[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 15 ATEX 1467U Rev. 1**

[4] Component: **Feed through and protective conductor terminal blocks, Types ZDU and ZPE for use with accessories ZQV, ZAP, WEW and ZEW**

[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] 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. **4787519350**

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

EN 60079-0:2012+A11:2013 **EN 60079-7:2015**

[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: 2016-06-24
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Notified Body
UL International Demko A/S, Ballerup 5A, 2750 Ballerup, Denmark
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[15] Description of Component:

Feed through and protective terminal blocks type ZDU and ZPE are for the connection of copper conductors in enclosures. The type of protection is increased safety, “eb”, insulating parts made of Wellamid with optional accessories, type ZQV plug-in cross-connectors, type WEW, ZEW, EW end brackets and type ZAP for fixing on mounting rails.

Types & electrical data:

Type	Rated voltage (V)	Rated current (A)	Resistance across terminals (uΩ)	Cross section (mm^2)	Strip length for min wire size (mm)	Solid wire size (mm^2)	Stranded wire size (mm^2)	Flexible wire size (mm^2)
ZDU 1.5	550	17	1830	1.5	10	0.5-1.5	0.5-1.5	0.5-1.5
ZDU 1.5/3AN	550	15	1830	1.5	10	0.5-1.5	0.5-1.5	0.5-1.5
ZDU 1.5/4AN	550	17	1830	1.5	10	0.5-1.5	0.5-1.5	0.5-1.5
ZDU 10	690	51	560	10	18	1.35-16	1.35-16	1.35-10
ZDU 10/3AN	690	51	560	10	18	1.35-16	1.35-16	1.35-16
ZDU 16	690	68	0.42	166	18	1.5-16	1.5-25	1.5-16
ZDU 16/3AN	690	66	0.42	16	18	1.5-16	1.5-25	1.5-16
ZDU 2.5	550	22	1330	2.5	10	0,5-4,0	0,5-4,0	0.5-4
ZDU 2.5/2X2AN	550	21	2660	2.5	10	0.5-4	0.5-4	0.5-4
ZDU 2.5/3AN	550	22	1330	2.5	10	0.5-4	0.5-4	0.5-4
ZDU 2.5/4AN	550	22	1330	2.5	10	0.5-4	0.5-4	0.5-4
ZDU 2.5N	440	22	1330	2.5	10	0.5-4	0.5-2.5	0.5-2.5
ZDU 2.5N/3AN	440	21.5	1330	2.5	10	0.5-4	0.5-2.5	0.5-2.5
ZDU 2.5N/4AN	440	22	1330	2.5	10	0.5-4	0.5-2.5	0.5-2.5
ZDU 35	690	110	260	35	25	2.5–16	2.5-35	2.5-35
ZDU 4	550	30	1000	4	12	0.5-6	0.5-6	0.5-6
ZDU 4/3AN	550	30	1000	4	12	0.5-6	0.5-6	0.5-6
ZDU 4/4AN	550	30	1000	4	12	0.5-6	0.5-6	0.5-6
ZDU 6	550	39	780	6	13	0.5-10	0.5-10	0.5-6
ZDU 6/3AN	550	39	780	6	13	0.5-10	0.5-10	0.5-6
ZPE 1.5	N/A	N/A	N/A	1.5	10	0.5-1.5	0.5-1.5	0.5-1.5
ZPE 1.5/3AN	N/A	N/A	N/A	1.5	10	0.5-1.5	0.5-1.5	0.5-1.5
ZPE 1.5/4AN	N/A	N/A	N/A	1.5	10	0.5-1.5	0.5-1.5	0.5-1.5
ZPE 10	N/A	N/A	N/A	10	18	1.35-16	1.35-16	1.35-10
ZPE 10/3AN	N/A	N/A	N/A	10	18	1.35-16	1.35-16	1.35-16
ZPE 16	N/A	N/A	N/A	16	18	1.5-16	1.5-25	1.5-16
ZPE 16/3AN	N/A	N/A	N/A	16	18	1.5-16	1.5-25	1.5-16
ZPE 2.5	N/A	N/A	N/A	2.5	10	0.5-4	0.5-4	0.5-4
ZPE 2.5/3AN	N/A	N/A	N/A	2.5	10	0.5-4	0.5-4	0.5-4
ZPE 2.5/4AN	N/A	N/A	N/A	2.5	10	0.5-4	0.5-4	0.5-4
ZPE 2.5N	N/A	N/A	N/A	2.5	10	0.5-4	0.5-2.5	0.5-2.5
ZPE 2.5N/3AN	N/A	N/A	N/A	2.5	10	0.5-4	0.5-2.5	0.5-2.5
ZPE 2.5N/4AN	N/A	N/A	N/A	2.5	10	0.5-4	0.5-2.5	0.5-2.5

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ZPE 35	N/A	N/A	N/A	35	25	2.5-16	2.5-35	2.5-35
ZPE 4	N/A	N/A	N/A	4	12	0.5-6	0.5-6	0.5-6
ZPE 4/3AN	N/A	N/A	N/A	4	12	0.5-6	0.5-6	0.5-6
ZPE 4/4AN	N/A	N/A	N/A	4	12	0.5-6	0.5-6	0.5-6
ZPE 6	N/A	N/A	N/A	6	13	0.5-10	0.5-10	0.5-6
ZPE 6/3AN	N/A	N/A	N/A	6	13	0.5-10	0.5-10	0.5-6
ZQV 1.5	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 2.5	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 4	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 6	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 10	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 16	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 35	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A
ZAP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ZEW 35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WEW 35/2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EW 35	N/A	N/A	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 Weidmüller 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.

[17] Schedule of limitations:

- The feed through and protective conductor 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 requirements according to EN 60079-0 and EN 60079-31.
- 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 “e” for gas atmosphere. For dust atmosphere the terminal blocks shall be mounted inside a suitable certified enclosure (EN60079-31) in type of protection “t”.
- 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 as shown below. No part of terminal block must exceed 110 °C under any condition.
    - T6 (- 60 °C ≤ Tamb ≤ +40 °C).
    - T5 (- 60 °C ≤ Tamb ≤ +55 °C).
    - T4 (- 60 °C ≤ Tamb ≤ +70 °C).
- When using the types ZDU and ZPE 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 rating, resistance across the terminal please refer to the table under “types & electrical rating” above. Details on creepage and clearance values and the required torque values please see 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

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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.