


## EU Type Examination Certificate CML 19ATEX1191X Issue 7

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **IQ Range of Electric Valve Actuators**
- 3 Manufacturer **Rotork Controls Limited**      **Rotork Flow Technology (Suzhou) Co., Ltd.**      **Rotork Controls, Inc.**      **Rotork Controls (India) Pvt Ltd**
- 4 Address **Brassmill Lane, Bath, BA1 3JQ, United Kingdom**      **Building A, No 88 Yinhe Road, Southeast Street, Changshu, Jiangsu, China 215558**      **675 Mile Crossing Blvd, Rochester, NY 14624, USA**      **28B, Ambattur Industrial Estate (North) TN Chennai-600 098, India**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Eurofins CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, 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 IEC 60079-7:2015+A1:2018
EN 60079-31:2014	EN ISO 80079-36:2016	
- 10 The equipment shall be marked with the following:

 II 2 G D

Ex db<sup>①</sup> h IIC T4 Gb IP66/IP68

Ex h tb IIIC T120°C Db

(Ta = -<sup>②</sup>°C to +<sup>③</sup>°C) <sup>②</sup>down to -50°C, <sup>③</sup>up to +70°C

<sup>①</sup> 'eb' included if the terminal enclosure utilises increased safety.

*The IQD\*\* and IQH\*\* models are not available as a low temperature version (below -20°C).*

## 11 Description

The IQ Range of Electric Valve Actuators comprise of an oil-filled worm gearcase with a rotating shaft and drive bush, an external handwheel and de-clutch mechanism. Attached to the gearcase is a motor enclosure, an electrical control enclosure and a terminal enclosure. All electrical enclosures are designed to satisfy the requirements for flameproof equipment. In addition, the terminal enclosure is designed to satisfy the requirements for increased safety, providing an alternative method of protection for the field wiring facilities. The IQ Range of Electric Actuators comprise of a range of electric actuators based upon various gearcase sizes.

The motor enclosure is formed by a cover which connects to the gearcase by means of a spigoted flamepath joint and is secured by four M8 socket cap-head screws. The rotary output from the motor transfers to the gearcase by means of a shaft supported by rolling element bearings and a cylindrical brass bushing forming its flamepath. Electrical services to the motor are supplied from the electrical enclosure via a potted, motor loom transfer bush.

Thermal protection devices are installed within the motor windings. There is a facility to override these devices should the user find it necessary.

NOTE: The overriding of the temperature classification thermal protection devices is not covered by the scope of this certificate.

The electrical enclosure is formed by a cover which connects to the gearcase by means of a spigoted flamepath joint and is secured by four M8 socket cap-head screws. The electrical enclosure contains monitoring and control circuitry, which senses and controls the position of the output shaft; it also contains a back-up battery facility, contained within an internal battery pocket, accessed externally via the battery pocket plug. The permitted battery types are: Ultralife PP3 type U9VL/U9VL-J-P; SAFT to Rotork part no. 95-462; Tadiran/Sonnenschein to Rotork part no. 95-614, in each case the battery is protected by an in-line fuse (permitted fuse types are Quick Blow Bussman S500, 100 mA, Quick Blow Littlefuse 217, 100 mA).

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. An encoder shaft exits the electrical enclosure via a cylindrical brass bushing, flamepaths being between the bushing and the gearcase and between the shaft and the bushing. The encoder shaft has a shoulder that is held against the shroud by a circlip.

The terminal enclosure connects to the electrical enclosure via the gearcase, their volumes being separated by a flameproof terminal bung. The flameproof terminal bung comprises of a moulded plastic main body through which passes a number of terminals which are sealed in place with a potting compound. The terminal bung is secured in position by means of a circlip. The terminal enclosure provides all electrical field wiring terminations at the terminal bung. The above flameproof terminal bung may be replaced with a non-flameproof terminal bung, in which case the electrical and terminal compartments are considered as one flameproof enclosure. This configuration cannot be applied to the variants that incorporate increased safety terminal facilities. Cable entry facilities are provided in the form of three or four threaded entries. The terminal enclosure is closed by means of a lid, which connects to the gearcase by means of a tapered spigot joint and is secured by four M8 socket cap-head screws. The terminal compartment is common to all sizes.

All external fasteners are stainless steel, grade A4-80 or grade 12.9 socket cap head screws.

