PHOENIX CONTACT 3209594 Ground Modular Terminal Block Instruction Manual

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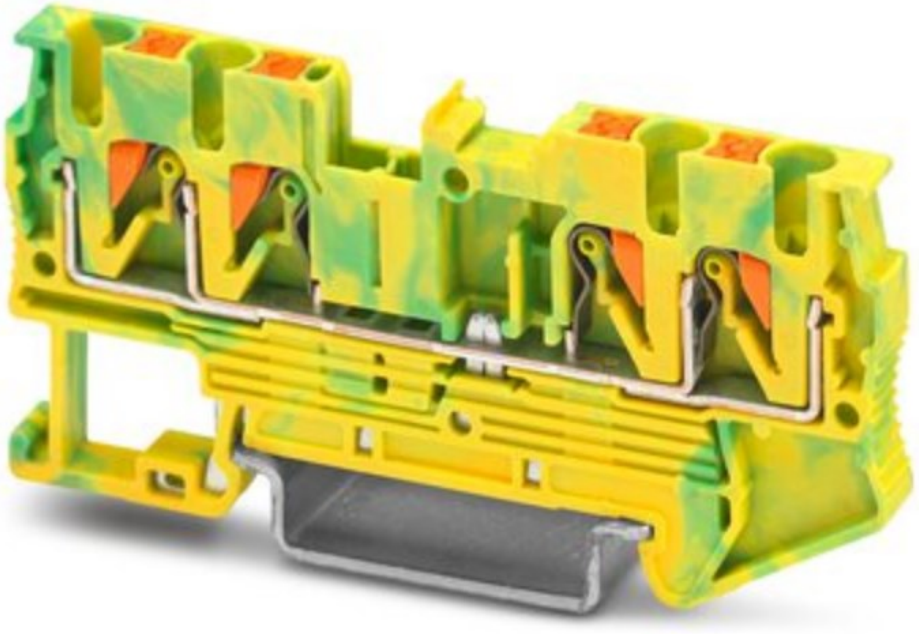

Ground terminal with multi-conductor push-in connection for use in potentially explosive areas

The terminal is designed for connecting and linking copper wires in wiring spaces with “eb”, “ec” or “nA” types of protection.

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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

Installation on the DIN rail

Snap the terminal blocks onto a corresponding DIN rail. For optical or electrical isolation, partition plates or covers can be inserted between the terminal blocks. When the terminal blocks are arranged in rows, fit the end terminal with the open half of the housing with the corresponding cover. If the terminal strip is not protected against twisting, slipping or moving by other certified components, it must be fixed on both sides with one of the specified end brackets (see accessories). Observe the accompanying example when installing the accessories.

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

Use of bridging jumpers

For this purpose, the contact tab of the plug-in bridge must be disconnected for the skip PE terminal to be disconnected.

NOTE: Using skip bridging from the ground terminals reduces the rated voltage of the bridged basic terminal bloc

