



# Certificate of Compliance

**Certificate:** 70005775

**Master Contract:** 236433

**Project:** 80150724

**Date Issued:** April 17, 2023

**Issued to:** Rotork UK Ltd  
9 Brown Lane West,  
Holbeck, Leeds,  
LS12 6BH  
UNITED KINGDOM

**Attention:** John Templeman

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only*



**Issued by:**

Reekesh Patel

## **PRODUCTS**

**CLASS 2258 02 – Process Control Equipment - For Hazardous Locations**

**Ex db eb\* IIC T4 Gb IP 66/68\*\***

**Ex db eb\* IIB T4 Gb IP 66/68\*\***

**Type 4, Type 6**

**-40°C\*\*\* ≤ T<sub>a</sub> ≤ +70°C\*\*\***

\* “eb” marking only present on versions with increased safety terminal enclosure

\*\* Only IP64 is endorsed by CSA, IP 66/68 testing in accordance with CAN/CSA-C22.2 No. 60529:16

\*\*\* minimum and maximum values depending on model version

**Rotork SI3 and SI4, Skilmatic Range of Electro-Hydraulic Control Modules;** rated - 24Vdc; 110/120Vac or 230Vac 60Hz 1Ø; 230Vac 50Hz 1Ø; 380-440Vac, 50/60Hz 3Ø; 480-575Vac, 60Hz 3Ø, 1.66 kVA (with an optional Power Module) or 5.5 kW (with a suitably approved third party motor & hydraulic pump)



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## **CLASS 2258 82 – Process Control Equipment - For Hazardous Locations – Certified to US Standards**

### **Class 1, Zone 1**

**AEx db eb\* IIC T4 Gb IP 66/68\*\***

**AEx db eb\* IIB T4 Gb IP 66/68\*\***

### **Type 4, Type 6**

**-40°C\*\*\* ≤ Ta ≤ +70°C\*\*\***

\* “eb” marking only present on versions with increased safety terminal enclosure

\*\* Only IP64 is endorsed by CSA, IP 66/68 testing in accordance with ANSI/IEC 60529:04 (R2011).

\*\*\* minimum and maximum values depending on model version

**Rotork SI3 and SI4, Skilmatic Range of Electro-Hydraulic Control Modules;** rated - 24Vdc; 110/120Vac or 230Vac 60Hz 1Ø; 230Vac 50Hz 1Ø; 380-440Vac, 50/60Hz 3Ø; 480-575Vac, 60Hz 3Ø, 1.66 kVA (with an optional Power Module) or 5.5 kW (with a suitably approved third party motor & hydraulic pump)

### **Conditions of Acceptability:**

- i. Connection to mains shall be made in accordance with ANSI/NFPA 70, NEC, with CSA C22.1, CEC, Part 1, or both as appropriate.
- ii. To maintain the flameproof and environmental characteristics of the equipment, unused conduit or cable entries must be sealed with suitable blanking elements
- iii. The temperature of the equipment can reach 81°C at the cable entry and the branching point in a 70°C ambient. This must be considered when selecting field wiring and cable entry devices.
- iv. This equipment shall be installed such that the risk of impact to the window is low.
- v. This equipment includes some external non-metallic parts, including the outer protective coating. The user shall therefore ensure that the equipment is not 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 charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.
- vi. The equipment utilizes A4-80 fasteners, if these are changed, they shall only be replaced by A4-80 fasteners.
- vii. With reference Clause 5.1 of ANSI/UL 60079-1:2015 and CAN/CSA-C22.2 No. 60079-1:16 - The flamepaths associated with this equipment are not to be repaired.
- viii. Equipment is only to be installed by manufacturer trained personnel.
- ix. If at any time there is a conflict between the system safety provisions and any relevant local (national or regional) requirements, the local requirements always take precedence.
- x. All cover securing fasteners to be tightened to between 20 and 22 Nm during manufacture and following removal for inspection and maintenance purposes
- xi. When the SI3 or SI4 Control Module is used with a third-party power unit (motor and pump), the assembler must ensure that the complete Electro-Hydraulic Valve Actuator assembly is in accordance with the conditions of use and acceptability of this approval including 1-4 below, the third-party power unit used and the relevant local and national regulations, before the complete Valve Actuator is put into service.
  1. The power unit shall be certified to the appropriate standards and suitably approved.
  2. The thermal considerations are such that the third-party motor must be fitted with thermal protective devices rated at 135°C, with the devices meeting the requirements of CSA C22.2 No 77-95 and/or UL 2111 (Motors with Inherent Overheating protection).



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3. The insulation between the motor windings and the thermal cut out must meet the requirements for basic insulation as given in CAN/CSA-C22.2 No. 61010-1 and UL 61010-1.
4. The maximum rating for the power module is 575V, 60 Hz, 5.5kW.

