# 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 **IBExU07ATEX1148** | Issue 1
- [4] Product: Control and distribution box Type: Klippon STB...
- [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-16-3-144.

- [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:

II 2G Ex eb IIC T6/T5/T4 Gb
II 2(1)G Ex eb ia [Ga] IIC T6/T5/T4 Gb
II 1G Ex ia IIC T6/T5/T4 Ga
II 2D Ex tb IIIC T80°C/T95°C/T100°C Db

 $-60 \text{ °C} \le T_a \le +40/+55/+60 \text{ °C}$ 

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

By order

1 Hense

Dipl.-Ing. (FH) A. Henker



- Seal -(notified body number 0637)

Tel: + 49 (0) 37 31 / 38 05 0 Fax: + 49 (0) 37 31 / 38 05 10

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, 2017-06-01

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## Schedule

### C

## Certificate number IBExU07ATEX1148 | Issue 1

### [15] Description of product

The control and distribution box of type Klippon STB... is used as a general purpose connection and junction box that can be equipped with approved ex-components such as cable glands and terminals for cross-connections of conductors in compliance with the thermal requirements of the respective temperature class. The enclosure consists of a bottom section and a cover made of stainless steel. The cover is locked by fastening screws; sealing is provided by means of a silicone gasket. The control and distribution box can be used for the types of protection "e" (increased safety) and "t" (dust ignition protection by enclosure) in potentially explosive gas and dust atmospheres of zone 1 and 21. If all electrical circuits are intrinsically safe with level of protection "ia", the box can also be used in zone 0.

#### 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 +60 °C (T4 resp., T100°C)
Degree of protection (IP): Rated voltage:	IP64 / IP65 / IP66 max. 1100 V AC
	max. TTUU V AC
Rated current:	max. 453 A

Dimensions:

Phase conductor cross-section: Earthing conductor cross-section:

Width	Height	Depth
120 mm	120 mm	80 mm
150 mm	120 mm	80 mm
150 mm	150 mm	90 mm
190 mm	150 mm	90 mm
190 mm	190 mm	100 mm
250 mm	250 mm	120 mm
380 mm	160 mm	120 mm
400 mm	250 mm	130 mm
	120 mm 150 mm 150 mm 190 mm 190 mm 250 mm 380 mm	120 mm     120 mm       150 mm     120 mm       150 mm     150 mm       190 mm     150 mm       190 mm     190 mm       250 mm     250 mm       380 mm     160 mm

max. 300 mm<sup>2</sup>

max. 150 mm<sup>2</sup>

These values are maximum values. The actual values are determined by the installed 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 the EC-Type Examination Certificate and its Additions:

#### Variation 1

Conformity with the current standards EN 60079-0:2012+A11:2013, EN 60079-7:2015, EN 60079-11:2012 and EN 60079-31:2014

Variation 2

Change of the maximum service temperature from +120 °C to +100 °C

#### Variation 3

Corresponding change of the maximum surface temperature from T120°C to T100°C

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Variation 4

Corresponding change of the maximum ambient temperature from +80 °C to +60 °C

Variation 5

Corresponding change of explosion protection marking

#### [16] Test report

The test results are recorded in the confidential test report IB-16-3-144 of 2017-06-01.

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

#### Summary of the test results

The control and distribution box of type Klippon STB... fulfils the requirements of explosion protection for equipment group II, category 1G/2G and 2D in type of protection increased safety "e", intrinsic safety "i" and dust ignition protection by enclosure "t" for explosion group IIC and IIIC.

#### Safety instructions

- At the installation of components, the corresponding separation distances (clearance and creepage distances) in accordance with EN 60079-7 and EN 60079-11 have to be observed.
- The required minimum degree of protection IP64 in accordance with IEC 60529 is only achieved by proper use of adequate cable glands and blanking elements tested and certified for explosion protection.
- For other than T6/T80°C applications, where the service temperature of the control and distribution box may exceed 80 °C, the manufacturer or operating company has to select appropriate heatresistant cable glands and connection cables.
- [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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