IBExU Institut für Sicherheitstechnik GmbH
An-Institut der TU Bergakademie Freiberg

[1] **EU-TYPE EXAMINATION CERTIFICATE** - Translation

[2] Equipment or protective systems
intended for use in potentially explosive atmospheres, Directive 2014/34/EU

[3] EU-type examination certificate number **IBExU14ATEX1050** | Issue 1

[4] Product: **Junction box**
Type Klippon TB FS... (KTB FS), TB MH... (KTB MH), TB QL... (KTB QL)

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

[6] Address: Klingenbergstraße 16
32758 Detmold
GERMANY

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

[8] IBExU Institut für Sicherheitstechnik GmbH, notified body number 0637 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 Annex II to the Directive.

The examination and test results are recorded in the confidential test report IB-16-3-145.

[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 EN 60079-11:2012 EN 60079-31:2014
except in respect of those requirements listed at item [18] of the schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.

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

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

Ⓔx II 2G Ex eb IIC/IIB/IIA T6/T5/T4 Gb
Ⓔx II 1G Ex ia IIC/IIB/IIA T6/T5/T4 Ga
Ⓔx II 2G Ex eb ia IIC/IIB/IIA T6/T5/T4 Gb
Ⓔx II 2D Ex tb IIIC T80°C/T95°C/T135°C Db
Ⓔx II 1D Ex ia IIIC T80°C/T95°C/T135°C Da
$-60\ °C \leq T_a \leq +40/+55/+90\ °C$

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By order

A. Henker

Dipl.-Ing. (FH) A. Henker

- Seal -
(notified body number 0637)

Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Freiberg, 2016-12-20

[13] **Schedule**

[14] **Certificate number IBExU14ATEX1050** | Issue 1

[15] **Description of product**

The junction boxes of type Klippon TB FS..., abbreviated as KTB FS..., Klippon TB MH..., abbreviated as KTB MH... and Klippon TB QL..., abbreviated as KTB QL... are made of coated or uncoated stainless steel or coated mild steel. Additionally, they can contain gland plates made of the same materials or brass. Alternatively, junction boxes can have a surface painting (thickness > 0.2 mm... ≤ 2 mm).
The enclosure lid can be locked in different ways. At type FS, fixing screws are used; at type MH (multi hinge), locking is realized by screws and hinges; and at type QL, a quarter lock is employed.
The junction boxes are intended for stationary use in zones 1 and 2 as well as 21 and 22. Optionally, the junction boxes can be equipped with document holders, door stays and label holders as well as metallic and non-metallic marking plates. Furthermore, the junction boxes feature connection of flanges via gland plates, application of the cable transit system Roxtex and use of special flange plates in combination with certified plug and socket connectors. The corresponding instructions of the manufacturer's documentation shall be observed.

Technical data:

Ambient temperature:	-60 °C to +40 °C (T6 resp., T80 °C) -60 °C to +55 °C (T5 resp., T95 °C) -60 °C to +90 °C (T4 resp., T135 °C)
Rated voltage:	max. 1100 V
Rated current:	max. 452 A
Conductor cross section:	max. 300 mm^2

These values are maximum values. The actual electrical values are determined by the built-in components / terminals. The manufacturer specifies the rated values in the context of these maximum values and ensures compliance with the maximum surface temperature of the equipment and the permissible operating temperature of the components / terminals. The actual rated values are indicated on the individual marking plates and in the manufacturer's instructions.

Variations compared to issue x of this certificate:

Variation 1
Conformity with the current standards EN 60079-0:2012+A11:2013, EN 60079-7:2015 und EN 60079-31:2014

Variation 2
Additional variants of the junction box with surface painting (thickness > 0.2 mm...≤ 2 mm) for explosion group IIB and IIA

Variation 3
Change of the maximum surface temperature of the junction box from T85°C to T80°C and from T100°C to T95°C

Variation 4
Corresponding change of explosion protection marking

Variation 5
Removal of covered standard EN 60079-26, as EPL Ga for Ex "ia" equipment is fully covered by EN 60079-11

[16] **Test report**

The test results are recorded in the confidential test report IB-16-3-145 of 2016-12-20.

The test documents are part of the test report and they are listed there.

Summary of the test results
The junction box of type Klippon TB FS... (KTB FS), TB MH... (KTB MH) and TB QL... (KTB QL) fulfils the requirements of explosion protection for equipment group II, category 2G and 2D in type of protection increased safety "e" and dust ignition protection by enclosure "t", as well as category 1G and 1D in type of protection "i" for explosion group IIC resp., IIB or IIA and IIIC.

Safety instructions

- At the installation of Ex-components in the junction boxes, the specific conditions of use / schedule of limitations specified in the respective type examination certificates have to be observed.
- During mounting and operation, the minimum degree of protection IP64 is only achieved by proper use of adequate cable glands tested and certified for explosion protection.

[17] **Specific conditions of use**
None

[18] **Essential health and safety requirements**
Fulfilled by compliance with the standards listed at item [9]

[19] **Drawings and Documents**
The documents are listed in the test report.

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Freiberg, 2016-12-20