### Model Codes

IQ Gearcase/Motor Configurations 3 phase, up to 690 V rms

#### Size 1

Gearcase size 1

One motor enclosure, four pole motors, two stator lengths Designated IQ10, 12 & 18.

#### Size 2

Gearcase size 2

One motor enclosure, with either two or four pole motors, six stator lengths Designated IQ19, 20 & 25.

#### Size 3

Gearcase size 3

One motor enclosure, with either two or four pole motors, one stator length Designated IQ35.

#### Size 5

Gearcase size 5

Motor Options

Three Motor enclosures:

One motor enclosure with two or four pole motor, one stator length

Designated IQ40

One motor enclosure with either two or four pole motors, five stator lengths Designated IQ70, IQ90, or IQ95.

One motor enclosure with a two pole motor, one stator length

Designated IQ91

### Design Options

Single phase motor option – Actuator sizes 1, 2 and 3

Actuator	Motor type
IQS12	4 pole 110 Vrms to 240 Vrms $\pm$ 10%
IQS20	4 pole 110 Vrms to 240 Vrms $\pm$ 10%
IQS35	2/4 pole 110 Vrms to 240 Vrms $\pm$ 10%

Different motor options (as can be seen above) as well as the necessary alternative control equipment within the electrical enclosure.

### Modulating motor control option for three phase motors – Actuator sizes 1, 2 & 3

The reversing contactor has been replaced with a solid-state starter module, utilising thyristor drives and their associated control electronics, designated:

IQM10, IQM12, IQM20, IQM25, IQM35

**Deep Terminal Cover Option - All Actuator sizes**

The deep terminal cover allows the installation of a PCB for various network disconnect applications or a wireless network PCB and associated external aerial enclosure, on Ex db versions. The deep cover is provided with threaded entry points.

**Short electrical cover option - Actuator sizes 1, 2 & 3**

Used when the internal equipment specified for the IQ Electric Valve Actuator allows a reduced size of electrical enclosure.

**Intumescent® coating option to the exterior of the actuators for fire proofing purposes**

The application of an outer, Intumescent® fire retardant coating can be applied to all sizes.

**Lightning suppression module option - All Actuator sizes**

Applies to terminal enclosures that are marked 'Ex db' only; it allows the inclusion of a lightning suppression module secured to the inner face of the existing terminal lid.

**IQH variant option – Ambient temperature range -20°C to +70°C**

The following high-speed actuator types have been introduced:  
IQH20, IQH25, IQH35, IQH40

**Terminal Bung with ethernet connection option - All Actuator sizes**

The ethernet option with RJ45 or M12 connections arrangement are mounted to two of the actuator's terminals.

**Design Options**

- i. Alternative absolute encoder shaft, manufactured in steel (Sizes 1, 2 and 3).
- ii. Alternative electrical cover manufactured in aluminium alloy to BS1490. Grade: LM25TF (heat treated).
- iii. Alternative design for the handwheel cover seal for all sizes.
- iv. Alternative Size 2 motor cover (Brook Motor).
- v. Alternative electrical cover manufactured in aluminium alloy to ASTM B85, Grade: A360 modified to accept an anti-vandal fixture.

**Notes:**

- Sira 12ATEX1124X is superseded by this certificate.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 12ATEX1124X.
- Where Sira 12ATEX1124X 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 modifications:

- i. Correction of typographical errors in the schedule drawings.
- ii. Addition of alternative M10 stator locking screw arrangement.
- iii. Addition of alternative 12.9 Grade Duplex Stainless Steel enclosure fasteners

**Variation 2**

This variation introduced the following modifications:

- i. The addition of alternative radio modules to the existing WT12 Bluetooth module.
- ii. A software update to permit the end-user to communicate with the actuator via a mobile device 'App'.
- iii. The introduction of an optional large contactor for the IQ35 model.
- iv. The optional addition of a metal-clad resistor that is intended to assist with the prevention of internal condensation build-up.
- v. The addition of a manufacturing location, Rotork Controls (India) Pvt Ltd.

**Variation 3**

This variation introduces the following modification:

- i. Correction of typographical errors in the drawing lists.

**Variation 4**

This variation introduces the following modifications:

- i. To recognise a change to the name of the manufacturer of a material of construction.
- ii. To permit the up issuing of certification drawings in order to align drawing versions across corresponding ATEX, UKEX and IECEx certificates.
- iii. To assess and permit the addition of an alternative part for retention of the piezo assembly on IQ3 actuators.
- iv. To recognize an editorial change to drawings AD1399 and AD1414 regarding Ex e ring tags.

