



# Certificate of Compliance

**Certificate:** 70048240 **Master Contract:** 157504 (038878\_0\_000)  
**Project:** 70166206 **Date Issued:** 2018-03-13  
**Issued to:** Rotork Controls Inc.  
5607 West Douglas Ave  
Milwaukee, Wisconsin 53218  
USA  
Attention: Gary Geer

*The products listed below are eligible to bear the CSA Mark shown*



Issued by: *James Cotton*  
James Cotton

## PRODUCTS

CLASS - C322802 - VALVES-Actuators - For Hazardous Locations

**Class I, Div 1, Groups C and D; Class II, Div 1, Groups E, F and G; Class III  
Ex d IIB T4; Ex tb IIIC T85°C**

**Temperature Code T4; Enclosure Type 4 and IP67**

- 20 °C ≤ Tamb ≤ +60°C (standard cover version)
- 20 °C ≤ Tamb ≤ +60°C (HMI & HMI/UPS versions, standard temp)
- 40 °C ≤ Tamb ≤ +60°C (all versions, low temp)

Rotork Compact Modulating Actuators (CMA), Models:

- SIZE 1: CMR-50 – ABC-DE, CML-100 – ABC-DE, CMQ-250 – ABC-DE.
- SIZE 2: CMR-100 – ABC-DE, CMR-200 – ABC-DE, CML-250 – ABC-DE, CMQ-500 – ABC-DE.
- SIZE 3: CMR-89 – ABC-DE, CMR-125 – ABC-DE, CMR-250 – ABC-DE, CML-750 – ABC-DE, CMQ-100050 – ABC-DE.

Where:

- |                   |  |
|-------------------|--|
| A (Model)         | = M                                    |
| B (Voltage)       | = 0 or 1                               |
| C (Local Control) | = 0, 1 or 2                            |
| D (Option 1)      | = 0, H, K, D, M, F, P, N, 1, 2, 3 or 7 |



**Certificate:** 70048240  
**Project:** 70166206

**Master Contract:** 157504  
**Date Issued:** 2018-03-13

E (Option 2) = 0, H, K, D, M, F, P, N, S, 1, 2, 3 or 7

Rated 24 VDC or 110, 115, 120, 208, 220, 230, 240 VAC, 50/60 Hz, Amp rating as follow:

Model Sizes 1;	24 VDC	110 VAC	115 VAC	120 VAC	208 VAC	220 VAC	230 VAC	240 VAC
CML-100 (Linear)	1.49A	0.46A	0.44A	0.42A	0.24A	0.23A	0.22A	0.21A
CMR-50 (Rotary)	1.25A	0.39A	0.37A	0.36A	0.21A	0.20A	0.19A	0.18A
CMQ-250 (Quarter-turn)	1.77A	0.55A	0.53A	0.50A	0.29A	0.28A	0.26A	0.25A

Model Sizes 2;	24 VDC	110 VAC	115 VAC	120 VAC	208 VAC	220 VAC	230 VAC	240 VAC
CML-250 (Linear)	1.85A	0.58A	0.55A	0.53A	0.31A	0.29A	0.28A	0.26A
CMR-100 (Rotary)	1.56A	0.49A	0.47A	0.45A	0.26A	0.24A	0.23A	0.22A
CMR-200 (Rotary)	1.56A	0.49A	0.47A	0.45A	0.26A	0.24A	0.23A	0.22A
CMQ-500 (Quarter-turn)	2.48A	0.77A	0.74A	0.71A	0.41A	0.39A	0.37A	0.35A

Model Sizes 3;	24 VDC	110 VAC	115 VAC	120 VAC	208 VAC	220 VAC	230 VAC	240 VAC
CML-750 (Linear)	2.48A	0.77A	0.74A	0.71A	0.41A	0.39A	0.37A	0.35A
CMR-89 (Rotary)	2.48A	0.77A	0.74A	0.71A	0.41A	0.39A	0.37A	0.35A
CMR-125 (Rotary)	2.48A	0.77A	0.74A	0.71A	0.41A	0.39A	0.37A	0.35A
CMR-250 (Rotary)	2.48A	0.77A	0.74A	0.71A	0.41A	0.39A	0.37A	0.35A
CMQ-1000 (Quarter-turn)	2.48A	0.77A	0.74A	0.71A	0.41A	0.39A	0.37A	0.35A



**Certificate:** 70048240

**Project:** 70166206

**Master Contract:** 157504

**Date Issued:** 2018-03-13

Notes:

