

Dionisio Bucchieri

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEX EUT 25.0007X Page 1 of 3 Certificate history:

Status: Current Issue No: 0

Date of Issue: 2025-06-26

Applicant: Rotork Instruments Italy s.r.l.

Via Portico 17

Orio al Serio (BG) 24050

Italy

Equipment: Soldo® Series SY and SW Limit switch box

Optional accessory:

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

Marking: Ex ia IIC T6...T4 Ga

Ex ib IIIC T42°C...T88°C Db

Approved for issue on behalf of the IECEx

Certification Body:

Position: Head of IECEx Certification Body

Signature:

(for printed version)

Date:

(for printed version)

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.lecex.com or use of this QR Code.

Certificate issued by:

Eurofins Product Testing Italy S.r.I. Via Cuorgnè n.21 - 10156 Torino Italy





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Manufacturer: Rotork Instruments Italy s.r.l.

Via Portico 17

Orio al Serio (BG) 24050

Italy

Manufacturing locations:

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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-11:2011

dition:6.0

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:

IT/EUT/ExTR25.0002/00

Quality Assessment Report:

GB/ITS/QAR09.0004/11



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The limit switch box series SW with body in stainless steel and SY with body in aluminium alloy material are electrical devices used to indicate the position, for example in valves and actuators, by means of electrical signal and visual indicator. These are mounted on actuator or manual valve with external lever or gear.

The cable entries are machined according to metric ISO 965-1 thread (M20x1.5 or M25x1.5), NPT thread (1/2" or 3/4").

The limit switch boxes can be configured with up to four proximity switches and one position transmitter mechanically connected to the internal camshaft and the potentiometer.

Configurations with a lower number of switches can be realized. The limit switches are mounted on circuit board or dedicated support plate and are interfaced to the camshaft; this component intervenes with induction effect of the switches changing their state.

The equipment is marked according to the intrinsically safe requirements and it can be powered up only by means of intrinsic safety barriers (associated apparatus). In this case each switch has to be connected to an individual channel of intrinsic safety barrier.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Potential electrostatic charging hazard, see instruction manual for details.
- SY enclosures are mainly made of aluminium material and then a proper installation has to be observed when placed in environment classified as Zone 0 to avoid an ignition hazard due to impact or friction.
- Each switch involved in the equipment has to be powered only by a single channel of certified intrinsic safety barrier.

Annex:

Annex to CoC IECEx EUT 25.0007.pdf





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Annex to certificate: IECEx EUT 25,0007 X Issue N. 0

General product information:

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Warning list:

- Do not open in a gas/dust explosive atmosphere
- Due to risk of static hazard the enclosure must be only cleaned with a damp cloth
- For safety instruction refers to IOM

Electrical parameters:

The safety related electrical parameters correspond to those defined for each individual already certified Ex Equipment internally installed.

Routine tests

None

Relationships between ambient temperature range, temperature limits and electrical parameters

| Switch type | Type 1 – 34mW | | | Type 2 – 64mW | | | Type 3 – 169mW | | | Type 4 – 242mW | | |
|---|---------------|----|----|---------------|----|----|----------------|----|----|----------------|-----|-----|
| Temp. Class (EPL Ga) | Т6 | T5 | T4 | Т6 | T5 | T4 | Т6 | T5 | T4 | Т6 | T5 | T4 |
| T _{amb} MAX [°C] | 48 | 63 | 83 | 47 | 62 | 82 | 35 | 50 | 79 | 18 | 33 | 62 |
| Max surface temp.[°C] (EPL Db) | 53 | 68 | 88 | 52 | 67 | 87 | 42 | 57 | 86 | N/A | N/A | N/A |

Notes

Note 1 - The equipment temperature range is delimited by the worst component ambient temperature range.

Note 2 - When already certified proximity switches/transmitters are involved in the equipment, the marked temperature class is related to the maximum ambient temperature as described by the certificate of these devices. Furthermore, when more than one already certified proximity (with eventually one transmitter) are included, the marked ambient temperature values for each temperature class/maximum surface temperature and group of supply parameters are reduced to take into consideration the local ambient temperature inside the limit switch box.

Note 3 - Input parameters are based on components certificates.