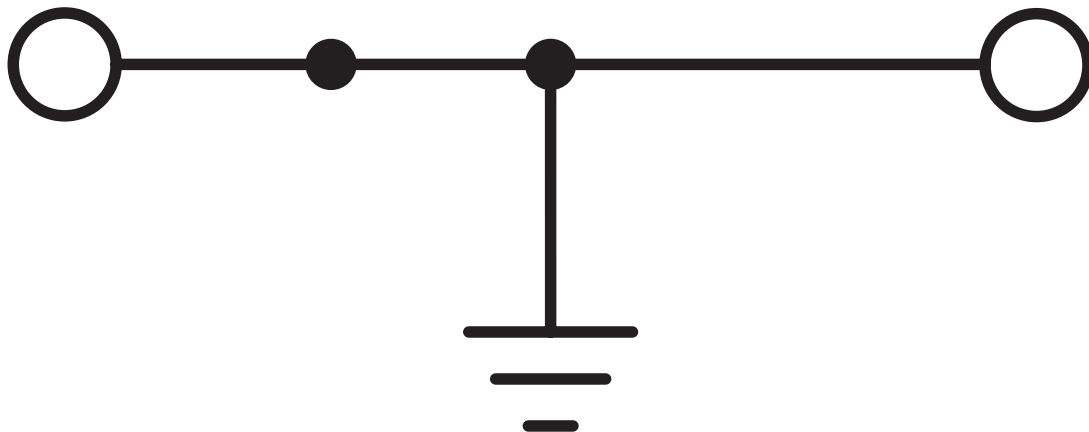


3212147

<https://www.phoenixcontact.com/us/products/3212147>

## Drawings

Circuit diagram



# PT 16 N-PE - Protective conductor terminal block



3212147

<https://www.phoenixcontact.com/us/products/3212147>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3212147>

|  <b>CSA</b><br>Approval ID: 158887 |                       |                       |                   |                             |
|---------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                     | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| B                                                                                                                   | -                     | -                     | 20 - 4            | -                           |
| C                                                                                                                   | -                     | -                     | 20 - 4            | -                           |

|  <b>IECEE CB Scheme</b><br>Approval ID: DE1-63053 |                       |                       |                   |                             |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                    | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                                              | -                     | -                     | -                 | 0.5 - 16                    |

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

|  <b>cULus Recognized</b><br>Approval ID: E60425 |                       |                       |                   |                             |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                    | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| B                                                                                                                                  | -                     | -                     | 20 - 4            | -                           |
| C                                                                                                                                  | -                     | -                     | 20 - 4            | -                           |

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

|  <b>VDE Zeichengenehmigung</b><br>Approval ID: 40040916 |                       |                       |                   |                             |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                            | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                                                      | -                     | -                     | -                 | 0.5 - 16                    |

|  <b>cUL Recognized</b><br>Approval ID: E192998 |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|-----------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

# PT 16 N-PE - Protective conductor terminal block



3212147

<https://www.phoenixcontact.com/us/products/3212147>

|       | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | -                     | -                     | 20 - 4            | -                           |



**EAC Ex**

Approval ID: RU C-DE.AB72.B.02351



**IECEx**

Approval ID: IECEx SEV13.0005U



**UL Recognized**

Approval ID: E192998

|       | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | -                     | -                     | 20 - 4            | -                           |



**ATEX**

Approval ID: SEV13ATEX0159U



**CCC**

Approval ID: 2020322313000631



**EAC Ex**

Approval ID: KZ 7500525010101950

# PT 16 N-PE - Protective conductor terminal block



3212147

<https://www.phoenixcontact.com/us/products/3212147>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27250103 |
| ECLASS-15.0 | 27250103 |

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC000901 |
|-----------|----------|

### UNSPSC

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



# PT 16 N-PE - Protective conductor terminal block



3212147

<https://www.phoenixcontact.com/us/products/3212147>

## 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 | 0.097 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)