**Variation 5**

This variation introduces the following modification:

- i. An alternative Bluetooth module, BT122 has been added to these equipment's in addition to the existing BT121, BT860 and WT12 Bluetooth modules.

**Variation 6**

This variation introduces the following modification:

- i. Addition of the option to include 2, either RJ45 or M12 type ethernet connections modules within the actuators terminal housing.

**Variation 7**

This variation introduces the following modification:

- i. Update to Manufacturing Locations.

**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	Introduction of Variation 1
2	14 Dec 2020	R13631A/00	Introduction of Variation 2
3	02 Sep 2021	R13631A/01 R13111A/01	Introduction of Variation 3
4	21 Nov 2021	R14711A/00	Introduction of Variation 4
5	16 Jun 2023	R16556A/00	Introduction of Variation 5
6	25 Mar 2024	R16773A/00	Introduction of Variation 6
7	1 Nov 2024	R18135A/00	Introduction of Variation 7

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 of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.
- ii. Each enclosure shall be subjected to a routine overpressure test in accordance with EN 60079-1 clause 16 at the following values.

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

<b>Equipment</b>	
<b>Gearcase – Flameproof Terminal Bung fitted</b>	<b>Test Pressure (bar)</b>
<b>Size 1</b>	
Gearcase/Electrical Compartment - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	20.63
Terminal Bung - Crastin ST830FRUV/Robnor PX700/BK	20.63
Motor Loom Bush - Robnor PX700/BK	20.63
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	20.63
<b>Size 2</b>	
Gearcase/Electrical Compartment - Aluminium Alloy to BS149, Grade: LM25M (or equivalent)	29.99
Terminal Bung - Crastin ST830FRUV/Robnor PX700/BK	29.99
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	29.99
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	29.99
Motor Loom Bush - Robnor PX700/BK	29.99
Gearcase – Flameproof Terminal Bung Fitted	29.99
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	29.99
<b>Size 3</b>	
Gearcase/Electrical Compartment - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	20.00
Terminal Bung - Crastin ST830FRUV/Robnor PX700/BK	20.00
Motor Loom Bush - Robnor PX700/BK	20.00
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	20.00
<b>Size 5</b>	
Terminal Bung - Crastin ST830FRUV/Robnor PX700/BK (tested from either terminal or flameproof side)	16.61
<b>Gearcase - Flameproof Terminal Bung not fitted</b>	

<b>Size 2</b>	
Gearcase/Electrical-Terminal Compartment - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	27.35
<i>cont.</i>	
Terminal Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	27.35
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	27.35
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25TF (Heat Treated) (or equivalent)	27.35
Motor Loom Bush - Robnor PX700/BK	27.35
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	27.35
<b>Size 3</b>	
Gearcase/Electrical-Terminal Compartment - Aluminium Alloy to BS149, Grade: LM25M (or equivalent)	31.68
Terminal Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	31.68
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	31.68
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25TF (Heat Treated) (or equivalent)	31.68
Motor Loom Bush - Robnor PX700/BK	31.68
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	31.68
<b>Size 5</b>	
Gearcase/Electrical-Terminal Compartment - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	40.07
Terminal Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	40.07
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	40.07
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25TF (Heat Treated) (or equivalent)	40.07
Motor Loom Bush - Robnor PX700/BK (Size 5)	40.07
Motor Enclosure	
<b>Size 5</b>	
Gearcase/Motor Compartment IQ70/90/95 - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	16.29
IQ40 Motor Cover - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	11.24
IQ70/90/95 Motor Cover - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	16.29

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

<b>Equipment</b>	
<b>Terminal Enclosure (all sizes)</b>	<b>Test Pressure (bar)</b>
Terminal Bung - Crastin ST830FRUV/Robnor PX700/BK (can be tested from either terminal or flameproof side)	18.09
<b>All sizes with Deep Terminal Cover fitted</b>	



Gearcase/Terminal Compartment - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	20.87
Deep Cover - Aluminium Alloy Sandcast (heat treated) to BS 1490, Grade: LM25TF (or equivalent)	20.87
Terminal Bung - Crastin ST830FRUV/Robnor PX700/BK	20.87

