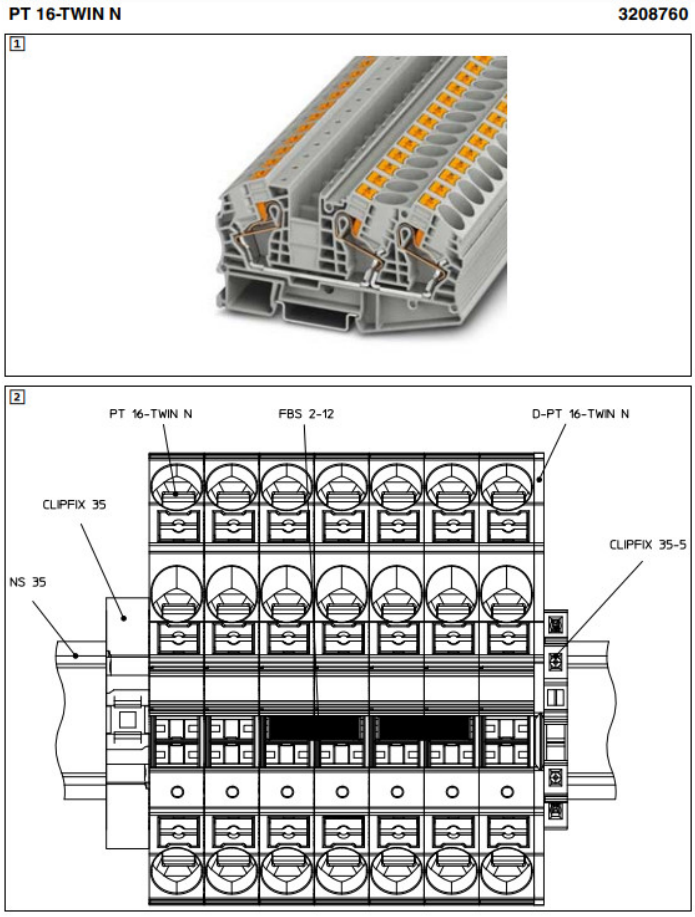
# PHOENIX CONTACT PT 16-TWIN Feed Through Terminal Block Instruction Manual



**Installation notes for electrically skilled persons**




Feed-through terminal block with push-in connection for use in potentially explosive areas
The terminal block is designed for connecting and joining copper conductors in wiring spaces with “eb” and “ec” types of protection.

**Contents**



## Installation instructions Increased safety “e”

The terminal block must be installed in a housing which is suitable for the type of protection. Depending on the type of protection, the housing must meet the following requirements:
– Flammable gases: IEC/EN 60079-0 and IEC/EN 60079-7
– Combustible dust: IEC/EN 60079-0 and IEC/EN 60079-31
When arranging terminal blocks of other series and sizes, as well as other certified components in rows, ensure that the required air clearances and creepage distances are observed.
You may install the terminal block in equipment with temperature class T6 (e.g. branch or junction boxes). The rated values must be adhered to. The ambient temperature at the installation position may not exceed +40°C. The terminal block may also be installed in equipment with temperature classes T1 to T5. For applications in temperature classes T1 to T4, ensure compliance with the highest permissible operating temperature at the insulating parts (see Technical Data, “Installation temperature range”).

## Installation and connection

### 2.1 Installation on the DIN rail

Snap the terminal blocks in place on a corresponding DIN rail. For optical or electrical isolation, you can insert partition plates or covers between the terminal blocks. If the terminal blocks are arranged in rows, fit the corresponding cover on the end terminal with the open half of the housing. To arrange terminal block types of non-identical design in rows you can mount a spacer plate on the closed termi- nal side. If the terminal strip is not protected against twisting, slipping, or moving by other certified components, it must be fastened in place on both sides using one of the specified end brackets (see accessories). Observe the accompanying exam- ple/examples when installing the accessories. (**[2]**)

**Note:** When fixing terminal blocks with other certified components, ensure that the required air clearances and creepage distances are observed.

