



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 16.0039U Issue No: 0 Certificate history:
Issue No. 0 (2016-11-15)

Status: **Current** Page 1 of 3

Date of Issue: **2016-11-15**

Applicant: **Ex tech solution**
22, Impasse de la Volute
16430 CHAMPNIERS
France

Equipment: **Pilot Light and Resistor type ZBWW/L/R... or XLW... or XAW5...**
Optional accessory:

Type of Protection: **eb mb tb**

Marking: Ex eb mb IIC Gb
Ex tb IIIC Db

Approved for issue on behalf of the IECEx
Certification Body:

Thierry HOUÉIX

Position:

Ex Certification Officer

Signature:
(for printed version)



Date:

2016-11-15

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: **Ex tech solution**
22, Impasse de la Volute
16430 CHAMPNIERS
France

Additional 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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-18 : 2009 Edition:3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	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/ExTR16.0049/00](#)

Quality Assessment Report:

[FR/INE/QAR08.0008/07](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

This component is a pilot light and resistor used in electrical circuits are intended to be used in pressurized or increased safety enclosures.

Pilot light can be associated with :

Metallic range XLW4B..., composed by a head ZB4B...series, with gasket ZBW080 (M_70ST42VF) and fastening ZB4BZ009. The Collar in Zamak (EN12844-ZP3).

Plastic range XLW5A..., by composed by a head ZB5A...series, with gasket ZBW080 (M_70ST42VF) and fixed by nut and a base ZB5AZ009. Collar in plastic (PBT GF20 FR), with gasket ZBW080 (M_70ST42VF).

Plastic range XAW5..., composed by a head ZAW5... certified (INERIS14ATEX9006U and IECEx INE 14.0015U).

Illuminated push-buttons types ZB4BP..., ZB4BH... and peepholes type ZB4BV... or ZB5AV... associated to the pilot light ZBWW... or ZBWL...

SCHEDULE OF LIMITATIONS:

During the installation, the user will have to take into consideration that the heads types ZB4BP..., ZB4BH..., ZB4BV... and ZB5AV... underwent only a shock corresponding to an energy of a low risk.

CONDITIONS OF CERTIFICATION: NO

Annex:

[IECEx INE 16.0039U-00_Annex.pdf](#)



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PARAMETERS RELATING TO THE SAFETY

For pilot light type ZBWV... and ZBWL...

Maximum supply voltage : from 24 to 254 V AC/DC

Maximum consumed current : from 2 to 10 mA

For pilot light type ZBWV...B and ZBWL...B

Maximum supply voltage : from 6 to 24 V AC/DC

Maximum consumed current : from 14 to 21 mA

For resistor type ZBWR...

Maximum supply voltage : 230 V AC/DC

Maximum consumed current : 40 mA

Maximum power : 0.53 W

Service temperature of non-metallic parts of the resistor and the pilot light: -40°C to +95°C

Service temperature and protection degrees IP of the associated heads :

References	Service temperatures	protection degrees IP
ZB4BP..., ZB4BH..., ZB4BV... or ZB5AV...	-20°C to +75°C	IP65
ZAW5... (certificates INERIS 14ATEX9006U and IECEX INE 14.0015U), head alone.	-50°C to +75°C	IP66

MARKING

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

Pilot light 24 to 254 V alone:

Ex-tech

FR-16430 CHAMPNIERS.

ZBWV...* or ZBWL...*

IECEX INE 16.0039U

Ex eb mb IIC Gb

Rated voltage and current



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Pilot light 6 to 24 V alone:

Ex-tech
FR-16430 CHAMPNIERS.
ZBWV...B* or ZBWL...B*
IECEX INE 16.0039U
Ex eb mb IIC Gb
Rated voltage and current

Resistor alone:

Ex-tech
FR-16430 CHAMPNIERS.
ZBWR...*
IECEX INE 16.0039U
Ex eb mb IIC Gb
Rated voltage and current

heads + resistor or pilot light:

Ex-tech
FR-16430 CHAMPNIERS.
XAW5...* or XLW...*
IECEX INE 16.0039U
Ex eb mb IIC Gb
Ex tb IIIC Db

(*) items are replaced with numbers or characters corresponding to functions

ROUTINE EXAMINATIONS AND TESTS

For resistor and pilot lights:

In accordance with clause 7.1 of the IEC 60079-7 standard, each component defined above has to have successfully passed, before delivery, a test of dielectric performed according to the relevant standards.

In accordance with clause 9.1 from the EN 60079-18 standard, a visual examination of encapsulation.

In accordance with § 9.2 of the EN 60079-18, a test of dielectric strength under a voltage to $2U+1000$ volts between active parts and encapsulate surface during a minimum of one second.

For the heads:

No routine test required.