<b>Gearcase - Flameproof Terminal Bung fitted</b>	
<b>Size 1</b>	
Gearcase/Electrical Compartment - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	25.10
Terminal Bung - Crastin ST830FRUV/Robnor PX700/BK	25.10
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	25.10
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25TF (heat treated) (or equivalent)	25.10
Motor Loom Bush - Robnor PX700/BK	25.10
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	25.10
<b>Size 2</b>	
Gearcase/Electrical Compartment - Aluminium Alloy to BS149, Grade: LM25M (or equivalent)	29.99
Terminal Bung - Crastin ST830FRUV/Robnor PX700/BK	29.99
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	29.99
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25TF (heat treated) (or equivalent)	29.99
Motor Loom Bush - Robnor PX700/BK	29.99
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	29.99
<b>Size 3</b>	
Gearcase/Electrical Compartment Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	30.21
Terminal Bung - Crastin ST830FRUV/Robnor PX700/BK	30.21
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	30.21
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25TF (heat treated) (or equivalent)	30.21
Motor Loom Bush - Robnor PX700/BK	30.21
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	30.21
<b>Size 5</b>	
Gearcase/Electrical Compartment Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	25.32
Terminal Bung - Crastin ST830FRUV/Robnor PX700/BK	25.32
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	25.32
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25TF (heat treated) (or equivalent)	25.32
Motor Loom Bush - Robnor PX700/BK	25.32
<b>Gearcase – Flameproof Terminal Bung NOT fitted</b>	





<b>Size 1</b>	
Gearcase/Electrical-Terminal Compartment Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	22.95
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	22.95
Motor Loom Bush - Robnor PX700/BK	22.95
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	22.95
<b>Size 2</b>	
Gearcase/Electrical-Terminal Compartment - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	30.89
Terminal Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	30.89
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	30.89
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25TF (heat treated) (or equivalent)	30.89
Motor Loom Bush - Robnor PX700/BK	30.89
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	30.89
<b>Size 3</b>	
Gearcase/Electrical-Terminal Compartment - Aluminium Alloy to BS149, Grade: LM25M (or equivalent)	31.68
Terminal Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	31.68
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	31.68
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25TF (heat treated) (or equivalent)	31.68
Motor Loom Bush - Robnor PX700/BK	31.68
Short Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	31.68
<b>Size 5</b>	
Gearcase/Electrical-Terminal Compartment - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	36.23
Terminal Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	36.23
Long Electrical Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	36.23
Long Electrical Cover - Aluminium Alloy to BS1490, Grade: LM25TF (Heat Treated) (or equivalent)	36.23
Motor Loom Bush - Robnor PX700/BK (Size 5)	36.23
<b>Gearcase - Flameproof Terminal Bung not fitted</b>	
<b>Motor Enclosures</b>	
<b>Size 2</b>	
Gearcase/Motor Compartment - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	23.51
Motor Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	23.51
Motor Cover - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	23.51
<b>Size 3</b>	
Motor Cover - Aluminium Alloy to ASTM B85, Grade: A360 (or equivalent)	19.05
<b>Size 5</b>	

Gearcase/Motor Compartment IQ40 - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	20.16
Motor Loom Bush (IQ40 motor side) - Robnor PX700/BK (Size 5)	20.16
Gearcase/Motor Compartment IQ70/90/95 - Aluminium Alloy to BS1490, Grade: LM25M (or equivalent)	20.16
Gearcase/Motor Compartment IQ91 - Aluminium Alloy to BS1490, Grade LM25M (or equivalent)	13.88
<i>cont.</i>	
IQ40 Motor Cover - Aluminium Alloy to BS1490, Grade LM25M (or equivalent)	20.16
IQ70/90/95 Motor Cover - Aluminium Alloy to BS1490, Grade LM25M (or equivalent)	20.16

- iii. When the terminal enclosure utilises increased safety explosion protection, the following electrical strength tests shall be applied to the termination facilities for at least 60 s in accordance with EN 60079-7 clause 6.1 at the following values.

iv. Test Voltage Applied Between	Test Voltage
Three phase terminals/case	2,500 Vrms
Three phase terminals/low voltage terminations	2,500 Vrms
Low voltage terminals/case	1,500 Vrms

Alternatively, a test shall be carried out at 1.2 times the test voltage but maintained for at least 100 ms in accordance with EN 60079-7 clause 7.1.

