



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 INE 14.0029X

Issue No: 2

Certificate history:

Status: **Current**

Issue No. 2 (2018-01-09)

Issue No. 1 (2015-12-15)

Date of Issue: **2018-01-09**

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Issue No. 0 (2014-08-14)

Applicant: **PEPPERL+FUCHS GmbH**
Lilienthalstraße 200
68307 Mannheim
Germany

Equipment: **Enclosures type EJB***/EJBX*****

Optional accessory:

Type of Protection: **d, d[ia], d[ib], e, ib, op is, op pr, tb, tb[ia] or tb[ib]**

Marking:

Ex d (*) IIA or IIB or IIB+H2 T6 or T5 or T4 or T3 Gb

Ex tb (*) IIIC T85°C or T100°C or T135°C or T200°C Db

(*) : The marking could be completed with the type of protection in accordance with the equipment mounted in/with the enclosures

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

Thierry HOUEIX

Position:

Ex Certification Officer

*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](http://www.iecex.com).

Certificate issued by:

INERIS
Institut National de l'Environnement Industriel
et des Risques, BP n2
Parc Technologique ALATA
France



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Manufacturer: **PEPPERL+FUCHS srl**
Via Galileo Galilei, 1B
20875 Burago di Molgora (MB)
Italy

Additional Manufacturing location(s):

ADDITIONAL MANUFACTURING LOCATIONS: SEE ANNEX

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 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-28 : 2006-08 Edition:1	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition:4	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:

[FR/INE/ExTR14.0025/00](#)

[FR/INE/ExTR14.0025/01](#)

[FR/INE/ExTR14.0025/02](#)

Quality Assessment Report:

[DE/PTB/QAR06.0015/09](#)

[DE/PTB/QAR16.0002/00](#)

[FR/INE/QAR12.0003/05](#)

[US/UL/QAR07.0005/12](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The metallic enclosures made in aluminum alloy (EJB) or in stainless steel (EJBX) of different sizes are covered by the certificate IECEx INE 14.0028U. These enclosures can have a blind cover or provided with glass windows. The cover is fixed by stainless steel screws A4-70 or A2-70 (minimum yield stress: 450 N/mm²).

Enclosures could be fitted with accessories (breather/drains devices, pilot lights, operators..) covered by an IECEx component certificates.

The list of the components is defined in the annex.

In accordance with the technical documentations and instructions manual, they can also contain :

- 'IS' element covered by a separated certificate and/or 'NIS' elements.
- Batteries
- Electromagnetic, ultrasonic, radio frequency sources and new measurement instruments and some equipment with type protection "Ex i", "Ex e", "Ex m", "Ex o", "Ex p" and "Ex q" covered by an IECEx certificate.

The enclosures could be coupled by a certified sealing bushings/fittings with an enclosure with type protection "Ex de", "Ex e" or "Ex i" also covered by a full conformity certificate.

These enclosures get the degrees of protection IP66 without O-ring or IP66/67 with O-ring according to the IEC 60529 standard but the final marking should be in accordance with the minimum degrees of protection of accessories mounted on the enclosures.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The width of the flameproof joints is superior to those specified in tables of IEC 60079-1 standard.

The other conditions are stipulated the instructions and in the parameters relating to the safety of the certificate.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Purpose of the Issue n°1:

- Introduction of the type of protection "op is" and "op pr" according to the standard IEC 60079-28 in order to allow the possibility to install equipments covered by a separated full conformity certificate.
- Application of the modifications and extensions of the range of enclosures in accordance with the Issue n°1 of the component certificate IECEx INE 14.0028U
- Update of the list of equipments covered by a separated component certificate.
- Possibility to install intrinsic safety elements in the enclosures intended for a minimum ambient temperature between -20°C and -50°C using a thermal control devices that ensure the conditions of uses of the certified elements.

