[1] # EU-TYPE EXAMINATION CERTIFICATE

[2] **Component intended for use on/in Equipment or Protective System**
Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU

[3] EU-Type Examination Certificate Number: **DEMKO 16 ATEX 1729U Rev. 2**

[4] Component: **Feed through and protective conductor terminal blocks, types ZDK series**

[5] Manufacturer: **Weidmüller Interface GmbH & Co. KG**

[6] Address: **Klingenbergstrasse 26, 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] UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Council Directive 2014/34/EU of the European Parliament and the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to design and construction of components intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. **DK/ULD/ExTR16.0025/02.**

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN IEC 60079-7: 2015 +A1:2018**

[10] The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11] This EU-Type Examination Certificate relates only to the design and construction of the specified component. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

[12] The marking of the component shall include the following:

II 2 GD **Ex eb IIC Gb**

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Component described herein ("Certified Component") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the component sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured component. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all products to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2016-11-29
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Notified Body

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Schedule
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[15] Description of Component:

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 Polyamide PA 66, with optional accessories, type ZQV plug in cross-connectors.

Temperature range

The ambient temperature range is -60°C to +70 °C depending of T-Code. Refer to [17] Schedule of limitations

The service temperature range is -60 °C to +110 °C.

Types & electrical data:

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)								
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

NOTE: NTI = Notice to installer

Routine tests

According to EN 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 be carried out according to Weidmuller procedure “High voltage test” Document -NR: A_10_54

[16] Descriptive Documents

The scheduled documents are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

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[17] Schedule of limitations:

- The feed through and protective conductor 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 EN 60079-0 and EN 60079-7. For combustible dust these enclosures must satisfy the requirements according to EN 60079-31.
- The terminal blocks shall be placed inside a suitable ATEX certified IP54 enclosure for gas atmosphere. For dust atmosphere the terminal blocks shall be mounted inside a suitable ATEX certified 't' enclosure (EN 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 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 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

[18] Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The trademark Weidmüller will be used as the company identifier on the marking label.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.