### 2.2 Use of bridges

To form terminal block groups with the same potential, connect the desired number of positions. To do so, push a plug-in bridge (FBS…) into the function shaft of the terminal block as far as it will go. Terminal blocks with a double function shaft can be used in the same way to implement flexible chain or skip bridging.

**NOTE:** Observe the maximum rated currents when using jumpers (see technical data)!

### 2.3 Use of reducing bridges

The technical data for the use of reducing bridges ( RB . . .) is available on request.

### 2.4 Connecting the conductors

Strip the conductors to the specified length (see technical data). Flexible conductors can be fitted with ferrules. Crimp the ferrules using crimping pliers and make sure that the test requirements according to DIN 46228 Part 4 are met. The length of the copper ferrules must match the specified conductor stripping length. Rigid or flexible conductors with ferrules can be connected directly without using tools. Insert the conductor as far as it will go into the connection opening of the terminal block. With small conductor cross-sections and flexible conductors without ferrules, you must open the terminal point before inserting the conductor. To do so, push the integrated actuating push button down using a bladed screwdriver (for recommended tools, see accessories).

## For further information, see page 2

### Certificate of conformity

Valid certificates / EU type test certificates and examination certificates Reference to the general safety notes

## Technical data

| **Technical data** | Ex: X |
|---|---|
| Marking on the product | II 2 GD Exeb IIC Gb |
| Operating temperature range | – 60 °C .. . 110 °C |
| Rated insulation voltage | 500 V |
| Rated voltage | 500 V |
| – for bridging with bridge | 500 V |
| Temperature increase | 40K (65,5 A / 16 mm²) |
| Contact resistance | 0,31 mΩ |
| Rated current | 65 ,5 A |
| Maximum load current | 78 A |
| **Connection capacity** | |
| Rated cross section | 16 mm² // AWG 6 |
| Connection capacity rigid | 0,5 mm² … 25 mm² // AWG 20 – 4 |
| Connection capacity flexible | 0,5 mm² … 16 mm² // AWG 20 – 6 |
| Stripping length | 18 mm … 2 0 mm |
| **Accessories / Type / Item No.** | |
| End cover /D-PT 16-TWIN N / 3208799 | |
| Screwdriver / SZF 1-0,6X3,5 / 1204517 | |
| End bracket / CLIPFIX 35-5 / 3022276 | |
| End bracket / CLIPFIX 35 / 3022218 | |
| Plug-in bridge /FBS 2-12 / 3005950 | 60,5 A / 16 mm² |

**Additional information**

## Attestation of Conformity

You will find the attestation of conformity in the download area under the category Manufacturer’s Declaration.
The following notified bodies certify compliance with the respective applicable directives:
Eurofins Electric & Electronic Product Testing AG [1258] Eurofins E & E Product CML Ltd [2503]

## Valid certificates / EU type test certificates and examination certificates

| Approvals | Country / region | Notified body / approval body | Certificate no. / file no. |
|---|---|---|---|
| ATEX | Europe | Eurofins Electric & Electronic Product Testing AG | SEV 13 ATEX 0159 U |
| IECEx | Intemational | Eurofins Electric & Electronic Product Testing AG | IECEx SEV 13.0005 U |
| CCC | China | SITiiAs | 2020322313000631 |
| UKEX | United Kingdom | Eurofins E & E CML Ltd | CML 22UKEX1224U |

## Safety notes

**NOTE:** Observe the general safety notes. These are available in the download area in the ‘Safety notes’ category.

Document valid for all color versions!

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## Documents / Resources

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|---|---|
|  | PHOENIX CONTACT PT 16-TWIN Feed Through Terminal Block [pdf] Instruction Manual PT 16-TWIN N BU 3208773, 3208760, PT 16-TWIN Feed Through Terminal Block, PT 16-TWIN , Feed Through Terminal Block, Through Terminal Block, Terminal Block, Block |

## References

- Phoenix Contact Australia
- User Manual