

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:

IECEx SIR 12.0036X

issue No.:3

Certificate history: Issue No. 3 (2017-3-24)

Issue No. 2 (2016-6-29)

Issue No. 1 (2016-1-4) Issue No. 0 (2012-7-10)

Status:

Current

- -

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Date of Issue:

Applicant:

2017-03-24

Rotork Instruments Italy srl

Via Portico 17

24050

Orio al Serio (BG)

Italy

Equipment:

SOLDO™ SK and SQ series limit switch boxes

Optional accessory:

Type of Protection:

Flameproof and Dust Protection by Enclosure

Marking:

Ex db IIC T6 Gb

or Ex db IIC T5 Gb

or Ex db IIC T4 Gb

Ex tb III C T85°C Db

Ex tb III C T100°C Db

Ex tb III C T135°C Db

Ta = -55°C≤Ta≤ 60°C Ta = -55°C≤Ta≤ 80°C

Ta = -55°C≤Ta≤ 105°C

Approved for issue on behalf of the IECEx

Certification Body:

R A Craig

Position:

Certification Support Officer

Signature:

(for printed version)

Date:

2114.03-21

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.

Certificate issued by:

SIRA Certification Service CSA Group Unit 6, Hawarden Industrial Park Hawarden, Deeside, CH5 3US United Kingdom







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Manufacturer:

Rotork Instruments Italy srl

Via Portico 17

24050

Orio al Serio (BG)

Italy

Additional Manufacturing location(s):

Fairchild Industrial Products Co.

3920 West Point Blvd. Winston-Salem North Carolina 27103 United States of America

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 60079-1: 2014-06

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition: 7.0

IEC 60079-31: 2013

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition: 2

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:

GB/SIR/ExTR12.0175/00 GB/SIR/ExTR17:0018/00 GB/SIR/ExTR15.0343/00 GB/SIR/ExTR17.0051/00 GB/SIR/ExTR16.0158/00

Quality Assessment Report:

GB/ITS/QAR09.0004/01

GB/SIR/QAR09.0003/05



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#### **Schedule**

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The SK and SQ series limit switch boxes are electromechanical devices used to indicate the position of valves/actuators etc. by means of an electrical signal and an optional visual indicator. The metallic enclosure is constructed from 316 or 316L stainless steel (SQ) or aluminium (SK) and comprises of two enclosure halves secured with 4 x M6 stainless steel fasteners with a minimum property class of 500 MPa. An operating rod passes through each enclosure half for connection to the device being monitored. The rod operates the internal switch/sensor for signalling and passes through to the external indicator (when fitted). There are two, threaded entries (M20 or ½" NPT) into the enclosure for cable entry

Voltage: 125 Vdc /250 VAC max

Current: 10 A max

Maximum dissipated power inside: 10 W

Conditions of manufacture

The Manufacturer shall comply with the following:

The power dissipation inside the flameproof enclosure shall not exceed 10 W

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

Electrostatic risk – When units are fitted with a non-conducting position indicator, this could potentially generate an ignition-capable level of electrostatic charges under certain extreme conditions. Therefore, these units shall not be installed in a location where they may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on the non-conducting surfaces. Additionally, cleaning of the equipment shall be done only with a damp cloth.



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

Issue 1 – this Issue introduced the following changes:

 The introduction of an alternative material, sintered bronze, for the shaft bushing fitted in the cover and body.

The introduction of an alternative shaft and bushing arrangement.

Issue 2 – this Issue introduced the following changes:

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, the documents previously listed, IEC 60079-1:2007 Ed 6 and IEC 60079-31:2008 Ed 1, were replaced by IEC 60079-1:2014 Ed 7 and IEC 60079-31:2013 Ed 2, the product markings were updated accordingly.

2. Removal of the following previous scheduled certification name plate drawings that are no longer

required to support production and are only retained for reference:

Drawing	Rev.	Title
SD-0211055-01	1	SK metal plate IP66-67 ATEX/IECEx certification
SD-0211054-01	1	SQ metal plate IP66-68 10m ATEX/IECEx certification
SD-0211053-01	1	SQ metal plate IP66-67 ATEX/IECEx certification
SD-0211056-01	1	SK metal plate IP66-68 10m ATEX/IECEx certification

Issue 3 - this Issue introduced the following changes:

The Applicant and Manufacturers name and address were changed as follows:

From:

Soldo srl Rotork Instruments Italy srl

Via Monte Baldo 60 Via Portico 17

25015 24050

Desenzano del Gards (BS)

Orio al Serio (BG)

taly

SOLDO<sup>TM</sup> was introduced to the front of the equipment name on page 1.

3. The introduction of an alternative manufacturing location at Fairchild Industrial Products Co., 3920 West Point Blvd., Winston-Salem, North Carolina 27103, USA was recognized.