

EU-TYPE EXAMINATION CERTIFICATE



[1]

[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 1346U Rev. 1**

[4]

Component: **Feed through and protective conductor terminal blocks. Types WDK and accessories ZQV, WQV, WAP, WEW, WTW, LS 2.8**

[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. **4788268188.2.1**

[9]

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

EN IEC 60079-0:2018

EN 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: 2016-05-26

Re-issued: 2019-01-30



Notified Body

UL International Demko A/S, Ballerup 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

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Schedule

[14]

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[15]

Description of Component:

Feed through terminal blocks type WDK are for the connection of copper conductors in enclosures. The type of protection is increased safety, "e", insulating parts made of Wellamid, with optional accessories, type WQV screw in cross-connectors, type ZQV plug-in cross-connectors, type LS2.8 shield bus, type WEW end brackets, type WTW partitions and type WAP-WDK end plates for fixing on mounting rails.

TYPE	Rated voltage (V)	Rated current (A)	Resistance across terminals (uΩ) top/lower	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)	Conductor range for 2 wires (mm ²)
WDK 1.5/R3.5	275	15	496/883	1.5	7	0,13-1,5	0,13-1,5	0,13-1,5	0,5-0,75
WDK 2.5	275	21	301/522	2.5	10	0,13-4,0	0,13-4,0	0,13-4,0	0,13-1,5
WDK 2.5 ZQV	275	21	299/566	2.5	10	0,13-4,0	0,13-4,0	0,13-4,0	0,13-1,5
WDK 2.5/EX	550	22	311/494	2.5	10	0,13-4,0	0,13-4,0	0,13-4,0	0,13-1,5
WDK 2.5DU-PE	275	23	372/ 1137	2.5	10	0,13-4,0	0,13-4,0	0,13-4,0	0,13-1,5
WDK 2.5N	550	21	262/427	2.5	8	0,13-4,0	0,13-4,0	0,13-4,0	0,13-1,5
WDK 2.5N DU-PE	550	24	297/939	2.5	8	0,13-4,0	0,13-4,0	0,13-4,0	0,13-1,5
WDK 2.5N V	550	24	269/420	2.5	8	0,13-4,0	0,13-4,0	0,13-4,0	0,13-1,5
WDK 2.5N/PE	PE	PE	1129	2.5	8	0,13-4,0	0,13-4,0	0,13-4,0	0,13-1,5
WDK 2.5PE	PE	PE	1056	2.5	10	0,13-4,0	0,13-4,0	0,13-4,0	0,13-1,5
WDK 2.5V	275	24	292/475	2.5	10	0,13-4,0	0,13-4,0	0,13-4,0	0,13-1,5
WDK 4N	550	30	232/365	4	8	0,13-6,0	0,13-6,0	0,13-4,0	0,13-1,5
WDK 4N DU-PE	550	30	222/735	4	8	0,13-6,0	0,13-6,0	0,13-4,0	0,13-1,5
WDK 4N PE	PE	PE	690	4	8	0,13-6,0	0,13-6,0	0,13-4,0	0,13-1,5
WDK 4N V	550	30	224/339	4	8	0,13-6,0	0,13-6,0	0,13-4,0	0,13-1,5
ZQV 1.5/R3.5	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WQV 2.5	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Q2 AKZ4	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 2.5N	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ZQV 4N	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WAP 2.5-10	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WAP	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WEW 35/1	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WEW 35/2	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WTW EN	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LS2.8	See NTI	See NTI	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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.

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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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Schedule

[14]

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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 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 (EN 60079-31) 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. 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 WDK and WPE 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.
- For cross connection accessories current rating, resistance across the terminal please refer to the table under "types & electrical rating" above. Details on creepages and clearance values and the required torque values please see Notice to installers.
- The terminal can be used with either one or two wires into either side of the terminal. When two wires are used they must be of the same type, and of equal sizes. 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.
- 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
- Unused terminals shall be tightened.

[18]

Essential Health and Safety Requirements

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

The trademark **Weldmüller**  may 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.