### **APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No. 61010-1-12	-	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use — Part 1: General Requirements
CAN/CSA-C22.2 No. 60079-0:19	-	Explosive atmospheres — Part 0: Equipment — General requirements
CAN/CSA-C22.2 No. 60079-1:16	-	Explosive atmospheres — Part 1: Equipment protection by flameproof enclosures “d”
CAN/CSA-C22.2 No. 60079-7:16	-	Explosive atmospheres — Part 7: Equipment protection by increased safety “e”
CAN/CSA-C22.2 No. 60529:16	-	Degrees of protection provided by enclosures (IP Code)
CAN/CSA-C22.2 No. 94.1-15	-	Enclosures for Electrical Equipment, Non-Environmental Considerations
CAN/CSA-C22.2 No. 94.2-15	-	Enclosures for Electrical Equipment, Environmental Considerations
UL 61010-1	-	Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements - Third Edition
ANSI/UL 60079-0:2020	-	Explosive atmospheres – Part 0: Equipment – General Requirements
ANSI/UL 60079-1:2015	-	Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/UL 60079-7:2017	-	Explosive atmospheres – Part 7: Equipment protection by increased safety “e”
ANSI/IEC 60529:04 (R2011)	-	Degrees of protection provided by enclosures (IP Code)
UL50 (2015)	-	Enclosures for Electrical Equipment, Non-Environmental Considerations
UL 50E (2015)	-	Enclosures for Electrical Equipment, Environmental Considerations

### **MARKINGS**

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Marking drawings appear on a minimum 0.02” (0.5mm) thick stainless steel 304/316 plate, secured to the body with screws, in bottomed holes provided by the enclosure manufacturer.



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The following marking details appear on drawing 2040486:

- CSA Monogram with c us Indicator (The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only), as shown on the Certificate of Compliance.
- Manufacturer's name "Rotork UK Ltd", or CSA Master Contract number "236433" adjacent the CSA Mark, in lieu of manufacturers name.
- Model designation, as specified in the PRODUCTS section, above.
- Complete electrical rating, as specified in the PRODUCTS section, above.
- Maximum ambient temperature rating, as specified in the PRODUCTS section, above.
- Date code / Serial number traceable to month and year of manufacture.
- Special purpose enclosure designation, "Type 4 and/or Type 6", as specified in the PRODUCTS section, above.
- Ingress Rating as applicable.
- Hazardous locations designation CAN - "Ex db\* IIC T4 Gb" "Ex db\* IIB T4 Gb" as specified in the PRODUCTS section, above or equivalent. \* "eb" added on versions with increased safety terminal enclosure.
- Hazardous locations designation US - "AEx db\* IIC T4 Gb" "AEx db\* IIB T4 Gb", as specified in the PRODUCTS section, above or equivalent. \* "eb" added on versions with increased safety terminal enclosure.
- Temperature code, as specified in the PRODUCTS section, above.
- The marking: - "SEE CERTIFICATE OR INSTRUCTIONS FOR CONDITIONS OF SAFE USE" and "VOIR CERTIFICAT OU LES INSTRUCTIONS POUR LES CONDITIONS D'UTILISATION SÉCURITAIRE"
- The warning words: "**WARNING! DO NOT OPEN WHILE ENERGISED OR IF AN EXPLOSIVE ATMOSPHERE IS PRESENT**" and "**ATTENTION! NE PAS OUVRIR SOUS TENSION OI SI UNE ATMOSPHERE EXPLOSIVE EST PRESENTE**" or equivalent;
- The warning words: "WARNING! POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS" and "ATTENTION" DANGER POTENTIEL DE CHARGE ELECTROSTATIQUE - VOIR LES INSTRUCTIONS" or equivalent;
- The warning words: "WARNING! THE TEMPERATURE AT CABLE ENTRIES MAY REACH 81°C IN SERVICE" and "ATTENTION! LA TEMPERATURE AUX ENTREES DE CABLE PEUT ATTEINDRE 81°C EN SERVICE" or equivalent;
- The warning words: "WARNING! CONDUIT SEALS MUST BE INSTALLED WITHIN 50mm OF THE ENCLOSURE" and "ATTENTION! UN SCELLEMENT DOIT ETRE INSTALLE A MOINS DE 50mm DU BOITIER" or equivalent;
- For Zone marked equipment the Certificate Number Reference "CSA 17CA70005775X" next to the CSA logo or preceded by "CSA" agency name.

As per the NEC/CEC, equipment rated for use in a Zone 1, IIC atmosphere may be marked 'Class I, Division 2, Groups A, B, C, D' along with the appropriate temperature class; equipment rated for use in a Zone 1, IIB atmosphere may be marked 'Class I, Division 2, Groups C, D' along with the appropriate temperature class.



## *Supplement to Certificate of Compliance*

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*The products listed, including the latest revision described below,  
are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

<b>Project</b>	<b>Date</b>	<b>Description</b>
80150724	April 17, 2023	To update the Company Name, Amendment to type designation of the SI 3.3 to S13, Introduction to the SI4 Range of Electro-Hydraulic Control Modules, To allow use of a third-party motor and hydraulic pump, To introduce alternative flamepath dimensions for Gas Group IIB, To allow changes to the Dielectric Strength and Overpressure Testing requirements, To introduce alternative part numbers for Manifold Configuration 1 and alternate manifold (2060241) for Manifold Configuration 2, Addition of an alternate manifold indication shaft, Addition of alternative pressure transducers and removal of unnecessary pressure transducers, Addition of EMC Filter to 24Vdc variants Addition of alternative DC motor variant, Standards Update to CAN/CSA-C22.2 No. 60079-0:19 and ANSI/UL-60079-0:2020 and Removal of CAN/CSA C22.2 No. 0-M91
80009872	July 24, 2019	Addition of an alternative terminal cover P/N 100561 manufactured in Aluminium alloy BS 1490 LM25TF.  Removal of certain routine overpressure Factory Tests.
70005775	March 19, 2018	Original Certification of The Rotork SI-3.3 Electric Fail-Safe Actuators