# EU Type Examination Certificate CML 19ATEX1196X Issue 1

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

2 Equipment **Remote Hand Station**

| | | | | |
|---|---|---|---|---|
| 3 | Manufacturer | **Rotork Controls Limited** | **Rotork Controls, Inc.** | **Rotork UK Ltd.** |
| 4 | Address | **Brassmill Lane, Bath, BA1 3JQ, United Kingdom** | **675 Mile Crossing Blvd, Rochester, NY 14624, USA** | **9 Brown Lane West, Holbeck, Leeds, LS12 6BH United Kingdom** |

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 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 T4 Gb IP66/IP68[③]

Ex tb IIIC T135°C Db

Ta = -[①]°C to +[②]°C

[①]down to -50°C, [②]up to +70°C

[③]Only IP6X is endorsed by CML

R C Marshall
Certification Officer

## 11 Description

The Remote Hand Station (RHS) is the electrical enclosure and associated display and control circuitry from a Rotork Actuator incorporated with an appropriate back-housing that includes field wiring facilities so that it can be mounted remotely from an actuator. This allows an operator to monitor and control a Rotork Actuator which is mounted in an inaccessible location.

The RHS comprises an electrical control and terminal enclosure attached via a common back-housing casting. The back-housing casting is manufactured in aluminium alloy and provides the back-housing for two electrical enclosures, all of which are designed to satisfy the requirements for flameproof equipment.

The electrical enclosure is formed by a cover which connects to the back-housing casting by means of a spigoted flamepath joint and is secured by four M8 socket cap-head screws. The electrical enclosure can be provided in two lengths, short and extra-short and contains monitoring and control circuitry. At one end of the electrical enclosure a window is provided to allow the observation of an internal LCD device. The window is manufactured from toughened glass and potted into the electrical cover. The electrical enclosure has external, non-penetrative local controls.

The terminal enclosure is formed by a cover which connects to the back-housing casting by means of a spigoted flamepath joint and is secured by three M5 socket cap-head screws. The terminal enclosure provides all electrical field wiring terminals. A single threaded entry point is provided for the installation of a suitable cable entry facility. The volumes of the terminal enclosure and the electrical enclosure are separated by a potted, cable feed-through bushing.

Notes:

- Sira 14ATEX1186X is superseded by this certificate.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 14ATEX1186X.
- Where Sira 14ATEX1186X 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.

**Variation 1**

This variation introduced the following modficiations:

i. Correction of typographical errors in the schedule drawings.
ii. Addition of new drawings for clarity.

## 12 Certificate history and evaluation reports

| Issue | Date | Associated report | Notes |
|---|---|---|---|
| 0 | 26 Jul 2019 | R12481A/00 | Issue of Prime Certificate |
| 1 | 02 Apr 2020 | R13111A/00 | Introcution of Variation 1 |

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. Each Remote Hand Station shall be subject to a routine overpressure test in accordance with EN 60079-1 clause 16 at the following values:

**Routine overpressure tests Tamb -20°C**

| Equipment | Test Pressure (bar) |
|---|---|
| **With Short Electrical Cover** | |
| Back Housing/Electrical Enclosure - Aluminium Alloy to BS1490, Grade: LM25TF (heat treated) (or equivalent) | 13.77 |
| **With Extra-Short Electrical Cover** | |
| Back Housing/Electrical Enclosure - Aluminium Alloy to BS1490, Grade: LM25TF (heat treated) (or equivalent) | 13.30 |

**Routine overpressure tests Tamb below -20°C**

| Equipment | Test Pressure (bar) |
|---|---|
| **With Short Electrical Cover** | |
| Back Housing/Electrical Enclosure - Aluminium Alloy to BS1490, Grade: LM25TF (heat treated) (or equivalent) | 18.26 |
| **With Extra-Short Electrical Cover** | |
| Back Housing/Electrical Enclosure - Aluminium Alloy to BS1490, Grade: LM25TF (heat treated) (or equivalent) | 18.48 |

## 14 Specific Conditions of Use (Special Conditions)

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

i. The Remote Hand Station shall be installed such that the risk of impact to the window is low.

ii. WARNING – There is the risk of potential electrical charging hazard associated with the external non-metallic parts including the coating; see user instructions.

iii. The grades of the fasteners securing the cover are indicated in the table below, if these fasteners are replaced in service the correct fastener grade must be used:

| **Location** | **Grade** |
|---|---|
| Electrical Cover/Back Housing | A4-80 (ISO 3506-1) |
| Terminal Cover/Back Housing | 12.9 (ISO 10642) |

iv. In accordance with the requirements of EN 60079-1 clause 5.1, the critical dimensions of the flamepaths are as follows:

| **Flamepath** | **Max. Gap (mm)** | **Min *L* (mm)** |
|---|---|---|
| Electrical Cover/Back Housing | 0.15 | 26.0 |
| Terminal Cover/Back Housing | 0.15 | 12.5 |
| Cable Feed-Through Bush/Back Housing | 0.15 | 25.0 |

# Certificate Annex

| | |
|---|---|
| **Certificate Number** | **CML 19ATEX1196X** |
| **Equipment** | **Remote Hand Station** |
| **Manufacturer** | **Rotork Controls Limited**<br>**Rotork Controls, Inc.**<br>**Rotork UK Ltd.** |

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

**Issue 0**

| Drawing No | Sheets | Rev | Approved date | Title |
|---|---|---|---|---|
| AD1429 | 1 to 6 | 4 | 26 Jul 2019 | Remote Hand Station, ATEX & IECEx Groups IIB & IIC |
| PLAD1429 | 1 to 4 | 3 | 26 Jul 2019 | Parts List for Remote Hand Station ATEX & IECEx Groups IIB & IIC |

**Issue 1**

| Drawing No | Sheets | Rev | Approved date | Title |
|---|---|---|---|---|
| AD1429 | 1 to 6 | 4 | 02 Apr 2020 | Remote Hand Station, ATEX & IECEx Groups IIB & IIC |
| RS448 | 1 to 2 | 1 | 02 Apr 2020 | WINDOW BONDING PROCEDURE |
| RS308 | 1 to 2 | 9 | 02 Apr 2020 | POTTING PROCEDURE FOR CENELEC AND ATEX TERM. BLOCKS / MTR. LOOMS / RHS LOOM |