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UNITED KINGDOM CONFORMITY ASSESSMENT UK-TYPE EXAMINATION CERTIFICATE

[2] Component Intended for use on/in a Product or Protective System Intended for use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended by UKSI 2019:696) - Schedule 3A, Part 1

[3] Type Examination Certificate No.: UL21UKEX2117U Rev. 0

[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 26, 32758 Detmold, Germany

[7] This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

UL International (UK) Ltd, Approved Body number 0843, in accordance with Regulation 44 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential report 4789880974.10.

[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

Except in respect of those requirements listed at section 19 of the schedule to this certificate.

- [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 the basis for certification of an equipment or protective system.
- [11] This UK-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified component. Further requirements of the Regulations apply to the manufacturing process and supply of this component. These are not covered by this certificate.
- The marking of the component shall include the following:

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Certification Manager

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David Lloyd

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This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the Ex UK Product Certification Program Requirements. This certificate and test results obtained apply only to the product 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 product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Regulations. 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: 2021-10-20

Approved Body

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[13] [14]

Schedule UK-TYPE EXAMINATION CERTIFICATE No. UL21UKEX2117U Rev. 0

[15]

<u>Description of Component</u>
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:

Types & electrical data	Rated voltage (V)	Rated current (A)	Resistance across terminals (uΩ)	Cross section (mm²)	Strip length for min wire size (mm)	Solid wire size (mm²)	Stranded wire size (mm²)	Flexible wire size (mm²)
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	28	1000	4	12	0.5-6	0.5-6	0.5-6
ZDU 4/3AN	550	28	1000	4	12	0.5-6	0.5-6	0.5-6
ZDU 4/4AN	550	28	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
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



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NOTE: NTI = Notice to installer

Temperature range:

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

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.

Test Report No. (associated with this certificate issue) [16]

DK/ULD/ExTR15.0009/03.

[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 \leq Tamb \leq +40 °C).
 - T5 (-60 °C \leq Tamb \leq +55 °C). T4 (-60 °C \leq Tamb \leq +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] Conditions of certification:

None

Essential Health and Safety Requirements (Regulations Schedule 1) [19]

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

Additional information

The trademark **Weldmüller 3** will be used as the company identifier on the marking label.

The manufacturer shall inform the approved body concerning all modifications to the technical documentation as described in Annex III to UKSI 2016:1107 (as amended by UKSI 2019:696) - Schedule 3A, Part 1.