Purpose of the Issue n°2:

- Update of the list of the additional manufacturing locations

Annex:

[IECEX INE 14.0029X-02_Annex.pdf](#)



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PARAMETERS RELATING TO THE SAFETY

- Maximum supply voltage for Non 'IS' elements : 1000 Vac or 660 Vdc
- Maximum supply voltage for "IS" elements : 250 V
- Rated frequency : 50/60 Hz
- Maximum power of the signaling operators : 5 W (T4,T3 with incandescent lamps of 5W)

The maximum dissipated powers are defined in the descriptive documents for the different ambient temperature ranges and according to the type of the enclosure (with or without windows), the class of temperature and the presence or absence of the thermal probe to protect 'IS' elements.

When thermal probes are used in order to protect the 'IS' elements regarding the high temperature, the maximum threshold of thermal probe shall be according with threshold value of $[(T_{IEEx-2}) \pm 2^{\circ}C]$.

T_{IEEx} = Maximum value of the certified ambient temperature of the "IS" elements.

When thermal probes are used in order to protect the 'IS' elements regarding the low temperature, the maximum threshold of thermal probe shall be according with threshold value of $[(T_{minEx+2}) \pm 2^{\circ}C]$.

T_{minEx} = Minimum value of the certified ambient temperature of the "IS" elements.

In accordance with the component certificate IECEX INE 14.0028U, the enclosures can be used in the temperature range from $-50^{\circ}C$ up to $+60^{\circ}C$ for Group IIB+H2.

Uses of components covered by separated IECEX certificates:

The table below details the accessories that could be fitted with the enclosures. The restrictions of uses of each component are detailed in the descriptive documents of the manufacturers.

List of the components covered by separated IECEX certificates and statement of the assessments regarding the older editions of the standard:

Family name	IECEX CoC number	Manufacturer	Type	Standards and Statement of the older editions of the standard
EJB/EJBX	IECEX INE 14.0028U (Issue 1)	PEPPERL+FUCHS	Enclosures	IEC 60079-0: 2011 : See (1) IEC 60079-1: 2007: See (1) IEC 60079-31: 2013: See (1)
"R", "B", "RB"	IECEX CES 10.0002U (Issue 1)	CORTEM	Three pieces union	IEC 60679-0: 2011: See (1) IEC 60079-1: 2007: See (1) IEC 60079-31: 2008: See (2)
"KBD", "KB1" and "KB1FA" series	IECEX CSA 10.0007U	Killark Division of Hubbell, Inc. (Delaware)	Flame arrestor	IEC 60079-0:2004: See (3) IEC 60079-1: 2003: See (4)
FT/VS 61090...	IECEX INE 12.0002U (Issue 2)	Officine Meccaniche MAM	Flame arrestor	IEC 60079-0: 2011: See (1) IEC 60079-1: 2007: See (1) IEC 60079-7: 2006: See (1) IEC 60079-31: 2013: See (1)



