



# 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](http://www.iecex.com)

Certificate No.: IECEx TUR 16.0011X

Issue No: 0

Certificate history:

Issue No. 0 (2018-01-31)

Status: **Current**

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Date of Issue: **2018-01-31**

Applicant: **WISKA Hoppmann GmbH**  
Kisdorfer Weg 28, 24568 Kaltenkirchen  
**Germany**

Equipment: **Explosion protected junction box**

Optional accessory: *Type 510/\*/(\*\*\*\*)/(\*\*\*\*)*

Type of Protection: **Ex eb, Ex tb**

Marking:

Ex eb IIC T6...T4 Gb  
Ex tb III C T85°C Db

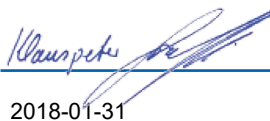
Approved for issue on behalf of the IECEx  
Certification Body:

Dipl.-Ing. Klauspeter Graffi

Position:

Head of Certification Body

Signature:  
(for printed version)



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Date:

2018-01-31

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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:

**TUV Rheinland Industrie Service GmbH**  
Am Grauen Stein  
51105 Cologne  
Germany





# IECEX Certificate of Conformity

Certificate No: IECEX TUR 16.0011X Issue No: 0  
Date of Issue: 2018-01-31 Page 2 of 3  
Manufacturer: **WISKA Hoppmann GmbH**  
Kisdorfer Weg 28,  
24568 Kaltenkirchen  
**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:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-31 : 2013</b> Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
<b>IEC 60079-7 : 2015</b> 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/TUR/ExTR16.0011/00](#)

Quality Assessment Report:

[DE/PTB/QAR11.0006/03](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

**SPECIFIC CONDITIONS OF USE: YES as shown below:**

see Attacement to IECEX TUR 16.0011X

### Annex:

[Attachement to IECEX\\_TUR\\_16.0011X\\_Rev-0.pdf](#)



Attachment to Certificate IECEX TUR 16.0011X

**Device:** **Explosion protected junction box**  
**Type:** 510\*/(\*\*\*\*)/(\*\*\*\*\*) (details refer to Technical Data section)  
**Manufacturer:** WISKA Hoppmann GmbH  
**Address:** Kisdorfer Weg 28,  
24568 Kaltenkirchen, Germany

**General product information:**

The explosion protected junction box is intended for use in gas- or dust explosive atmospheres.  
The explosion protected junction box is designed in Equipment protection by increased safety "e" and Equipment dust ignition protection by enclosure "t".  
The junction box consist of a bottom enclosure and a lid made of cast brass.  
The bottom enclosure can be equipped inside with separately certified terminals blocks directly mounted or terminals mounted on special rails.  
The bottom enclosure is equipped with up to four threaded boreholes up to a thread form of M25 x 1.5 equipped with up to four separately certified cable glands. Not used openings will be closed by separately certified blind plugs.

Type designation 510\*/(\*\*\*\*)/(\*\*\*\*\*)

510/	*/	(****)/	(*****)
1	2	3	4

- 1 = Type code:  
510 = type designation for the explosion protected junction box
- 2 = Specification of number and position of the cable gland  
1 = one cable gland  
2 = two cable glands side by side  
3 = three cable glands  
4 = four cable glands  
D = two cable glands oppositely
- 3 = alternative specification for mounting in terminal block, f. e.:  
No -specification = equipped with two terminal blocks type  
GHG 790 1108 R0001 (acc. PTB 00 ATEX 3102 U, IECEX PTB 11.0029U)  
11WDU1.5 = 11 terminal blocks type WDU 1.5 (Weidmüller)  
etc.
- 4 = Specification of size and sort of cable gland (only if delivered with cable glands), f. e.  
2x24-Z14 = two cable glands with rated size M24 with earth link 14 mm  
1x20-W10/1x20-Z10 = one cable gland rated size M20 without earth links  
For cable diameter 10mm and cable gland size M20 with  
earth links for cable diameter 10mm  
etc.



