



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX ULD 16.0025U** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2018-05-24\)](#)
[Issue 0 \(2016-11-29\)](#)
Date of Issue: 2021-06-23
Applicant: **Weidmüller Interface GmbH & Co. KG**
Klingenbergstrasse 26
Detmold 32758
Germany
Ex Component: Feed through and protective conductor terminals with accessories - ZDK* and accessories ZQV
This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).
Type of Protection: **Increased Safety "eb"**
Marking: Ex eb IIC Gb

Approved for issue on behalf of the IECEx
Certification Body:

Lucy Frieders

Position:

Staff Engineer

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

UL International DEMKO A/S
Borupvang 5A
DK-2750 Ballerup
Denmark





IECEX Certificate of Conformity

Certificate No.: **IECEX ULD 16.0025U**

Page 2 of 4

Date of issue: 2021-06-23

Issue No: 2

Manufacturer: **Weidmüller Interface GmbH & Co. KG**
Klingenbergstrasse 26
Detmold 32758
Germany

Additional manufacturing locations: **Weidmüller Interface GmbH & Co. KG**
Klingenbergstrasse 16
32758 Detmold
Germany

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[DK/ULD/ExTR16.0025/00](#)

[DK/ULD/ExTR16.0025/01](#)

[DK/ULD/ExTR16.0025/02](#)

Quality Assessment Report:

[NL/DEK/QAR12.0052/07](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX ULD 16.0025U**

Page 3 of 4

Date of issue: 2021-06-23

Issue No: 2

Ex Component(s) covered by this certificate is described below:

The feed through and protective terminal blocks Type ZDK are for the connection of copper conductors in enclosures. The type of protection is increased safety, "eb", insulating parts made of Poliamide PA 66, with optional accessories, Type ZQV plug-in cross-connectors.

Please see Annex for additional information.

SCHEDULE OF LIMITATIONS:

The feed through terminal blocks are suitable for use in enclosures in atmospheres with flammable gases and combustible dust. For flammable gases these enclosures must satisfy the requirements according to IEC 60079-0 and IEC 60079-7. For combustible dust these enclosures must satisfy the requirements according to IEC 60079-31.

The terminal blocks shall be placed inside a suitable IECEx certified IP54 enclosure for gas atmosphere. For dust atmosphere the terminal blocks shall be mounted inside a suitable IECEx certified 't' enclosure (IEC 60079-31).

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 110 °C under any condition.

T6 (- 60°C ... +40 °C)

T5 (- 60°C ... +55 °C)

T4 (- 60°C ... +70 °C)

When using the types ZDK with other terminal blocks series or sizes or accessories, the requirements for clearance and creepage distances according to table 2 of IEC 60079-7 must be observed. Regarding the use of covers, cross-connectors and end brackets the instructions of the manufacturer must be followed.

For cross connection accessories current and voltage rating, resistance across the terminal please refer to "Notice to installers".

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.



IECEX Certificate of Conformity

Certificate No.: **IECEX ULD 16.0025U**

Page 4 of 4

Date of issue: 2021-06-23

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1: Alternate construction added.

Issue 2: Standards updated to IEC 60079-0 Ed. 7 and IEC 60079-7 Ed.5.1.

Annex:

[Annex to IECEx ULD 16.0025U Issue 2.pdf](#)



IECEx Certificate of Conformity

Certificate No.: IECEx UL 16.0025U

Issue No.: 2

Page 1 of 2

PARAMETERS RELATING TO THE SAFETY

TYPE	Rated (V)	Rated (A)	Resistance top level (uΩ)	Resistance bottom level (uΩ)	Strip length [mm]	Solid wire size (mm ²)	Stranded wire size (mm ²)	Flexible wire size (mm ²)
ZDK 2.5	440	20	630	980	10	0.5-2.5	0.5-2.5	0.5-2.5
ZDK 2.5 PE	N/A	N/A	N/A	N/A	10	0.5-2.5	0.5-2.5	0.5-2.5
ZDK 2.5 N-DU	352	19	500	800	10	0.5-2.5	0.5-2.5	0.5-2.5
ZDK 2.5 DU-PE	352	20	500	N/A	10	0.5-2.5	0.5-2.5	0.5-2.5
ZDK 2.5/3AN	440	21	760	1000	10	0.5-4	0.5-2.5	0.5-2.5
ZDK 2.5/3AN PE	N/A	N/A	N/A	N/A	10	0.5-4	0.5-2.5	0.5-2.5
ZDK 2.5/3AN V	440	20	1280	N/A	10	0.5-4	0.5-2.5	0.5-2.5
ZDK 2.5/3AN DU-PE	440	24	650	N/A	10	0.5-4	0.5-2.5	0.5-2.5
ZDK 2.5 V	440	20	N/A	2600	10	0.5-2.5	0.5-2.5	0.5-2.5
ZDK 2.5N-PE	352	20	500	N/A	10	0.5-2.5	0.5-2.5	0.5-2.5

Pluggable cross connections (accessories)	Rated (V)	Rated (A)	Resistance top level (uΩ)	Resistance bottom level (uΩ)	Strip length [mm]	Solid wire size (mm ²)	Stranded wire size (mm ²)	Flexible wire size (mm ²)
ZQV 2.5/2	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 2.5/3	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 2.5/4	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 2.5/5	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 2.5/6	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 2.5/7	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 2.5/8	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 2.5/9	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 2.5/10	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A



IECEx Certificate of Conformity

Certificate No.: IECEx UL 16.0025U

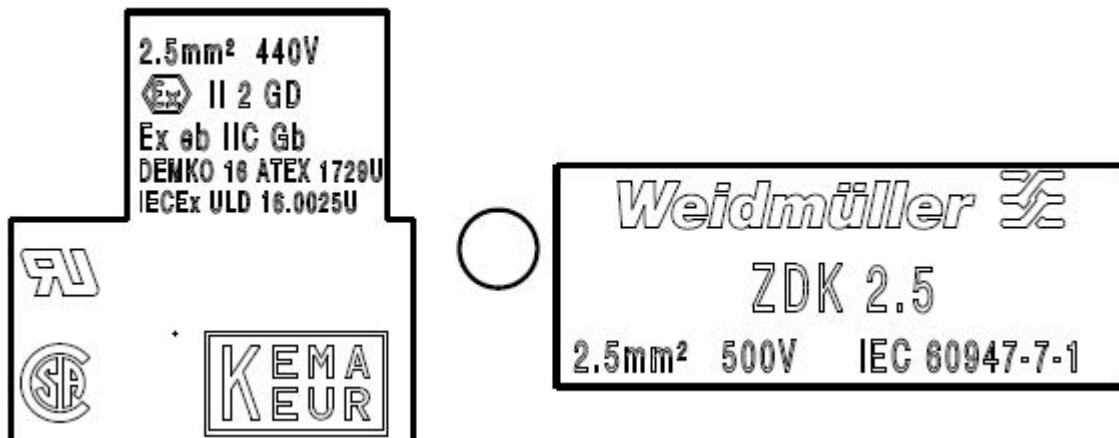
Issue No.: 2

Page 2 of 2

MARKING

Marking has to be readable and indelible; it has to include the following indications:

Representative for the series, from Type ZDK 2.5:



ROUTINE EXAMINATIONS AND TESTS

According to IEC 60079-7 clause 7.1 in combination with clause 6.1 a dielectric strength test has to be carried out. The routine tests may be performed on a statistical basis according to ISO 2859-1 with an acceptance quality limit (AQL) of 0,04. Routine test is to carried out according to Weidmüller procedure "High voltage test" Document -NR: A_10_54.