

[1]

# 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

UK-Type Examination Certificate No.: UL21UKEX2113U Rev. 0

[4] Component: Earthing and Neutral Busbar assembly

[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.

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 4789880974.8

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

(Ex) II 2 GD Ex eb IIC Gb

**Certification Manager** 

David Lloyd

ar in

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: 2021-10-22

Approved Body UL International (UK) Ltd Unit 1-3 Horizon Kingsland Business Park Wade

Road, Basingstoke RG24 8AH, UK

Phone: +44 (0)1256 312100



#### [13]

### **Schedule UK-TYPE EXAMINATION CERTIFICATE No.** [14]

### **UL21UKEX2113U Rev. 0**

#### [15] **Description of Component**

Earthing Busbar assembly, consisting of busbar holders type SH... or WEW..., a copper busbar and clamping yokes type ZB and WBBD 16 terminals..., for the connection of copper conductors in enclosures in type of explosion protection increased safety "e". The assembly is considered to form one component and are not to be used independently. The Ex-marking of the assembly is provided on the busbar holders. The following assembly elements are covered in this certification: rail mounting clamps type SH1, SH2, SH2S, SH3, WEW35/1 or WEW 35/2 and busbar NSCH, ESCH, SSch 10x3, SSch 12X5, SSch 6x6, SSch 15x6 and SSch 12x10

Operating temperature range -60°C ... +180°C (for ZB/NSCH without insulating material)
Operating temperature range -60°C ... +100°C (for WBBD 16 with PA66 insulating material)
Operating temperature range -60°C ... +100°C (for ZB with PA66 insulating material)
Operating temperature range -60°C ... +110°C (for SH1 and SH3 with PA66 insulating material)
Operating temperature range -60°C ... +130°C (for SH2 with KRG insulating material) Operating temperature range -60°C ... +110°C (for WEW with Wemid insulating material)

Type**	Rated conductor cross section in mm <sup>2</sup> (AWG)	Conductor cross section rigid in mm <sup>2</sup> (AWG)	Conductor cross section flexible in mm² (AWG)	Maximum current in A***	Tightening torque in Nm	Number of Conductors
NSCH	2.5 (14)	Min. 0.5 (20) Max. 2.5 (14)	Min. 0.5 (20) Max. 2.5 (14)	24 per clamping unit; 72 NSCH busbar	2	1
ZB4K, ZB4K, ZB4G, ZB4/6, ZB4/6K	4 (12)	Min. 0.5 (20) Max. 6.0 (10)	Min. 0.5 (20) Max. 4.0 (12)	28*	0.5	1
ZBE6, ZBE6K	6 (10)	Min. 1.0 (20) Max. 10 (8)	Min. 1.5 (20) Max. 10 (8)	36*	1.2	1
ZB10	10 (8)	Min. 1.5 (16) Max. 10 (8)	Min. 1.5 (16) Max. 10 (8)	50*	1.2	1
ZB16 ZB16/6K, ZBE16K ZB16K, ZB16/6	16 (6)	Solid: Min. 2.5 (14) Max. 16 (6)	Min. 2.5 (14) Max. 16 (6) Stranded: Min. 16 (6) Max. 25 (4)	66*	1.2	1
ZB35, ZB35K	35 (2)	-	Min. 16 (64) Max. 35 (0) Stranded: Min. 16 (6) Max. 50 (4)	109*	2.5	1
ESCH	2.5 (14)	2.5 (14)	2.5 (14)	-	2.0	1
WBBD 16****	16 (6)	Min 1.5 (20) Max 16 (6)	Stranded: Min 1.5 (20) Max 16 (6)	76A	2.5	1

\*If smaller cross sections than the rated cross section are used, the belonging lower current has to be laid down in the Certificate of the complete apparatus.

### Temperature range

Operating temperature range -60°C ... +180°C (for ZB/NSCH without insulating material)

Operating temperature range -60°C ... +100°C (for WBBD 16 with PA66 insulating material)
Operating temperature range -60°C ... +100°C (for ZB with PA66 insulating material)

Operating temperature range -60°C ... +110°C (for SH1 and SH3 with PA66 insulating material) Operating temperature range -60°C ... +130°C (for SH2 with KRG insulating material) Operating temperature range -60°C ... +110°C (for WEW with PA66 insulating material)

#### Routine tests

None

[16] Test Report No. (associated with this certificate issue) DK/ULD/ExTR13.0005/01.



<sup>\*\*</sup>in all colours

<sup>\*\*\*</sup> The maximum temperature was determined ≤ ΔT 40 K

<sup>\*\*\*\*</sup> Contact Resistance WBBD 16 with rated cross section 0.42mΩ

#### **Schedule** [13]

## **UK-TYPE EXAMINATION CERTIFICATE No. UL21UKEX2113U Rev. 0**

#### [17] Schedule of limitations:

[14]

The Earthing Busbar assemblies described above are considered to form one component, with Ex marking applied to the busbar holders type SH and WEW. If used independently, the above-mentioned parts are not covered by this certificate.

Service temperature range -60°C ... +180°C (for ZB/NSCH/ESCH without insulating material)

Service temperature range -60°C ... +100°C (For WBBD 16 with PA6 insulating material)

Service temperature range -60°C ... +100°C (for ZB with PA66 insulating material)

Service temperature range -60°C ... +110°C (for SH1 and SH3 with PA66 insulating material)
Service temperature range -60°C ... +130°C (for SH2 and SH2S with KRG insulating material)
Service temperature range -60°C ... +110°C (for WEW with PA66 insulating material)

The maximum temperature rise was determined ≤ ∆T 40 K.

For WBBD 16 - 1 solid or stranded conductor per clamping unit

For WBBD 16 - resistance across terminal -0.42m $\Omega$ 

The Earthing Busbar assemblies 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 placed inside a suitable certified IP6X enclosure in type of protection "t" for dust atmosphere

#### [18] Conditions of certification:

None

#### [19]

Essential Health and Safety Requirements (Regulations Schedule 1)
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



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.

[13] Schedule
[14] UK-TYPE EXAMINATION CERTIFICATE No.
UL21UKEX2113U Rev. 0