1. The above models are permanently connected, Equipment Class 1, Pollution Degree 2, Overvoltage Category II.
2. Mode of operation: Continuous
3. Environmental Conditions – Extended: -40 to 60°C, 5000m altitude, indoor/outdoor use, +/- 10% mains voltage fluctuations, 80% max RH up to 31°C decreasing linearly to 50% at 40°C and -40°C to +60°C (UPS/HMI and HMI versions only)
4. Units have 2 relay outputs rated: 3A @ 150Vac/30Vdc
5. Optional communication boards have outputs rated:
  - a. RIRO: ≤ 150 Vac, 3A
  - b. All other cards: ≤ 30 Vac/dc

Conditions of Acceptability:

1. The scope of this approval **does not** include any safety related function or reliability of the equipment
2. All conduit entries must be engaged 5 full turns minimum and made wrench tight.
3. Adaptors must not be plugged with stopping plugs.
4. The screws securing the outer window frame contribute to the integrity of the flameproof enclosure and must not be removed.

**APPLICABLE REQUIREMENTS**

CAN/CSA C22.2 No. 0-10	- General Requirements – Canadian Electrical Code, Part II
CAN/CSA C22.2 No. 60079-0:15	- Explosive atmospheres – Equipment – General Requirements
CAN/CSA C22.2 No. 60079-1:16	- Explosive atmospheres – Equipment protection by flameproof enclosure “d”
CAN/CSA C22.2 No. 60079-31:16	- Explosive atmospheres – Equipment dust ignition protection by enclosure “t”
CSA C22.2 No. 25-M1966	- Enclosures for Use in Class II, Groups E, F, and G Hazardous Locations
CSA C22.2 No. 30-M1986	- Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CAN/CSA C22.2 No. 94-M91	- Special Purpose Enclosures
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. 60529:16	- Degrees of Protection Provided by Enclosures (IP Code)



**Certificate:** 70048240

**Project:** 70166206

**Master Contract:** 157504

**Date Issued:** 2018-03-13

## **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 without an indicator for Canada only (indicating that products have been manufactured to the requirements of Canadian Standards).

**Nameplate information:** Laser or chemically etched onto a 0.5 mm thick Aluminum/Stainless Steel sheet attached to the equipment housing with rivets and contains the following marking details:

1. Company name;
2. Company address/contact details;
3. Serial number;
4. Wiring diagram number;
5. Actuator Type/Model;
6. Temperature Range;
7. Hazardous Location designation: "Class 1, Div 1, Groups C and D; Class II, Div 1, Groups E, F and G; Ex d IIB T4; Ex tb IIIC T85°C";
8. Special Purpose Enclosure Ratings: "Type 4";
9. Ingress protection rating: "IP67";
10. T-class;
11. Power Rating;
12. Electrical Input Rating;
13. Ambient Temperature (" $-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$  or " $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$  (Low Ambient variant)");
14. Caution symbol  possibility of electric shock.
15. The following or equivalent statements in English and French:
  - a. "NOTE: CONSULT INSTALLATION MANUAL TO DETERMINE TEMPERATURE RATING OF CABLE";
  - b. "MORE THAN ONE LIVE CIRCUIT. KEEP COVER TIGHT WHILE CIRCUITS ARE ALIVE. A SEAL SHALL BE INSTALLED WITHIN 50mm OF THE ENCLOSURE. COVER JOINTS MUST BE CLEANED BEFORE REPLACING COVER. WARNING: DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT";
16. The products listed are eligible to bear the CSA Mark shown for Canada only: .
17. CSA Certificate Number: CSA 16.70048240



## *Supplement to Certificate of Compliance*

**Certificate:** 70048240

**Master Contract:** 157504 (038878\_0\_000)

*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>
70166206	2018-03-13	Update to report 70048240 to address enclosure surface temperature effects of alternative components added to ordinary locations report 70025474 under project 70166205. Maximum ambient temperature ratings of standard cover version reduced from +65°C to +60°C.
70060114	2016-11-23	The introduction of long versions of the actuator cover, which allows a viewing window to be installed, as well as external local controls (HMI – human machine interface) and UPS module (uninterruptable power supply). The new aluminum casting process introduced (HPDC - High Pressure Die Cast) uses A360 aluminum material and different process.
70048240	2016-02-29	CSA certification of Compact Modulating Actuators, for sizes 1, 2 and 3.