



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 FTZU 17.0017X**

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Certificate history:

Status: **Current**

Issue No: 3

Issue 2 (2021-05-14)

Issue 1 (2020-12-07)

Issue 0 (2017-08-16)

Date of Issue: 2024-03-01

Applicant: **Festo SE & Co. KG**
Ruiter Strasse 82
Esslingen 73734
Germany

Equipment: **Limit Switch Box SRBC-Cx-xx-N-20N-ZC-C2x-EX6, SRBC-Cx-xx-MW-1-1WG-C2x-EX6**

Optional accessory:

Type of Protection: **Intrinsic safety**

Marking: Ex ia IIC T1...T6 Ga
Ex ia IIIC Txx °C Da
xx - see Annex to this Certificate

Approved for issue on behalf of the IECEx
Certification Body:

Dipl. Ing. Lukáš Martinák

Position:

Head of the Certification Body

Signature:
(for printed version)

Lukáš Martinák
2024-03-01

Date:
(for printed version)



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



Certificate issued by:

Fyzikálně technický zkusební ústav
(Physical -Technical Testing Institute)
Pikartská 7, 71607 Ostrava - Radvanice
Czech Republic





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Manufacturer: **Festo SE & Co. KG**
Ruiter Strasse 82
Esslingen 73734
Germany

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

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 Reports:

CZ/FTZU/ExTR17.0017/00
CZ/FTZU/ExTR17.0017/03

CZ/FTZU/ExTR17.0017/01

CZ/FTZU/ExTR17.0017/02

Quality Assessment Report:

NL/DEK/QAR12.0012/11





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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The equipment Limit Switch Box SRBC-Cx-xx-N-20N-ZC-C2x-EX6, SRBC-Cx-xx-MW-1-1WG-C2x-EX6 is designed for switching according to angle of sensing spindle. The equipment is equipped by inductive/proximity sensors or mechanical switch.

The intrinsically safe parameters are mentioned in Annex to this Certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The equipment contains light alloy parts and must be protected against impact and friction when is used and transported in hazardous area.
2. If the equipment is used in Zone 0 and Gas Group IIC, under certain extreme circumstances, the plastic part of enclosure may store an ignition-capable level of electrostatic charge. The equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge. The equipment shall only be cleaned with a damp cloth
3. If the equipment is used in dust explosive atmosphere, under certain extreme circumstances, the surface of enclosure may store an ignition-capable level of electrostatic charge. The equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge.
4. If the equipment is used in the dust explosive atmosphere it must be used certified glands and blank elements according to IEC 60079-1 or IEC 60079-7 with appropriate IP code according to IEC 60529.





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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 3:

Modification of parameters and marking.

Annex:

[Annex_to_IECEx_FTZU_17_0017X_03.pdf](#)





Annex to Certificate of Conformity
IECEx FTZU 17.0017X issue No.: 3



Applicant: **Festo SE & Co. KG**
Address: **Ruiter Straße 82, 73734 Esslingen, Germany**

Electrical Apparatus: **Limit Switch Box SRBC-Cx-xx-N-20N-ZC-C2x-EX6**

Intrinsically safe parameters:

Minimal ambient temperature: $T_{amin} = -20^{\circ}\text{C}$

$L_i = 100\mu\text{H}$, $C_i = 100\text{nF}$

Gas atmosphere		Maximal Input parameters			Tamax [°C] = Maximal permissible ambient temperature for application in Temperature Class			
Category	EPL	Ui [V]	Ii [mA]	Pi [mW]	T6	T5	T4...T1	
1G/2G ^{*)}	Ga/Gb	16	25	34	73	80	80	
1G/2G ^{*)}	Ga/Gb	16	25	64	66	80	80	
1G/2G ^{*)}	Ga/Gb	16	52	169	45	60	80	
1G/2G ^{*)}	Ga/Gb	16	76	242	30	45	74	
Dust atmosphere		Maximal Input parameters			T [°C] = Maximal surface temperature for application in Ambient Temperature			
Category	EPL	Ui [V]	Ii [mA]	Pi [mW]	Ta = 40°C	Ta = 60°C	Ta = 70°C	Ta = 80°C
1D	Da	16	25	34	42	62	72	82
1D	Da	16	25	64	43	63	73	83
1D	Da	16	52	169	49	69	79	89

^{*)} Parameters are identical for Category/EPL 1G and 2G/Ga and Gb

Maximal ambient temperature: Tamax = 80°C ^{*)}

^{*)} Depends on Temperature Class and input power, see tables above

Degree of protection by enclosure: IP67





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Address: **Ruiter Straße 82, 73734 Esslingen, Germany**

Electrical Apparatus: **Limit Switch Box SRBC-Cx-xx-MW-1-1WG-C2x-EX6**

Intrinsically safe parameters:

Minimal ambient temperature: $T_{amin} = -40^{\circ}\text{C}$

$U_i = 30\text{ V}$, $I_i = 0.1\text{ A}$, $P_i = 1\text{ W}$, $L_i = \text{negligible}$, $C_i = \text{negligible}$

Gas atmosphere		Maximal Input parameters			$T_{amax} [^{\circ}\text{C}]$ = Maximal permissible ambient temperature for application in Temperature Class		
Category	EPL	$U_i [\text{V}]$	$I_i [\text{mA}]$	$P_i [\text{W}]$	T6	T5	T4...T1
1G/2G ^{*)}	Ga/Gb	30	100	1	80	80	80
Dust atmosphere		Maximal Input parameters			$T [^{\circ}\text{C}]$ = Maximal surface temperature for application in Ambient Temperature		
Category	EPL	$U_i [\text{V}]$	$I_i [\text{mA}]$	$P_i [\text{W}]$	$T_a = 70^{\circ}\text{C}$		$T_a = 80^{\circ}\text{C}$
1D/2D ^{*)}	Da/Db	30	100	1	$T = T_a$		$T = T_a$

^{*)} Parameters are identical for Category/EPL 1G and 2G/Ga and Gb, 1D and 2D/Da and Db

Maximal ambient temperature: $T_{amax} = 80^{\circ}\text{C}$ ^{*)}

^{*)} Depends on Temperature Class and input power, see tables above

Degree of protection by enclosure: IP66

