



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 SEV 13.0011 issue No.: 0 Certificate history: _____

Status: **Current**

Date of Issue: **2013-11-14** Page 1 of 4

Applicant: **Schurter AG**
Werkhofstrasse 8-12
CH-6002 Luzern
Switzerland

Electrical Apparatus: **Piezo Switch**
Optional accessory:

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

Marking: Ex ib IIC T6...5 Gb
Ex ib IIIC T85 °C...100 °C Db

Approved for issue on behalf of the IECEx
Certification Body: Erich Obrist

Position: Manager product certification

Signature:
(for printed version) 

Date: 2013-11-14

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:

Electrosuisse div. Testing and Certification
Luppenstrasse 1
CH-8320 FEHRALTORF
Switzerland

electrosuisse 



IECEx Certificate of Conformity

Certificate No.: IECEx SEV 13.0011

Date of Issue: 2013-11-14

Issue No.: 0

Page 2 of 4

Manufacturer: **Schurter AG**
Werkhofstrasse 8-12
CH-6002 Luzern
Switzerland

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 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:
[CH/SEV/ExTR13.0007/00](#)

Quality Assessment Report:
[CH/SEV/QAR13.0007/00](#)



IECEx Certificate of Conformity

Certificate No.:

IECEx SEV 13.0011

Date of Issue:

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Issue No.: 0

Page 3 of 4

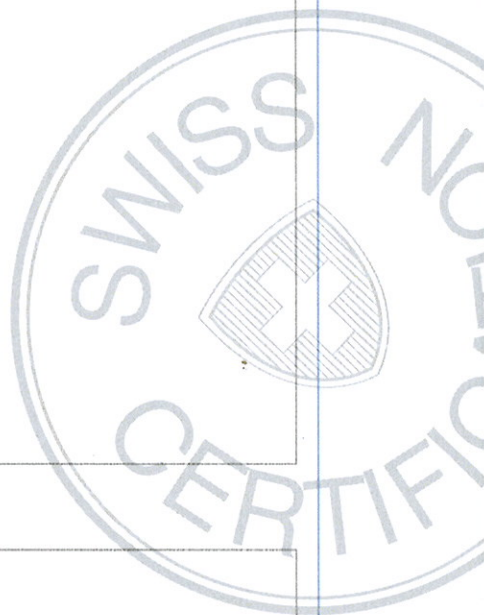
Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

PSE EX

CONDITIONS OF CERTIFICATION: NO





IECEx Certificate of Conformity

Certificate No.: IECEx SEV 13.0011

Date of Issue: 2013-11-14

Issue No.: 0

Page 4 of 4

Additional information:

The basic function of the piezo switch bases on the piezo electric effect. The pressure force on the piezo ceramic produce a charge transfer, which produce a voltage impulse. The voltage impulse will be amplified in the electronic and transferred to the output switch. During the voltage impulse the output switch is closed for a specific time. The switch time depends on the actuating force and speed.

Ratings:

$U_i = 24 \text{ VAC/VDC}$, $I_i = 40 \text{ mA}$

$P_i = 700 \text{ mW}$ for T6 / 960 mW for T5

$C_i = 0 \text{ nF}$, $L_i = 0 \text{ }\mu\text{H}$

Classification of installation and use: stationary

Ingress protection: IP67

Rated ambient temperature range: $-20 \text{ }^\circ\text{C}$ to $+60 \text{ }^\circ\text{C}$

Rated service temperature range for Ex Components: $-20 \text{ }^\circ\text{C}$ to $+60 \text{ }^\circ\text{C}$

