



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 BVS 19.0016X

Issue No: 0

Certificate history:

[Issue No. 0 \(2019-03-19\)](#)

Status: **Current**

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Date of Issue: **2019-03-19**

Applicant: **Buschjost GmbH**
Detmolder Str. 256
32545 Bad Oeynhausen
Germany

Equipment: **Valve solenoid type *****.890*.*** ****

Optional accessory:

Type of Protection: **Equipment protection by flameproof enclosures "d", Equipment dust ignition protection by enclosure "t", Equipment protection by increased safety "e"**

Marking:

Ex db eb IIC T4 / T5 *) Gb
Ex tb IIIC T130°C / T95°C *) Db

*See Parameters for details

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

Dr Franz Eickhoff

Position:

Deputy Head of Certification Body

*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:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
On the safe side.



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Manufacturer: **Buschjost GmbH**
Detmolder Str. 256
32545 Bad Oeynhausen
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:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2017 Edition:5.1	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/BVS/ExTR19.0013/00](#)

Quality Assessment Report:

[DE/TUN/QAR10.0002/05](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description

The actuating solenoids of solenoid group 89 (types 8900 ... 8909) serve as electric drives for process valves. A distinction is made between the two basic valve types NC (normally closed) and NO (normally open). The process valves are not part of this approval. The coil space of the solenoids is designed in flameproof enclosure "db", while the connection space is designed according to the rules of increased safety "eb". The entire device fulfils the requirements of the type of protection "Protection by enclosure "tb". The housing complies with protection class IP65.

Subject and type

See Annex

Parameters

See Annex

Listing of all components used referring to older standards

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

- A fuse corresponding to the rated current (max. $3 \times I_E$) must be connected in series with each electromagnet.
- Repair of the gap-forming parts is not permitted.
- The gap length of the flameproof joint of this apparatus are in parts longer and the gap width are in parts smaller than required by Table 3 of IEC 60079-1:2014.
- The continuous temperature resistance of the connecting cables must be at least 90 °C.

Annex:

[BVS_19_0016X_Buschjost_Annex.pdf](#)



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Annex
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Subject and type

Valve solenoid type *****1), 89²⁾**3), ****4) **5)

*****1) - Valve number (Not part of this type examination)

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89²⁾ - Solenoid group 89

**3) - Rotor no. for design of magnet, magnet sleeve, cable, temperature class, etc.
00 ... 09

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***4) - Rated voltage, 024 for 24 V, 110 for 110 V, 230 for 230 V

**5) - Power type:
00 Direct current
49 Alternating current

Parameters

Nominal voltage					
Direct current	12	V	up to	400	V DC
Alternating current	24	V	up to	400	V AC
	40	Hz	up to	60	Hz
Nominal current	0.073	A	up to	2.42	A
Nominal power	29	W			

Ambient temperature by temperature class and surface temperature

T5 / T95 °C: -40 °C ≤ T_{amb} ≤ +40 °C

T4 / T130 °C: -40 °C ≤ T_{amb} ≤ +60 °C

Medium temperature by temperature class and surface temperature

T5 / T95 °C: max. +90 °C

T4 / T130 °C: max. +110 °C

Listing of all components used referring to older standards

Subject and type	Certificate	Standards
Reduction / Adapter	IECEX PTB 06.0075U	IEC 60079-0 Ed. 4 ¹ IEC 60079-1 Ed. 4 ¹ IEC 60079-7 Ed. 3 ¹

¹ No applicable technical differences

² Technical differences evaluated and found satisfactory