EU Type Examination Certificate CML 19ATEX1360X Issue 0

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment **SOLDO™ SW and SY Rotary Limit Switch Boxes**

3 Manufacturer **Rotork Instruments Italy srl** **Fairchild Industrial Products Co.**

4 Address
Via Portico 17
24050
Orio al Serio (BG)
Italy

3920 West Point Blvd.
Winston-Salem
North Carolina 27103
USA

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 CML B.V., Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.

8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014

10 The equipment shall be marked with the following:

II 2GD

Ex db IIC T* Gb

Ex tb IIIC T*°C Db

Ta = -60°C to +*°C (see description)

H M Amos MIET
Certification Manager

11 Description

The SOLDO™ SW and SY Rotary Limit Switch Boxes consist of a flameproof, stainless steel enclosure (Type SW) or aluminium enclosure (Type SY) with operating rods passing through the enclosure walls for connection to valves and an optional external visual indicator. The enclosure has a cover and body that are secured by an M150 x 2 threaded joint. The function of these rotary limit switches is to provide visual and/or remote electrical indication of quarter turn valve/actuator positions. They can internally be provided with several switch options, a heating device or 4-20 mA transmitter/interfaces.

The relationship between the ambient temperature and the assigned temperature classes/surface temperatures for dust are as follows:

Tamb	T Class/Maximum Surface Temp. for Dust*	Configuration
-60°C to +60°C	T6/T110°C	4 Switches and a 5 W heater or 6 Switches
-60°C to +80°C	T5/T110°C	6 Switches
-60°C to +105°C	T4/T140°C	6 Switches

*Under a 50 mm dust layer which exceeds the requirements of the listed standards.

Rating:

Max. Voltage 250Vac 125 Vdc
Max. Current: 10A
Maxi. Power: 10 W (including heater, if applicable)

Notes:

- Sira 12ATEX1181X is superseded by this certificate.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 12ATEX1181X.
- Where Sira 12ATEX1181X is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	03 Oct 2019	R12654D/00	Issue of prime certificate

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.

ii. The power dissipation inside the flameproof enclosure must not exceed 10 W.

14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

i. The equipment is fitted with a non-conducting position indicator which could potentially generate an ignition-capable level of electrostatic charge under certain extreme conditions. Therefore, the equipment shall not be installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charge on the non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.

ii. The maximum temperature at the cable entry points may exceed 70°C. The user shall refer to the manufacturer's instructions document for guidance in respect of the selection of suitable cabling for the equipment.

iii. Dust layers in excess of 50 mm shall not be allowed to form on the equipment.

iv. The following have a minimum flamepath width (*L*) and maximum gap (i_c) other than that detailed in EN 60079-1 Table 3 and are detailed below:

Flamepath	**Joint Width (*L*) mm**	**Max. Gap (i_c) mm**
Cover shaft/Cover	26	0.097
Body Shaft/Body	26	0.097

Certificate Annex

Certificate Number	CML 19ATEX1360X
Equipment	SOLDO™ SW and SY Rotary Limit Switch Boxes
Manufacturer	Rotork Instruments Italy srl

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
SL-0202052-03	1 of 1	03	03 Oct 2019	Cover SW
SL-0201053-05	1 of 1	05	03 Oct 2019	Body SW
SI-0201055-09	1 of 1	09	03 Oct 2019	Body SY
SL-0202054-07	1 of 1	07	03 Oct 2019	Cover SY
SL-0204066-01	1 of 1	01	03 Oct 2019	Body shaft SW-SY
SL-0204067-01	1 of 1	01	03 Oct 2019	Cover shaft SW-SY
SD-0211023-02	1 of 1	2-1	03 Oct 2019	Label SY ATEX IECEx
SD-0211024-03	1 of 1	3-1	03 Oct 2019	Label SW ATEX IECEx
SL-0225141-03	1 of 1	03	03 Oct 2019	Assembly switch box SW
SL-0225142-04	1 of 1	04	03 Oct 2019	Assembly switch box SY
SD-0204183-00	1 of 1	-	03 Oct 2019	Cover shaft SY
SD-0204182-00	1 of 1	-	03 Oct 2019	Body shaft SY
SD-0202090-00	1 of 1	-	03 Oct 2019	Cover SY
SD-0202089-00	1 of 1	-	03 Oct 2019	Cover SW
SD-0201129-00	1 of 1	-	03 Oct 2019	Body SY
SD-0201128-00	1 of 1	-	03 Oct 2019	Body SW
SD-0225291-00	1 of 1	-	03 Oct 2019	Assembly switch box SY
Sd-0225290-00	1 of 1	-	03 Oct 2019	Assembly switch box SW