- iv. When the terminal enclosure requires a routine overpressure test and utilises the 2xoff either RJ45 or M12 type ethernet connections, the enclosure shall be tested in accordance with the requirements for the terminal fitted, described in the conditions above.

#### 14 Specific Conditions of Use (Special Conditions)

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

- i. The IQ Range of Electric Valve Actuators shall be installed such that the risk of impact to the window is low.
- ii. In accordance with EN 60079-1 clause 5.1, the critical dimensions of the flamepaths are as follows.

Flamepath	IQ Sizes 1, 2 & 3		IQ Size 5	
	Max. Gap (mm)	Min. L (mm)	Max. Gap (mm)	Min. L (mm)
Gearcase / Motor Cover	0.15	25.0	0.15	25.00
Gearcase / Wormshaft shroud	0.05	35.0	0.00	49.75
Wormshaft shroud / Wormshaft	0.24	26.0	0.25	49.75
Gearcase / Terminal Bung	0.115	27.0	0.115	27.00
Gearcase / Terminal Cover	0.15	27.0	0.15	27.00
Gearcase/Plug and Socket Cover	0.15	27.00	0.15	27.00
Gearcase / Electrical Cover	0.15	26.0	0.15	26.00

Flamepath	IQ Sizes 1, 2 & 3		IQ Size 5	
	Max. Gap (mm)	Min. L (mm)	Max. Gap (mm)	Min. L (mm)
Encoder Shaft Bush / Encoder Shaft	0.08	27.0	0.08	27.00
Gearcase / Encoder Shaft Bush	0.07	25.0	0.07	25.00
Gearcase / Motor Loom Bush	0.15	29.0	0.15	33.25
Gearcase / Deep Terminal Cover	0.15	27.0	0.15	27.0
Gearcase / Short Electrical Cover	0.15	26.0	-	-

- iii. **WARNING** – There is a potential electrical charging hazard associated with the non-metallic external parts and outer case depending on the model and coating applied; see user instructions.
- iv. Where the end user connects locally to the actuator via a mobile app, the end user shall use a suitably certified explosion proof handheld device.

## Certificate Annex

**Certificate Number** CML 19ATEX1191X Issue 7  
**Equipment** IQ Range of Electric Valve Actuators  
**Manufacturer** Rotork Controls Limited  
 Rotork Fluid Technology (Suzhou) Co Ltd  
 Rotork Controls, Inc.  
 Rotork Controls (India) Pvt Ltd



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

### Issue 0

Drawing No	Sheets	Rev	Approved Date	Title
95-462	1 to 2	8	26 Jul 2019	Low temperature battery
95-614	1 to 2	2	26 Jul 2019	High temperature battery
44406	1 of 1	1	26 Jul 2019	Label fuse types – CENELEC Battery loom
AD1346	1 to 8	7	26 Jul 2019	IQ19,20 & 25 Actuator ATEX & IECEx Approval Group IIB & IIC
AD1347	1 to 7	4	26 Jul 2019	IQ40,70,90,95 & 91 Actuator ATEX & IECEx Approval GP IIB & IIC
AD1350	1 to 7	6	26 Jul 2019	IQ10, 12 & 18 Actuator ATEX & IECEx Approval GRP IIB & IIC
AD1351	1 to 7	5	26 Jul 2019	IQ35 Actuator ATEX & IECEx Approval Group IIB & IIC
AD1399	1 to 2	3	26 Jul 2019	Terminal Bung & Main labels – IQ ATEX & IECEx IIB & IIC
AD1411	1 to 3	2	26 Jul 2019	Deep Cover Housing, ATEX & IECEx Group IIB & IIC
AD1412	1 to 2	1	26 Jul 2019	IQ10-95 Intumescent Coated Actuators (ATEX, IECEx, FM & CSA)
AD1423	1 to 2	1	26 Jul 2019	Lightning Suppression Module, ATEX& IECEx Approvals
PLAD1346	1 to 8	09	26 Jul 2019	Parts List for IQ19, 20 & 25 Actuators ATEX & IECEx Certification Group IIB & IIC
PLAD1347	1 to 8	06	26 Jul 2019	Parts List for IQ40, 70, 90, 95, & 91 Actuators ATEX & IECEx Certification Group IIB & IIC
PLAD1350	1 to 8	08	26 Jul 2019	Parts List for IQ10, 12 & 18 Actuators ATEX & IECEx Certification Group IIB & IIC
PLAD1351	1 to 8	06	26 Jul 2019	Parts List for IQ35 Actuators ATEX & IECEx Certification Group IIB & IIC
RS448	1 to 2	1	26 Jul 2019	Window Bonding Procedure
RS308	1 to 2	9	26 Jul 2019	Potting Procedure for Cenelec and ATEX Term, Blocks / MTR. Looms / RHS Loom

