

(1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

TÜV 18 ATEX 8221 U

Issue: 01

- (4) Equipment: **Terminals AKZ/AKE Series**
- (5) Manufacturer: **Weidmüller Interface GmbH & Co. KG**
- (6) Address: **Klingenbergstraße 16
32758 Detmold, Germany**
- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex8221.01/18

- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 60079-0: 2018

EN 60079-7: 2015 / A1: 2018

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



II 2 GD Ex eb IIC Gb

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2019-05-08


Dipl.-Ing. Christian Mehrhoff



This EU-Type Examination Certificate without signature and stamp shall not be valid.
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
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(13) Annex

(14) **EU Type Examination Certificate**
TÜV 18 ATEX 8221 U Issue: 01

(15) Description of equipment

15.1 Equipment and type:

Terminals, AKZ/AKE Series

15.2 Description

General product information:

The terminal blocks of the AKZ/AKE- series is for the connection of copper conductors in enclosures. The type of protection is increased safety, “e” - Level of Protection “eb” (EPL “Gb”).

The assessment covers the following types:

AKZ 1.5*, AKZ 2.5*, AKE 2.5, AKZ 4*, AKE 4, AKZ 4 WEMID*

Optional accessories:

| | |
|-----------------|-------------------------|
| end plate | AP AKZ...* |
| end bracket | EW 15* |
| | EW 15/2* |
| | AP AKZ...* |
| partition plate | TW AKZ...* |
| Terminal rail | TS 15/ acc.to IEC 60715 |
| Cross- | Q 2 AKZ... |
| connection | Q 3 AKZ... |
| | Q 4 AKZ... |
| | Q 10 AKZ... |

*: in all colours

...: 1.5, 2.5 or 4

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Technical Data

| | |
|---|--------------------|
| Operating temperature ranges for AKZ 4 WEMID: | -60°C up to +110°C |
| T6 | -60°C up to +40 °C |
| T5 | -60°C up to +55 °C |
| T4 | -60°C up to +70 °C |

| | |
|--|--------------------|
| for AKZ 1.5, AKZ 2.5, AKZ 4, AKE 2.5, AKE 4: | -50°C up to +85°C |
| T6 | -50°C up to +40 °C |
| T5 | -50°C up to +45 °C |
| T4 | -50°C up to +45 °C |

See manufacturer's installation instructions of each single terminal type for details.

Details of Change

- Standard update to EN 60079-0: 2018 and EN 60079-7: 2015 / A1: 2018
- Additional configurations of cross connections were assessed to meet the requirements of the listed standards.

(16) Test-Report No. 557/Ex8221.01/18

(17) Schedule of Limitations

1. The AKZ/AKE-series products 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 the enclosure must satisfy the requirements according to EN 60079-0 and EN 60079-31.
2. The enclosure shall be constructed to block all sun and UV light from affecting the terminal blocks. The terminal blocks shall be placed inside a suitable certified IP54 enclosure in type of protection "eb" for gas atmosphere. For dust atmosphere the terminal blocks shall be mounted inside a suitable certified enclosure (EN60079-31) in type of protection "t"..
3. Under normal operating conditions the temperature rise of the terminal blocks is maximum 40 K, measured at the maximum 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. No part of terminal block must exceed 110°C under any condition in combination with AKE no part of terminal block must exceed 85°C under any condition.

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| | |
|---|------------------------|
| AKZ 1.5, AKZ 2.5, AKE 2.5, AKZ 4, AKE 4 | AKZ 4 WEMID |
| T6 (- 50°C ... +40 °C) | T6 (- 60°C ... +40 °C) |
| T5 (- 50°C ... +45 °C) | T5 (- 60°C ... +55 °C) |
| T4 (- 50°C ... +45 °C) | T4 (- 60°C ... +70 °C) |

4. When using the AKZ/AKE-series products especially with other terminal blocks series or sizes or accessories the requirements for clearance and creepage distances according to table 1 of EN 60079-7 must be observed. Regarding the use of covers, cross-connectors and end brackets the instructions of the manufacturer must be followed.
5. For cross connection accessories current rating, resistance across the terminal please refer to the table under "technical data" above.
6. No other wire sizes or types than the ones specified in instructions must be used. The terminal blocks must either be mounted next to another block of the same type and size or with an end plate.
7. 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.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standards

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2019-05-08


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