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Family name	IECEX CoC number	Manufacturer	Type	Standards and Statement of the older editions of the standard
AX***	IECEX DNV 11.0015U	Solexy USA, LLC	Antenna coupler	IEC 60079-0: 2011: See (1) IEC 60079-1: 2007: See (1) IEC 60079-11: 2011: See (1) IEC 60079-18: 2009: See (1)
“RL**”, “RP**” and “RI*(CM*)” series	IECEX INE 14.0030U	PEPPERL+FUC HS	Operators	IEC 60079-0: 2011 : See (1) IEC 60079-1: 2007: See (1) IEC 60079-31: 2013: See (1)
MN, MNH and SMH	IECEX SIM 08.0009U (Issue2)	PEPPERL+FUC HS	Operators	IEC 60079-0: 2000: See (3) IEC 60079-1: 2003: See (4)
E540	IECEX SIR 08.0067U (Issue 2)	PEPPERL+FUC HS	Operators	IEC 60079-0: 2007: See (3) IEC 60079-1: 2007: See (1)
VDR**	IECEX INE 14.0031U	PEPPERL+FUC HS	Drain and breath valves	IEC 60079-0: 2011 : See (1) IEC 60079-1: 2007: See (1) IEC 60079-31: 2013: See (1)
PV02H*	IECEX SIR 12.0007U	PEPPERL+FUC HS	Drain and breath valves	IEC 60079-0: 2007: See (3) IEC 60079-1: 2007: See (1) IEC 60079-31: 2008: See (2)
07-91...	IECEX EPS 13.0045U	BARTEC	Line bushing	IEC 60079-0: 2011 : See (1) IEC 60079-1: 2007: See (1) IEC 60079-31: 2013: See (1)
57-91...	IECEX PTB 13.0030U (Issue 1)	BARTEC	Line bushing	IEC 60079-0: 2007: See (3) IEC 60079-1: 2007: See (1)
CP-TP-NPS- NCS-LPS	IECEX CES 10.0003U (Issue 1)	CORTEM	Line bushing	IEC 60679-0: 2011: See (1) IEC 60079-1: 2007: See (1) IEC 60079-31: 2008: See (2)
TMX-...	IECEX INE 12.0019U (Issue 1)	IDRM	Line bushing	IEC 60679-0: 2011: See (1) IEC 60079-1: 2007: See (1) IEC 60079-31: 2008: See (2)
GHG 640 ** R****	IECEX BVS 13.0098U	Cooper Crouse- Hinds	Line bushing	IEC 60679-0: 2011: See (1) IEC 60079-1: 2007: See (1)

(1): Certified in accordance with the last edition of the applicable standards.

(2): Not impacted by the major technical changes until the standard IEC 60079-31:2013

(3): Not impacted by the major technical changes until the standard IEC 60079-0:2011

(4): Not impacted by the major technical changes until the standard IEC 60079-1:2007



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MARKING

Marking has to be readable and indelible; it has to include the following indications:

- PEPPERL+FUCHS
- 68307 Mannheim – GERMANY
- EJB... (*)
- IECEX INE 14.0029X
- (Serial number)
- Ex d (**) IIA or IIB or IIB+H2 Gb
- Ex tb (**) IIIC Db IP (***)
- T.amb : (**)
- T. cable : (**)
- **WARNINGS: DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.**

(*) The dots are replaced by a codification according to the manufacturing variations. The different types are indicated in the descriptive documents.

(**) The type of protection, cable temperature in accordance with different factors as the internal equipment covered or not by an IECEX certificate, ambient temperature and maximum power dissipated.

(***) In accordance with the minimum degrees of protection of accessories mounted on the enclosures.

ROUTINE EXAMINATIONS AND TESTS

None



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ADDITIONAL MANUFACTURING LOCATIONS

	Manufacturer 1	Manufacturer 2	Manufacturer 3	Manufacturer 4
Manufacturer Name:	Pepperl+Fuchs (Aust) Pty Ltd	Pepperl+Fuchs GmbH	Pepperl+Fuchs (India) Pvt. Ltd.	Pepperl+Fuchs (Shanghai) Automation Engineering Co. Ltd.
Manufacturer Address:	Process Automation Division 131-149 Link Drive Campbellfield, Victoria, 3061.	Werk Bühl Bussmatten 10-12 77815 Bühl/Baden	#546/1, 7th Main, 4th Phase Peenya Industrial Estate Bangalore-560058	Nr. 269, Yuanzhong Rd., Huinan Town, Pudong District, Shanghai, 201399
Manufacturer Country :	Australia	Germany	India	Peoples Republic of China

	Manufacturer 5 (*)	Manufacturer 6 (**)
Manufacturer Name:	Pepperl & Fuchs Manufacturing (India) Pvt. Ltd.	PEPPERL+FUCHS Inc.
Manufacturer Address:	Plot no. A-13 Sipcot Industrial Growth Centre Oragadam, Tamil Nadu, 602105	4333 West Sam Houston Parkway North Suite 150 Houston, TX 77043
Manufacturer Country :	India	United States of America

(*) This manufacturing location is not qualified to manufacture EJB with "op is" option.

(**) This manufacturing location is not qualified to manufacture EJB with "op is" and "op pr" options.