



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 EUT 15.0007X Issue No: 0 Certificate history:
Issue No. 0 (2015-10-07)

Status: **Current** Page 1 of 3

Date of Issue: **2015-10-07**

Applicant: **EUROSWITCH S.r.l.**
Via Provinciale, 15 - 25057 Sale Marasino (BS)
Italy

Electrical Apparatus: **Pressure Switch and Vacuum switch**
Optional accessory:

Type of Protection: **Intrinsic safety "I"**

Marking:
Ex ia I
Ex ia IIC TX
Ex ia IIIC TX°C

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

Dionisio Bucchieri

Position:

Head of IECEx CB

*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:

Eurofins TECH S.r.l.
Via Cuorgnè,
n.21 - 10156 Torino
Italy



Product Testing



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Manufacturer: EUROSWITCH S.r.l.
Via Provinciale, 15 - 25057 Sale Marasino (BS)
Italy

Additional Manufacturing
location(s):

EUROSWITCH S.r.l.
Via del Cottonificio, 1
25055 Pisogne (BS)
Italy

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 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 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:

[IT/EUT/ExTR15.0011/00](#)

Quality Assessment Report:

[IT/EUT/QAR15.0003/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The vacuum/pressure switch is a device that allows the signalling of the reaching of a threshold pressure/depression of the fluid of a generic process. The devices are electro-mechanical with two states (over or under a threshold corresponding to opened or closed state of an internal switch); the diaphragm (which is immersed in the fluid) actuates the switch through a spring .

The equipment consist of a metallic body (made of brass or stainless steel) and a plastic connector with its connection cable.

The equipment is suitable for Group I, Group IIC and Group IIIC and has respectively the type of protection "Ex i" . The equipment must be connected to an already IEC Ex certified intrinsically safe barrier with suitable output parameters.

The safe input parameters of the apparatus are:
 $U_i = 20V$; $I_i = 0.2A$; $P_i = 1W$; $L_i = 0 \mu H$; $C_i = 0 \mu F$.

Degree of protection IP65 (declared by the manufacturer);

Ambient temperature. $-20 \div +40 \text{ }^\circ\text{C}$

The maximum process temperature is 100°C for model 80 and 120°C for other models

The process connection is different for each model, it can be: 1/8" conical gas, 1/8" gas cylindrical, 1/8" NPT, 1/4" conical gas, 1/4" gas cylindrical, M10x1 conical, M10x1 cylindrical; M12x1.5 cylindrical, 1/2" Gas cylindrical, M20x1.5 cylindrical, 3/4" 16 UNF.

CONDITIONS OF CERTIFICATION: YES as shown below:

The user must avoid that a dust layer on the equipment exceeds 5 mm.

Potential electrostatic charge hazard - The user must periodically clean the equipment with a damp cloth or antistatic products.

Temperature class and Maximum surface temperature:

T6 and 80°C when T_{process} and $T_{\text{amb}} \leq 40^\circ\text{C}$;

T5 and 95°C when $40^\circ\text{C} < T_{\text{process}} \leq 55^\circ\text{C}$;

T4 and 130°C when $55^\circ\text{C} < T_{\text{process}} \leq 90^\circ\text{C}$;

T3 and 160°C when $90^\circ\text{C} < T_{\text{process}} \leq 120^\circ\text{C}$;

When used in mine and where coal dust can form a layer, the process temperature must not exceed 100°C ; where coal dust can not form a layer, the process temperature must not exceed 120°C