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 BVS 08.0022X**

Certificate history:
Issue 1 (2011-05-24)
Issue 0 (2008-06-17)

Status: **Current**

Issue No: 2

Date of Issue: 2017-11-02

Applicant: **Pepperl+Fuchs GmbH**
Lilienthalstrasse 200
68307 Mannheim
Germany

Equipment: **Keyboard type EXTA*-*-*-**-X**

Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i"**

Marking: Ex ib IIC T4 Gb
Ex ib IIIB T135°C Db

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

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

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Manufacturer: **Pepperl+Fuchs GmbH**
Lilienthalstrasse 200
68307 Mannheim
Germany

Additional manufacturing locations: **Pepperl+Fuchs GmbH**
Bussmatten 10-12
77815 Bühl, Baden
Germany

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 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

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 Report:

DE/BVS/ExTR07.0034/02

Quality Assessment Reports:

DE/PTB/QAR06.0008/08 US/UL/QAR07.0005/12

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Description for issues 0 and 1

The keyboard is used for input of data and is designed for mounting in an enclosure.
The keyboard consists of pc boards, which are fixed behind a light metal plate and protected by a metal cover; the light metal plate has openings for the operation of switching elements and a plastic foil at the front side.
In some variations additionally a track ball or a touch pad or a joystick is fastened.

Type

See Annex

Parameters

For keyboard circuits (IS 1) and for separated trackball/joystick/touch pad circuit (IS2):

Voltage	U_i	DC	5.4	V
Current	I_i		240	mA
Power	P_i		600	mW
Max. internal capacitance	C_i		24	µF
Max. internal inductance	L_i		negligible	
Ambient temperature range	T_a	-20 °C up to +50 °C		

SPECIFIC CONDITIONS OF USE: YES as shown below:
The danger of ignition due to propagating brush discharges must be avoided by mounting the apparatus in areas without intensive charging mechanism.

The connecting cable must be fixed and effectively protected against damage.

For the types EXTA*-*-*-*6-X a capacitance of 7 pF was measured at the non-grounded joystick.
Therefore, electrostatic charges in the area of Group IIC must be avoided.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
The keyboard has been assessed in acc. with the current standard versions.
The schematic and layout has been changed slightly.
Alternative a new mouse device M4 (touchpad) and an other front foil can be used.
Additional enclosures and a slightly changed front panel variant are possible.
Max. internal capacitance has been decreased from 25 µF to 24 µF.
Changed manufacturing locations.
Additional to the device type EXTA2-*-*-**-X a new device type EXTA3-*-*-**-X has been introduced.
A new “Condition of Use” has been introduced.