

**INSTALLATION INSTRUCTIONS**  
**& CONDITIONS FOR SAFE USE**

 II 3 G Ex ec IIC Gc

**Modular TERMINAL Blocks: Z- Series**

**TÜV 20 ATEX 8502 U**  
**IECEX TUR 20.0014 U**  
**TÜV 22 UKEX 7091 U**

Standards:

EN 60079-0:2012/A11:2013 and EN 60079-15: 2010  
IEC 60079-0:2011 Rev. 6  
IEC 60079-15:2010 Rev. 4

**Test - Disconnect Terminal Blocks: ZDTR 2.5**

|          |           |            |
|----------|-----------|------------|
| Version: | Type      | Order No   |
|          | ZDTR 2.5* | 1745400000 |

|               |                               |            |
|---------------|-------------------------------|------------|
| Accessories:  |                               | Order No   |
| End Plate     | AP ZDTR2.5*                   | 1745420000 |
| End bracketed | ZEW 35*                       | 9540000000 |
| Terminal rail | TS 35/... acc.to DIN EN 60715 |            |

|                  |                |            |
|------------------|----------------|------------|
| Cross-connection | Pluggable*     |            |
|                  | ZQV 2.5N/2 GE  | 1693800000 |
|                  | ZQV 2.5N/3 GE  | 1693810000 |
|                  | ZQV 2.5N/4 GE  | 1693820000 |
|                  | ZQV 2.5N/5 GE  | 1693830000 |
|                  | ZQV 2.5N/6 GE  | 1693840000 |
|                  | ZQV 2.5N/7 GE  | 1693850000 |
|                  | ZQV 2.5N/8 GE  | 1693860000 |
|                  | ZQV 2.5N/9 GE  | 1693870000 |
|                  | ZQV 2.5N/10 GE | 1693880000 |

**Insulation material:**

|  |  |
|--|--|
| - Type                                 | Wemid                                      |
| - Tracking resistance (A) to IEC 60112 | CTI ≥ 600                                  |
| - Flammability class to UL 94          | V0   |
| - Operating temperature range          | -60°C...+100°C (insulating material limit) |

\* in all colours

**Technical data according to IEC/EN 60079-7 (increased safety "ec"):**

|   | <b>ZDTR 2.5</b>           |
|---|---------------------------|
| - Rated voltage                                 | 400 V                     |
| - Rated current                                 | 15 A                      |
| - Rated conductor cross section                 | 2.5 mm <sup>2</sup>       |
| - Conductor cross section solid                 | 0,5 - 4,0 mm <sup>2</sup> |
| - Conductor cross section stranded              | 0,5 - 4,0 mm <sup>2</sup> |
| - Conductor cross section flexible              | 0,5 - 4,0 mm <sup>2</sup> |
| - Conductor cross section flexible with ferrule | 0,5 - 2,5 mm <sup>2</sup> |
| - cross section, American Wire Gauge            | 26 - 12 AWG               |
| - Stripping length                              | 10 mm                     |

**Service life acc. To IEC 60947-7-1**

|                          |           |
|--------------------------|-----------|
| - max. no. Of actuations | 50 cycles |
|--------------------------|-----------|

**Note:**

The creepage and clearance distances were determined in the worst case.

**Mounting instructions:**

The ZDTR 2.5 terminal block is suitable for application in enclosures in atmospheres with flammable gases and combustible dust. For use in flammable gases these enclosures must satisfy the requirements according to IEC/EN60079-0 and IEC/EN60079-7. For use in combustible dust these enclosures must satisfy the requirements according to IEC/EN60079-0 and IEC/EN60079-31.

In combination with other terminal block series and sizes and if other accessories are used, the applicable creepage and clearance distances shall be met.

Regarding the use of accessories the instructions of the manufacturer must be followed.

**Schedule of Limitations:**

The terminal blocks shall be placed inside a suitable IECEx/ATEX/UKCA certified IP54 enclosure for gas atmosphere. For dust atmosphere the terminal blocks shall be mounted inside a suitable IECEx/ATEX/UKCA certified 't' enclosure (IEC/EN60079-31).

The enclosure shall be constructed to block all sun and UV light from affecting the terminal blocks.

Under normal operating conditions the temperature rise of the terminal blocks is max 40 K, measured with the max permitted rated current. Due to the above mentioned the terminal blocks may be used in apparatus of temperature classes T6...T1 as long as the terminal block ambient temperature range is not exceeded as shown below. No part of terminal block must exceed 100 °C under any condition.

**WARNING – Do not remove or replace the fuse/test disconnect switch when energized!**

When using the types ZDTR 2.5 with other terminal blocks series or sizes or accessories, the requirements for clearance and creepage distances according to IEC/EN 60079-7 must be observed. Regarding the use of covers, cross-connectors and end brackets the instructions of the manufacturer must be followed.

For terminal jumper accessories current ratings and the resistances across the terminals please refer to the table under "technical data".

If smaller conductor cross sections than the rated conductor cross sections are used, then the corresponding lower current shall be stated in the 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 - 60 °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 max. value of the operating temperature range.



- Cross connections with blank ends shall not be used.
- Manually cut cross connections shall not be used.

**Essential Health and Safety Requirements:**

Concerning ESRs this Schedule verifies compliance with the Annex II of ATEX / Schedule 1 of UKCA directive and Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016 only. By placing the product on the market, the manufacturer declares compliance with other relevant Directives, and all other safety related requirements including those of Annex II / Schedule 1 of these Directives.