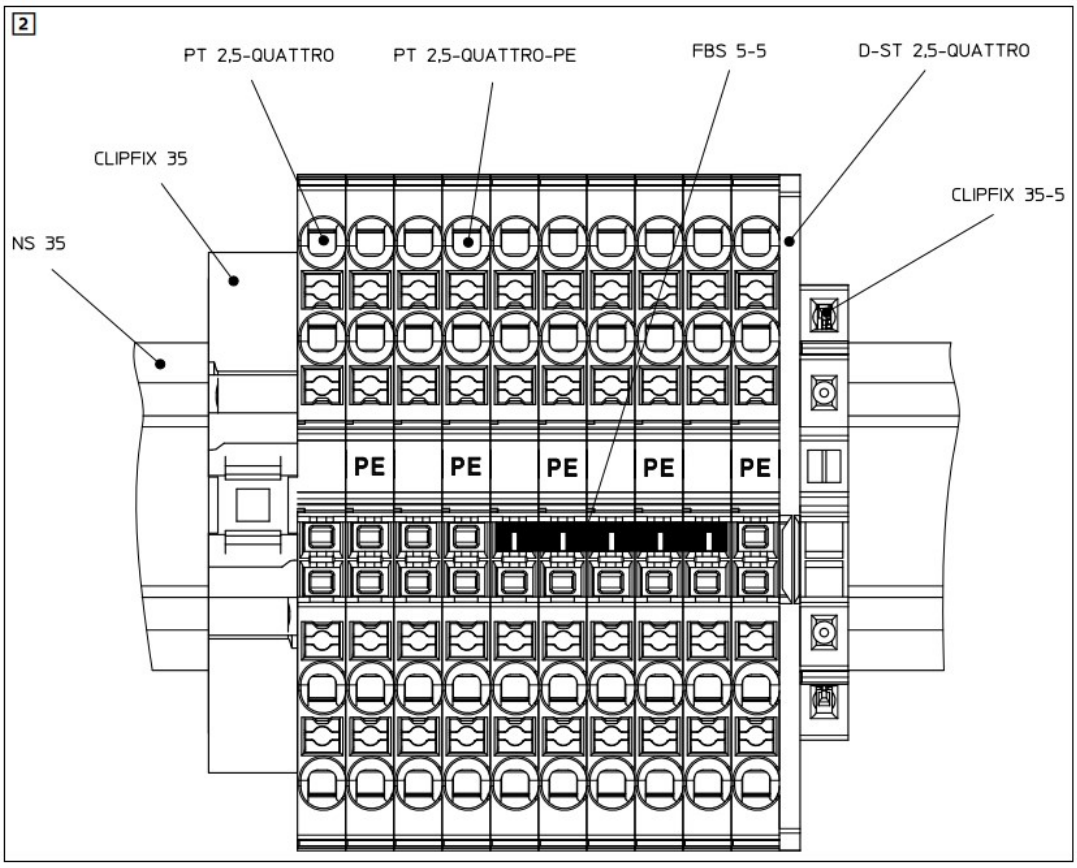
Connecting the conductors

Strip the conductors to the specified length (see technical data). Stranded conductors can be fitted with ferrules. Crimp the ferrules using crimping pliers and ensure that the test requirements listed in DIN 46228 Part 4 are met. The length of the copper ferrules must equal the specified conductor stripping length. Solid or stranded conductors with ferrules can be connected directly without tools. Insert the conductor into the connection opening of the terminal block up to the stop. With small conductor cross sections and stranded conductors without ferrules, you must open the terminal point before inserting the conductor. To do so, push the integrated push button down using a bladed screwdriver (tool recommendation, see accessories).

For further information, see page 2
Certificate of conformity

- further certificates
- Reference to the general safety notes

Installation notes for electricians



Technical data

- EU-type examination certificate
- IECEx certificate
- Marking on the product
- Operating temperature range
- **Connection capacity**
- Rated cross section
- Connection capacity rigid
- Connection capacity flexible
- Stripping length
- **Accessories** / **Type** / **Item No**
- End cover / D-ST 2,5-QUATTRO / 3030514
- Screwdriver / SZF 1-0,6X3,5 / 1204517
- End clamp / CLIPFIX 35-5 / 302227
- End clamp / CLIPFIX 35 / 3022218

Technische Daten

- Ex:
- PTB 09 ATEX 1111 U
- IECEx PTB 10.0021 U
- Ex eb IIC Gb
- -60 °C … 110

- 2,5 mm² // AWG 14
- 0,14 mm² … 4 mm² // AWG 26 – 12
- 0,14 mm² … 2,5 mm² // AWG 26 – 14
- 8 mm … 10 mm

Additional information

Attestation of Conform’

The above-mentioned product conforms with the most important requirements of directive 2014/34/EU (ATEX directive) and its amending directives. The following relevant standards were consulted for evaluating the conformity:

- IEC 60079-0/EN 60079-0
- IEC 60079-7/EN 60079-7

For the complete list of relevant standards, including the issue status, see attestation of conformity. This is available in the download area under the category Manufacturer’s Declaration.

Conformance with the provisions of the ATEX directive was certified by the following notified body:

Physikalisch-Technische Bundesanstalt, Bundesallee 100, 38116 Braunschweig, GERMANY (Ref. No. 0102)

Further valid certificates

Country	Notified body	Certificate no. / file no.
USA/Canada	UL	E 192998
China	NEPSI	GYJ20.1198U

Technical data/requirements in accordance with UL and CSA standards

For applications in North America, these installation instructions apply with the following additions:

USR	UL 60079-0, fourth edition / UL 60079-7, second editio n
CNR	CAN / CSA E 60079-0:02, CAN/CSA E 60079- 7:03
Connectable conductor cross sections	AWG 26-12 rigid and flexible copper conductors
Conductor connection method	Factory and field wiring
Marking	USR: Class I, Zone 1, AEx e II / CNR: Ex eb IIC

Acceptance criteria

- The suitability of the mounting equipment and the mounting method must be assessed in the end application.

- The connection cables at the terminal blocks must be adequately insulated for the voltages. The clearance between conductor insulation and the metal of the terminal point may not exceed 1 mm (see stripping length).
- During operation, the terminal blocks may not be used in an ambient temperature lower than -60°C or higher than +110°C.
- The terminal blocks have been rated for use in a housing with a minimum requirement of IP54. The suitability of the housing for the end application for increased safety is to be taken into consideration.
- The terminal points for the external connections of these terminal blocks have been rated in accordance with ANSI/UL 486E “Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors”. The suitability of the terminal points must be assessed during the final acceptance.
- The air clearances and creepage distances between bare live parts with different potentials are to be taken into consideration in the end application.
- The suitability of the terminal blocks is to be confirmed via a temperature-rise test in the end application.
- If used in connection and junction boxes, the specified design and installation regulations must be taken into consideration.

Safety notes

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

Documents / Resources

	PHOENIX CONTACT 3209594 Ground Modular Terminal Block [pdf] Instruction Manual PT 2.5-QUATTRO-PE, 3209594 Ground Modular Terminal Block, 3209594, Ground Modular Terminal Block, Modular Terminal Block, Terminal Block, Block

References

- Phoenix Contact USA

Manuals+,