



# 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 TPS 18.0004X

Issue No: 0

Certificate history:

[Issue No. 0 \(2019-08-09\)](#)

Status: **Current**

Page 1 of 4

Date of Issue: **2019-08-09**

Applicant: **Johannes Hübner Fabrik elektrischer Maschinen GmbH**  
Siemensstrasse 7  
35394 Giessen  
**Germany**

Equipment: **Couplings Ex-HKS 5\*\* and Ex-HKDS 5\*\***

*Optional accessory:*

Type of Protection: **Constructional safety "c"**

Marking:

Ex h IIC T6 Gb

Ex h IIIC T85°C Db

*Approved for issue on behalf of the IECEx  
Certification Body:*

Dipl.-Ing. (FH) Arno Butzke

*Position:*

Technical Certifier

*Signature:  
(for printed version)*

*Date:*

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](#).

Certificate issued by:

**TÜV SÜD Product Service GmbH**  
Ridlerstr. 65  
D-80339 Munich  
Germany



Product Service



# IECEX Certificate of Conformity

Certificate No: IECEx TPS 18.0004X Issue No: 0

Date of Issue: **2019-08-09** Page 2 of 4

Manufacturer: **Johannes Hübner Fabrik elektrischer Maschinen GmbH**  
Siemensstrasse 7  
35394 Giessen  
**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 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>ISO 80079-36 : 2016</b> Edition:1.0	Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic methods and requirements
<b>ISO 80079-37 : 2016</b> Edition:1.0	Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"

*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/TUN/ExTR18.0038/00](#)

Quality Assessment Report:

[DE/TPS/QAR17.0001/02](#)



# IECEX Certificate of Conformity

Certificate No: IECEx TPS 18.0004X

Issue No: 0

Date of Issue: **2019-08-09**

Page 3 of 4

## Schedule

### EQUIPMENT:

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

The Ex-HKS 5\*\* and Ex-HKDS 5\*\* couplings are used to transmit rotary movements to a connected rotary encoder in hazardous areas of EPL Gb or Db.

For parameters and type designation code, refer to the Annex.

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

The couplings must be protected against risk of mechanical danger (mechanical impacts from outside).



# IECEX Certificate of Conformity

Certificate No: IECEX TPS 18.0004X

Issue No: 0

Date of Issue: **2019-08-09**

Page 4 of 4

**Additional information:**

**Annex:**

[Attachment to IECEX\\_TPS\\_18\\_0004\\_X\\_Issue0.pdf](#)

**Type designation**

Couplings Ex-HK\*S 5\*\*

Ex-HK\*<sub>1</sub>S 5\*<sub>2</sub>\*<sub>2</sub>

1 = D = double-coupling

2 = digit = length

Main variant	Sub variant	Joints	Total length [mm]	Shaft diameter from ... to [mm]	
Ex-HKS 5	22	1	52	8	22
	32		60	8	22
	33		68	8	22
Ex-HKDS 5	22	2	104	8	22
	32		112	8	22
	33		120	8	22
	68		68	10	20

**Parameters**

Specification	Value (max.)	Unit
Shock resistance (short time)	100	g
Shock resistance (continuous load)	10	g
Vibration resistance (short time)	20	g
Vibration resistance (continuous load)	3	g
Torque	3	Nm
Rotational speed	6000	min <sup>-1</sup>
Ambient temperature (Ex-HKS and Ex-HKDS)	-50 ... +70	°C

Mounting accuracy (max. values)	Ex-HKS 5	Ex-HKDS 5
Axial offset	± 1 mm	± 1.5 mm
Radial offset	-	± 0.5 mm
Angle	0.5°	-