

## Thermoelectric voltage terminal block MTKD

|  |                                |
|--|--------------------------------|
| <b>Article description</b>             | MTKD-... *                     |
| Article no.                            | See item list below*           |
| <b>EC-TYPE EXAMINATION CERTIFICATE</b> | QSI 11 ATEX 2020U*             |
| <b>Marking</b>                         | Ex eb IIC<br>QSI 11 ATEX 2020U |
| Assembly on mounting rails             | NS 35 acc. to EN 60715-TH 35   |
| Stripping length                       | 7 mm                           |
| Torque                                 | 0,6 - 0,8 Nm                   |
| Assembly instructions                  | See page 2                     |
| Operating temperature range            | -50 °C ... +110 °C             |



### Technical data according to EN 60079-7 (increased safety „e“)

|                          |                                     |
|--------------------------|-------------------------------------|
| Rated insulation voltage | 250 V                               |
| Rated voltage            | 275 V                               |
| Nominal current          | 1 A ( $\Delta T$ 45 K)              |
| Temperature rise         | 37,5 K (6 A / 0,5 mm <sup>2</sup> ) |
| Contact resistance       | 11 m $\Omega$                       |

### Connection capacity

|                                     |   |                            |
|-------------------------------------|---|----------------------------|
| Rated cross-section                 | 2,5 mm <sup>2</sup>   | AWG 12                     |
| Max. conductor cross-section        | 2,5 mm <sup>2</sup>   | AWG 12                     |
| Connectable conductor cross-section | 0,2 - 2,5 mm <sup>2</sup> rigid<br>0,2 - 2,5 mm <sup>2</sup> flexible | AWG 24 - 12<br>AWG 24 - 12 |

### Insulation material

|   |             |
|---|-------------|
| Description   | PA 6.6      |
| Creep resistance acc. to IEC 60112 / material group | CTI 600 / I |

### Accessories

|                 | Description | Article no. |
|-----------------|-------------|-------------|
| Cover           | D-MTK       | 3101029     |
| Partition plate | ATS-MTK     | 3101223     |

### Item list

|                     |         |
|---------------------|---------|
| MTKD-CU/CUNI EX     | 3100060 |
| MTKD-FE/CUNI EX     | 3100047 |
| MTKD-NICR/CUNI EX   | 3100076 |
| MTKD-NICRSI/NISI EX | 3100103 |
| MTKD-NICR/NI EX     | 3100063 |
| MTKD-E-CU/A-CU EX   | 3100092 |
| MTKD-S-CU/E-CU EX   | 3100102 |

\* valid for colour variants

## Important assembly instructions – increased safety „e“

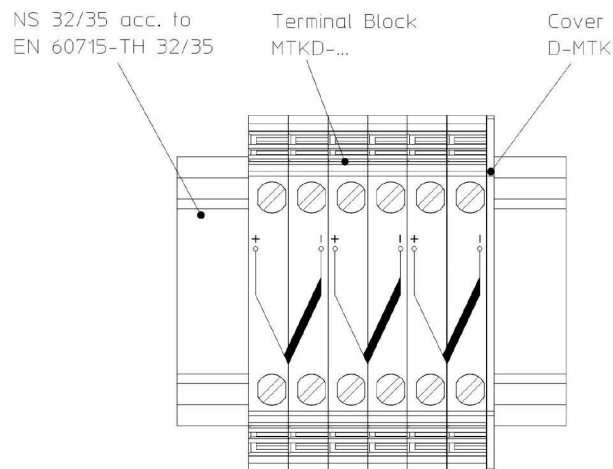
The Terminal Blocks are suitable for use in enclosures in atmospheres with flammable gases or combustible dust. For flammable gases these enclosures must satisfy the requirements according to EN 60079-0 and EN 60079-7. For combustible dust these enclosures must satisfy the relevant requirements of part 31 of EN 60079.

When assembling with other certified series and sizes of terminal blocks and using belonging accessories, the required creepage distances and clearances have to be observed.

If conductors with smaller cross section as the rated cross section are used, the belonging lower current has to be laid down in the EC-Type Examination Certificate of the complete apparatus.

The Terminal Blocks may be used, based on the self-heating when used at the nominal current and at ambient temperatures of -50 °C to +40 °C at the mounting position in electrical apparatus, e.g. junction and connection boxes, for temperature class T6. When the Terminal Blocks are used in electrical apparatus of temperature classes T1 up to T5, the highest temperature of the insulating material shall not exceed the maximum value of the operating temperature range.

The Terminal Blocks and their appropriate accessories have to be assembled as specified below.



## Operating instructions – Intrinsic safety “i”

EN 60079-14:2008 Clause 12 describes modular terminal blocks as simple apparatus when used in intrinsically-safe circuits. Testing by a notified body and marking is not required. If terminal blocks be identifiable as part of an intrinsically circuit are marked by a colour, the colour used shall be **light blue**.

Testing for compliance to intrinsically safe requirements including clearance, creepage, and solid insulation distances specified in EN 60079-0 and EN 60079-11 have been performed for circuits up to **60 V**.

Compliance with distance requirements of EN 60079-14:2008 Clause 12.2.3 for the connection of separated intrinsically-safe circuit accessories is met. A minimum distance of 50 mm to separate clamping units of intrinsically-safe and non intrinsically-safe circuits is required through the use of a separating plate or similar device.

## Operating instructions for zone 2 and zone 22

In compliance with clause 5.4.4 of EN 60079-14:2009 the Terminal Blocks can be used if the requirements of the respective type of protection e. g. "nA" or "tD" are considered.

## Attestation of Conformity

The above mentioned product is in line with the provisions of the below marked directive and their modification directive(s):

2014/34/EU ATEX Directive

Compliance with Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2009

EN 60079-7:2007

current edition:\*)

EN 60079-0:2012

EN 60079-7:2015

The conformity with the provisions of the ATEX directive were certified by

Notified Body: QS Schaffhausen AG

Address: Wiesengasse 20, CH-8222 Beringen/Switzerland [Ident.-No.: 1252]

Certificate: QSI 11 ATEX 2020U, 2011-06-20  
(No., Date)

\*) The minor respectively formal changes of the new edition of the mentioned standards do not affect the EHSRs. Consequently the terminal blocks still comply with the relevant requirements of the ATEX Directive.


Blomberg, 2016-05-30


  
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This attestation certifies the conformity with the indicated directive, it does not, however, covenant any characteristics.  
The instructions for safety and installation have to be observed.

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