## Certificate Annex

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**Manufacturer** Rotork Controls Limited  
Rotork Fluid Technology (Suzhou) Co Ltd  
Rotork Controls, Inc.  
Rotork Controls (India) Pvt Ltd



### Issue 1

Drawing No	Sheets	Rev.	Approved Date	Title
AD1399	1 to 2	4	02 Apr 2020	Terminal Bung & Main Labels – IQ ATEX & IECEx IIB & IIC
AD1346	1 to 7	8	02 Apr 2020	IQ19,20 & 25 Actuator ATEX & IECEx Approval Group IIB & IIC
AD1350	1 to 6	7	02 Apr 2020	IQ 10, 12 & 18 Actuators-ATEX & IECEx Approval Group IIB & IIC
PLAD1346	1 to 8	10	02 Apr 2020	Parts List for IQ 19, 20 & 25 Actuators ATEX & IECEx Certification Group IIB & IIC
PLAD1347	1 to 8	7	02 Apr 2020	Parts List for IQ 40, 70, 90, 95, & 91 Actuators ATEX & IECEx Certification Group IIB & IIC
PLAD1350	1 to 8	9	02 Apr 2020	Parts List for IQ 10, 12 & 18 Actuators ATEX & IECEx Certification Group IIB & IIC
PLAD1351	1 to 8	7	02 Apr 2020	Parts List for IQ 35 Actuators ATEX & IECEx Certification Group IIB & IIC

### Issue 2

Drawing No	Sheets	Rev.	Approved Date	Title
AD1399	1 to 2	5	11 Dec 2020	TERMINAL BUNG & MAIN LABELS - IQ ATEX & IECEx IIB & IIC
AD1351	1 to 7	6	11 Dec 2020	IQ 35 ACTUATOR – ATEX AND IECEx APPROVAL GROUP IIB & IIC

### Issue 3

None.

### Issue 4

Drawing No	Sheets	Rev.	Approved Date	Title
PLAD1346	1 to 6	11	21 Nov 2021	Parts List for IQ19, 20 & 25 Actuators ATEX & IECEx Certification Group IIB & IIC

## Certificate Annex

**Certificate Number** CML 19ATEX1191X Issue 7  
**Equipment** IQ Range of Electric Valve Actuators  
**Manufacturer** Rotork Controls Limited  
Rotork Fluid Technology (Suzhou) Co Ltd  
Rotork Controls, Inc.  
Rotork Controls (India) Pvt Ltd



Drawing No	Sheets	Rev.	Approved Date	Title
PLAD1350	1 to 8	10	21 Nov 2021	Parts List for IQ10, 12 & 18 Actuators ATEX & IECEX Certification Group IIB & IIC
PLAD1351	1 to 8	08	21 Nov 2021	Parts List for IQ35 Actuators ATEX & IECEX Certification Group IIB & IIC
AD1399	1 to 2	7-0	21 Nov 2021	CertDwg IQ3 ATEX-IECEX TERMINAL BUNG & MAIN LABELS

### Issue 5

None.

### Issue 6

Drawing No	Sheets	Rev	Approved Date	Title
AD1346	1 to 8	9	25 Mar 2024	IQ19,20 & 25 Actuator ATEX/IECEX/UKEX Approval Group IIB & IIC
AD1347	1 to 6	5	25 Mar 2024	IQ40,70,90,95 & 91 Actuator ATEX/IECEX/UKEX Approval Group IIB & IIC
AD1350	1 to 7	8	25 Mar 2024	IQ 10, 12 & 18 Actuators- ATEX/IECEX/UKEX Approval Group IIB & IIC
AD1351	1 to 7	7	25 Mar 2024	IQ 35 Actuator- ATEX/IECEX/UKEX Approval Group IIB & IIC

### Issue 7

Drawing No.	Sheets	Rev	Approved Date	Title
AD1399	1 to 2	8-0	1 Nov 2024	CertDwg IQ3 ATEX-IECEX Terminal Bung & Main Labels