



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 PTB 12.0040 issue No.:0 Certificate history:.....

Status: **Current**

Date of Issue: **2012-08-02** Page 1 of 5

Applicant: **Bürkert Werke GmbH**
Christian-Bürkert-Str. 13-17
74653 Ingelfingen
Germany

Electrical Apparatus: **Magnet coil, type AC 10-...-.....**
Optional accessory:

Type of Protection: **intrinsic safety**

Marking: **Ex ia IIC T6,T5 Gb**
Ex ia IIIC T80 °C Db

Approved for issue on behalf of the IECEx Certification Body: Dr. Ing. U. Johannmeyer

Position: Department Head "Intrinsic Safety and Safety of Systems"

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:

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
Germany





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Manufacturer: **Bürkert Werke GmbH**
Christian-Bürkert-Str. 13-17
74653 Ingelfingen
Germany

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 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

IEC 60079-11 : 2011-06 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition: 6.0

*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/PTB/ExTR12.0054/00](#)

Quality Assessment Report:
[DE/PTB/QAR07.0002/04](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The magnet coil, type AC 10 is used to actuate valves which control gaseous, liquid, powdery or granular media. It is designed as single solenoid.

Three diodes are connected in parallel to the coil to limit the opening overvoltage. The coil is always supplied from a certified intrinsically safe circuit. Versions PD89, PD94, PE28 and PE30 are connected by means of a flat connector and a socket according to DIN EN 175301-803, type A, whereas versions PD93, PD95, PE29 and PE31 are connected to the cable which is potted inside the cable head. The cable head of versions PD93, PD95, PE29 and PE31 is potted without voids after connection of the cable.

CONDITIONS OF CERTIFICATION: NO



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EQUIPMENT(continued):

Electrical data for application in hazardous areas due to explosive gas atmospheres:

The permissible ambient temperature for coil size 6 ranges from – 40 °C to + 60 °C for temperature class T6 and from – 40 °C to + 75 °C for temperature class T5.

Li and Ci are negligibly low.

Type AC 10...-5-....

Supply only for connection to certified intrinsically safe circuits with the following maximum values:

U_i = 35 V

I_i = 0.9 A

P_i = 1.1 W

single or butt mounting

Type AC 10...-6-....

Supply only for connection to certified intrinsically safe circuits with the following maximum values:

U_i = 35 V

I_i = 0.9 A

P_i = 2.1 W

single mounting only



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Additional information:

Electrical data for application in hazardous areas due to combustible dusts:

The permissible ambient temperature for coil size 6 ranges from $-40\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$ with a maximum surface temperature of $+80\text{ }^{\circ}\text{C}$.

Li and Ci are negligibly low.

Type AC 10...-5-....
Supply only for connection to certified intrinsically safe circuits with the following maximum values:
U_i = 35 V
I_i = 0.9 A
P_i = 690 mW
single or butt mounting

Type AC 10...-6-....
Supply only for connection to certified intrinsically safe circuits with the following maximum values:
U_i = 35 V
I_i = 0.9 A
P_i = 690 mW
single mounting only