IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

EU-TYPE EXAMINATION CERTIFICATE - Translation [1]

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



EU-type examination certificate number IBExU16ATEX1131 | Issue 0 [3]

[4] Product: **Aluminium Junction Box**

Type: CA-...Ex

[5]

Manufacturer: BERNSTEIN AG

Address: [6]

Hans-Bernstein-Straße 1

32547 Porta Westfalica

GERMANY

- This product and any acceptable variation thereto is specified in the schedule to this certificate and the [7] documents therein referred to.
- IBExU Institut für Sicherheitstechnik GmbH, Notified Body number 0637 in accordance with Article 17 [8] 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-14-3-160.

- Compliance with the essential health and safety requirements has been assured by compliance with: [9] EN 60079-0:2012+A11:2013, EN 60079-7:2015, EN 60079-11:2012 and 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.
- This EU-type examination certificate relates only to the design and construction of the specified [11] 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 one of the following:

᠍ II 2G Ex eb IIC T6...T4 Gb

(a) II 2G Ex eb ia/ib IIC T6...T4 Gb

IBExU Institut für Sicherheitstechnik GmbH

Fuchsmühlenweg 7

09599 Freiberg, GERMANY

By order

Dipl.-Ing. [FH] Henker

IREXII OF IBEXU Institut für Sicherheitstechnik GmbHenn-Nr. 06 - Seal -

(Notified Body number 0637)

+ 49 (0) 37 31 / 38 05 0 Tel: 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, 2016-06-03

IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

[13] Schedule

[14] Certificate number IBExU16ATEX1131 | Issue 0

[15] Description of product

The Aluminium junction boxes types CA-...Ex can be used stationary in Zone 1 or 2 as well as 21 or 22. The enclosures serve for the connection and distribution or cables and conductors by means of installed terminal blocks.

The Aluminium junction boxes are provided in different sizes.

type	length	width	heigth
CA 060	58 mm	64 mm	36 mm
CA 080	98 mm	64 mm	36 mm
CA 100	150 mm	64 mm	36 mm
CA 130	75 mm	80 mm	57 mm
CA 140	75 mm	80 mm	57 mm
CA 150	125 mm	80 mm	57 mm
CA 160	125 mm	80 mm	57 mm
CA 170	175 mm	80 mm	57 mm
CA 180	175 mm	80 mm	57 mm
CA 190	250 mm	80 mm	57 mm
CA 210	122 mm	122 mm	80 mm
CA 215	122 mm	122 mm	90 mm
CA 220	122 mm	122 mm	80 mm
CA 230	220 mm	122 mm	80 mm
CA 235	220 mm	122 mm	90 mm
CA 240	220 mm	122 mm	80 mm
CA 250	360 mm	122 mm	80 mm
CA 270	160 mm	160 mm	90 mm
CA 280	160 mm	160 mm	90 mm
CA 290	260 mm	160 mm	90 mm
CA 300	260 mm	160 mm	90 mm
CA 310	360 mm	160 mm	90 mm
CA 330	560 mm	160 mm	90 mm
CA 350	200 mm	230 mm	110 mm
CA 360	200 mm	230 mm	180 mm
CA 370	280 mm	230 mm	110 mm
CA 380	330 mm	230 mm	110 mm
CA 390	330 mm	230 mm	180 mm
CA 400	400 mm	230 mm	109 mm
CA 420	600 mm	230 mm	110 mm
CA 450	402 mm	310 mm	110 mm
CA 460	402 mm	310 mm	180 mm
CA 470	600 mm	310 mm	110 mm
CA 480	600 mm	310 mm	180 mm

IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

Technical data:

	max. 1100 V max. 60 V for intrinsically safe circuits	
Rated current:	max. 500 A	
Ambient temperature range:	-55 °C up to +90 °C (with silicone gasket) -35 °C up to +40 °C (with EPDM gasket) -20 °C up to +40 °C (with NBR gasket)	
maximum ambient temperature in dependence of the temperature class	+40 °C for T6 +55 °C for T5 +90 °C for T4	
Degree of protection (acc. to EN 60529):	at least IP64 (maximum IP66)	
Connection cross-section:	max. 300 mm²	
Protective ground cross-section:	up to 150 mm²	

[16] Test report

The test results are recorded in the confidential test report IB-14-3-160 of 2016-06-01.

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

Summary of the test results

The junction box type CA-...Ex fulfils the requirements of explosion protection for Equipment Group II, Category 2D in type of protection protection by enclosure "t" as well as Group II, Category 2G in type of protection increased safety "e" or intrinsic safety "i".

Safety technical notes

- The fixed conditions in the EC-TYPE EXAMINATION CERTIFICATE for the Ex Components for installation in the enclosure have to be observed.
- The Degree of protection, at least IP 64, at mounting and operation is reached only by proper use of cable glands which are separately tested and certified for explosion protection.
- The results are maximum values, the actual electrical results are determined by the built-in components. The manufacturer fixes the rated values on the basis of these limiting values, so that the maximum surface temperature and the permitted operating temperature of the components are met.
- When the temperature under rated conditions is higher than 70 °C at the entry point or 80 °C at the branching point of the conductors, information has to be marked on the equipment exterior to provide guidance to the user on the proper selection of the cable and cable gland.

[17] Specific conditions of use None

Essential health and safety requirements

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report:

None

[19] Drawings and Documents

The documents are listed in the test report.

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

By order

Dipl.-Ing. [FH] Henker

Freiberg, 2016-06-03