



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx IBE 16.0037X Issue No: 0 Certificate history:
Issue No. 0 (2016-11-22)

Status: Current Page 1 of 3

Date of Issue: 2016-11-22

Applicant: **BERNSTEIN AG**
Hans-Bernstein-Straße 1
32547 Porta Westfalica
Germany

Equipment: **Junction Box type CP*...Ex**
Optional accessory:

Type of Protection: **Increased safety "e", Intrinsic safety "i" and protection by enclosure "t"**

Marking:
Ex eb IIC T6...T4 Gb
Ex ia/ib IIC T6...T4 Gb
Ex eb ia/ib T6...T4 Gb

Ex tb IIIC T80 °C...T130 °C Db
Ex ia/ib IIIC T80 °C...T130 °C Db

-55 °C ≤ T_{amb} ≤ +90 °C (maximum values, depending on components used)

Approved for issue on behalf of the IECEx
Certification Body:

Prof. Dr. Tammo Redeker

Position:

Head of Certification Body

Signature:
(for printed version)

Date:


2016-11-22

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

IBExU Institut für Sicherheitstechnik GmbH
Certification Body
Fuchsmühlenweg 7
09599 Freiberg
Germany



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Manufacturer: **BERNSTEIN AG**
Hans-Bernstein-Straße 1
32547 Porta Westfalica
Germany

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

DE/IBE/ExTR14.0067/00

Quality Assessment Report:

DE/IBE/QAR15.0008/00



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Polyester junction boxes types CP*...Ex can be used stationary in Zone 1 or 2 as well as 21 or 22. There are two different variations, one dissipative made of black plastic and one insulating made of grey plastic. The enclosures may be provided with hinges. Gaskets made of NBR are used for sealing of the screws at the hinges.

The enclosures serve for the connection and distribution of cables and conductors by means of installed terminal blocks.

For detailed information of sizes and technical data see Annex.

CONDITIONS OF CERTIFICATION: YES as shown below:

The junction boxes type CPG-...Ex made of grey plastic may not be installed in areas where charging processes may occur. The surface has to be cleaned with a damp cloth.

Further information as number of terminals or current is mentioned in the proof of heating which is part of the operating instructions.

Annex:

[Annex2IBE16.0037X.pdf](#)

The Polyester junction boxes are provided in different sizes.

Type	length	width	height
CP* 145	80 mm	75 mm	75 mm
CP* 155	110 mm	75 mm	75 mm
CP* 175	160 mm	75 mm	75 mm
CP* 195	190 mm	75 mm	75 mm
CP* 140	80 mm	75 mm	55 mm
CP* 150	110 mm	75 mm	55 mm
CP* 170	160 mm	75 mm	55 mm
CP* 190	190 mm	75 mm	55 mm
CP* 220	122 mm	120 mm	90 mm
CP* 240	220 mm	120 mm	90 mm
CP* 280	160 mm	160 mm	91 mm
CP* 300	260 mm	160 mm	91 mm
CP* 320	360 mm	160 mm	91 mm
CP* 330	560 mm	160 mm	91 mm
CP* 370	255 mm	250 mm	120 mm
CP* 400	400 mm	250 mm	120 mm
CP* 450	400 mm	405 mm	120 mm
CPG 460	400 mm	405 mm	165 mm

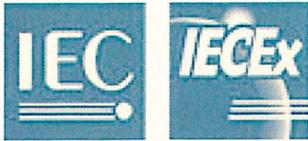
Technical data:

Rated voltage:	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 mm ²
Protective ground cross-section:	up to 150 mm ²

^(*) The gasket made of NBR is only used at the hinges.

Safety technical notes

- The fixed conditions in the certificates 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.



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- 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.