

# IECEx Certificate of Conformity

# INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.:

**IECEX EPS 18.0110X** 

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Certificate history: Issue 0 (2019-01-25)

Status:

Current

Issue No: 1

Date of Issue:

2019-11-07

Applicant:

Bürkert Werke GmbH & Co. KG Christian-Bürkert-Straße 13-17

74653 Ingelfingen

Germany

Equipment:

Solenoid AC10-..-.

Optional accessory:

Type of Protection:

mb eb tb

Marking:

Ex mb IIC T\* Gb (AC10-U3-\*-JJ\*\*-JW\*\*-PX\*\*)

Ex mb IIIC T\*\*\*°C Db (AC10-U3-\*-JJ\*\*-JW\*\*-PX\*\*)

Ex eb mb IIC T\* Gb (AC10-U3-\*-JA\*\*-PX\*\*)

Ex mb tb IIIC T\*\*\*\*C Db (AC10-U3-\*-JA\*\*-PX\*\*)

Approved for issue on behalf of the IECEx

Certification Body:

Position:

Signature: (for printed version)

Date:

Holger Schaffer

Certification Manager

2019-11-07

. 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 www.iecex.com or use of this QR Code.

Certificate issued by:

Bureau Veritas Consumer Products Services Germany GmbH Businesspark A96 86842 Türkheim Germany





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Date of issue:

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Manufacturer:

Bürkert Werke GmbH & Co. KG Christian-Bürkert-Straße 13-17

74653 Ingelfingen Germany

Additional manufacturing locations:

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 equipment 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 60079-0:2017

Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"

Edition:4.1

Edition:2

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

IEC 60079-7:2017

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition:5.1

This Certificate does not indicate compliance with 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/EPS/ExTR18.0115/01

Quality Assessment Report:

DE/PTB/QAR07.0002/09



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#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The solenoid type AC10-..-. is used for actuating valves that control gaseous or liquid media. The electrical connection is provided by either a cable-connection or a terminal box. The terminal box is described and certified under the certificate number PTB 15 ATEX 1011 U/ IECEx PTB 15.0037U.

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

The device shall never be used in areas affected by strong charge-generating processes, mechanical friction and separation processes, electron emission (e.g. in the vicinity of electrostatic coating equipment), and pneumatically conveyed dust. For cleaning the surface of housing only antistatic- or damp- clothes are allowed. By installing of cable, the bending radius must be observed.

The solenoid shall always be used with armature.

If there are used different coils with different power the electrical values of the solenoid with max power is valid. Then the max ambient temperature is +40°C.



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#### **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Description of modification with revision 1

Adaptation to the latest version of Standards, supplementing of measurement of temperature increase with dust layer, reducing of maximum ambient temperature for PX58 and PX61 (see values), conducting of O-ring seals and adding corresponding test reports, adding the Installation instructions for cables.

Annex:

IECEx EPS 18.0110X\_1 - Annex.pdf



## Annex to Certificate IECEx EPS 18.0110X Issue No.: 1



### Electrical data:

### Assembly, temperature:

VAR EPS	VAR PTB	Temperature class	Ambient temperature [°C]	Assembly
PX58	PX22	T4/T130°C	-40+55	Single assembly
	PX23	T4/T130°C	-40+55	Single assembly
PX59	PX24	T4/T130°C	-40+40	Block assembly
PX60	PX25	T6/T80°C	-40+40	Single assembly
PX61	PX26	T6/T80°C	-40+55	Single assembly
PX62	PX27	T6/T80°C	-40+50	Single assembly
PX63	PX28	T6/T80°C	-40+40	Block assembly
PX64	PX29	T5/T95°C	-40+60	Single assembly
PX65	PX30	T5/T95°C	-40+50	Block assembly
PX66	PX31	T4/T130°C	-40+80	Single assembly



## Annex to Certificate IECEx EPS 18.0110X Issue No.: 1



### Wiring, power, voltage, frequency (size 32 mm):

code	wire-Ø [mm]	winding	R <sub>20</sub> [Ohm]	power [W]	voltage [V]	frequency [Hz]
04EA		40000	21405	3	240	50, 60
	0,05				230	DC, 50, 60
08EA	0,067	25000	7840	7	240	50, 60
	0,067				230	DC, 50, 60
10EA	0,075	19110	4630	3	120	50, 60
IULA	0,073	13110		3	110	DC, 50, 60
13EB	0,09	13600	2580	7	120	50, 60
14EB	0,095	12800	1950	7	115	DC, 50, 60
14EA	0,095	12200	1830	7	110	DC, 50, 60
15EA	0,1	11150	1520	7	100	DC, 50, 60
16EA	0,106	9700	1160	3	60	DC, 50, 60
18EB	0,118	8000	775	3	48	DC, 50, 60
22EA	0,15	5200	312	7	48	DC, 50, 60
23EA	0,16	4500	235	2,25	24	DC, 50, 60
24EA	0,17	3900	184	3	24	DC, 50, 60
28EA	0,212	2600	79	7	24	DC, 50, 60
32EA	0,25	1930	42,3	3	12	DC, 50, 60
36EA	0,315	1250	17,1	7	12	DC, 50, 60



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## Wiring, power, voltage, frequency (size 40 mm):

code	wire-Ø [mm]	winding	R <sub>20</sub> [Ohm]	power [W]	voltage [V]	frequency [Hz]
OFFR	05EB 0,056	56000	28974	1,8	240	50, 60
USEB		30000			230	DC, 50, 60
11EA 0,08				9	240	50, 60
	0,08	28000	7110	1,8	120	50, 60
					110	DC, 50, 60
12EA	0,085	25200	5662	9	230	DC, 50, 60
18EA	0,118	13700	1600	9	120	50, 60
1050	0.125	12150	1270	9	110	DC, 50, 60
19EB 0,125	12150	12/0	1,8	48	DC, 50, 60	
25EB	0,18	5600	275	1,8	24	DC, 50, 60
26EB	0,19	5300	240	9	48	DC, 50, 60
33EA	0,265	2860	67	1,8	12	DC, 50, 60
34EA	0,28	2600	54	9	24	DC, 50, 60
40EA	0,4	1320	13,4	9	12	DC, 50, 60