Attachment to Certificate  
IECEX TUR 16.0011X  
Revision 0

**Technical data**

Protection by enclosure acc. to IEC 60529 IP66

For standard terminal type GHG 790 1108 R0001  
(acc. to IECEx PTB 11.0029U, PTB 00 ATEX 3102 U)

Rated insulation voltage	630 V
Rated voltage	up to 690 V
Rated service temperature range	-55 °C to + 130 °C

Rated cross section	Rated current	Temperature increase ( $\Delta T$ )
1,0 mm <sup>2</sup>	12,4 A	max. 18 K
1,5 mm <sup>2</sup>	16,1 A	max. 19 K
2,5 mm <sup>2</sup>	22,0 A	max. 24 K
4,0 mm <sup>2</sup>	30,0 A	max. 27 K
6,0 mm <sup>2</sup> *	37,0 A	max. 23 K
* 6,0 mm <sup>2</sup> only single wire or with pin-end connector		

Capacity per terminal	Kind of connectable wires	Torque
8 x 1.0 mm <sup>2</sup>	single wire, finely stranded with ferrule	2,5 Nm
6 x 1.0 mm <sup>2</sup>	finely stranded with ferrule / pin-end connector	2,5 Nm
8 x 1.5 mm <sup>2</sup>	single wire	2,5 Nm
5 x 1.5 mm <sup>2</sup>	finely stranded with ferrule / pin-end connector	2,5 Nm
6 x 2.5 mm <sup>2</sup>	single wire	2,5 Nm
4 x 2.5 mm <sup>2</sup>	finely stranded with ferrule / pin-end connector	2,5 Nm
4 x 4.0 mm <sup>2</sup>	single wire	2,5 Nm
3 x 4,0 mm <sup>2</sup>	finely stranded with ferrule / pin-end connector	2,5 Nm
3 x 6.0 mm <sup>2</sup>	single wire / finely stranded with pin-end connector	2,5 Nm

Number of terminals typ GHG 790 1108 R0001	Max. current [A]	Ambient temperature range	Temperature class
2	33	-40 °C ≤ Ta ≤ +55 °C	T4
2	22	-40 °C ≤ Ta ≤ +55 °C	T5
2	22	-40 °C ≤ Ta ≤ +45 °C	T6

For rail terminal blocks (separately certified in type of protection “e”)

Rated insulation voltage	Dependent of the used terminals
Rated voltage	Dependent of the used terminals
Rated service temperature range	min. required -40 °C to + 100 °C

Number of terminals	Cross section [mm <sup>2</sup> ]	Max. current [A]	Ambient temperature range	Temperature class
11	1,5	6	-40 °C ≤ Ta ≤ +45 °C	T5
11	1,5	5	-40 °C ≤ Ta ≤ +45 °C	T6
11	1,5	5	-40 °C ≤ Ta ≤ +55 °C	T5
6	4	18	-40 °C ≤ Ta ≤ +45 °C	T6
6	4	18	-40 °C ≤ Ta ≤ +55 °C	T5

Minimum operating temperature range for separately certified cable glands dependent on the ambient temperature range

Ambient temperature range	Operating temperature range
-40 °C ≤ Ta ≤ +45 °C	-40 °C to +75 °C
-40 °C ≤ Ta ≤ +55 °C	-40 °C to +85 °C

Minimum operating temperature range for cables dependent on the ambient temperature range

Ambient temperature range	Operating temperature range
-40 °C ≤ Ta ≤ +45 °C	-40 °C to +80 °C
-40 °C ≤ Ta ≤ +55 °C	-40 °C to +90 °C

#### “Specific Conditions of Use” for Ex Equipment:

- 1) Only separately certified cable glands which comply with the type of protection should be used.
- 2) The dust exclusion tests were carried out with cable glands and blind plugs with gaskets / O-Rings. For type of protection “Equipment dust ignition protection by enclosure “t”” separately certified blanking elements and cable glands with affiliated gaskets/o-rings or tightening between enclosure and cable gland should be used. The gaskets / o-rings must be tested and certified together with the cable glands and must be suitable for this purpose (min. IP66).
- 3) For an ambient temperature of -40°C up to +45 °C:
  - cable glands must be used with a minimum temperature resistance of -40°C up to +75 °C
  - cables must be used with a minimum temperature resistance of -40°C up to +80 °C
 For an ambient temperature of -40°C up to +55 °C:
  - cable glands must be used with a minimum temperature resistance of -40°C up to +85 °C
  - cables must be used with a minimum temperature resistance of -40°C up to +90 °C
- 4) This equipment is designed for other than the normal ambient temperature range. References are given in the operating manual