



Certificate of Compliance

Certificate: 1002332 **Master Contract:** 167265
Project: 80227069 **Date Issued:** 2024-10-09
Issued to: Valmet Flow Control Inc.
44 Bowditch Dr
Shrewsbury, Massachusetts 01545-8044
United States
Attention: Alex Haddon

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:
Thong Tong
Thong Tong, Certifier

PRODUCTS

Class 3228 02 VALVES - Actuators - For Hazardous Locations
Class 3228 82 VALVES - Actuators - For Hazardous Locations-Certified to U.S. Standards
Class I, Groups C and D; Class II, Groups E, F and G; Class III; Encl. Type 4, 4X:
Electric valve actuators, Valvcon series
Valvcon series ADCWX or private brand series ACSxxx-N

Model(s)	Torque (lb/in)	Input Voltage (VDC)	Current (A dc max)	Input Voltage (VAC)	Input Current (A ac max)	Duty Cycle	Insulation Class	Ambient Temp (°F)



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Valvcon series ADCWX or private brand series ACSxxx-N	150, 300, and 600	12/24	2.8/1.7	24/115/230 at 60Hz	2.5/0.6/0.5	100% at 104°F (or below); and 75% (max) at 130°F, and 75% (max) at 150°F	Class B	-40 to 150
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Valvcon series VWX, IWX or private brand series CSxxx-Ex

Model(s)	Torque (lb/in)	Input Voltage (VDC)	Current (A dc max)	Input Voltage (VAC)	Input Current (A ac max)	Duty Cycle	Insulation Class	Ambient Temp (°F)
Valvcon series VWX, IWX or private brand series CSxxx-Ex	150	n/a	n/a	115/230 at 60Hz	0.61/0.44	75%; 8 seconds ON, 3 seconds OFF, and 50% (max) at 150°F, 8 seconds ON, 8 seconds OFF	Class B	-40 to 150
Valvcon series VWX, IWX or private brand series CSxxx-Ex	300	n/a	n/a	115/230 at 60Hz	0.61/0.44	75%; 15 seconds ON, 5 seconds OFF, and 50% (max) at 150°F, 15 seconds ON, 15 seconds OFF	Class B	-40 to 150
Valvcon series VWX, IWX or private brand series CSxxx-Ex	600	n/a	n/a	115/230 at 60Hz	0.61/0.44	75%; 30 seconds ON, 10 seconds OFF, and 50% (max) at 150°F, 30 seconds ON, 30 seconds OFF	Class B	-40 to 150

Valvcon series LADCWX or private brand series ACLxxxx-N



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Model(s)	Torque (lb/in)	Input Voltage (VDC)	Current (A dc max)	Input Voltage (VAC)	Input Current (A ac max)	Duty Cycle	Insulation Class	Ambient Temp (°F)
Valvcon series LADCWX or private brand series ACLxxxx-N	1000, 1500, 2000, 2500, and 3000 (large enclosure)	12/24	4.3/2.4	24/115/230 at 60Hz	3.5/0.9/0.6	100% at 104°F (or below); and 75% (max) at 130°F; 75% (max) at 150°F	Class B	-40 to 150

Valvcon Series LVWX, LIWX or private brand series CLxxxx-Ex

Model(s)	Torque (lb/in)	Input Voltage (VDC)	Current (A dc max)	Input Voltage (VAC)	Input Current (A ac max)	Duty Cycle	Insulation Class	Ambient Temp (°F)
Valvcon Series LVWX, LIWX or private brand series CLxxxx-Ex	1000	n/a	n/a	115/230 at 60Hz	0.72/0.46	75%; 25 seconds ON, 9 seconds OFF, and 50% (max) at 150°F, 25 seconds ON, 25 seconds OFF	Class B	-40 to 150
Valvcon Series LVWX, LIWX or private brand series CLxxxx-Ex	1500	n/a	n/a	115/230 at 60Hz	0.72/0.46	75%; 40 seconds ON, 14 seconds OFF, and 50% (max) at 150°F, 40 seconds ON, 40 seconds OFF	Class B	-40 to 150
Valvcon Series LVWX, LIWX or private brand series CLxxxx-Ex	2000	n/a	n/a	115/230 at 60Hz	0.72/0.46	75%; 55 seconds ON, 19 seconds OFF, and 50% (max) at 150°F, 55 seconds ON, 55 seconds OFF	Class B	-40 to 150



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Valvcon Series LVWX, LIWX or private brand series CLxxxx-Ex	2500	n/a	n/a	115/230 at 60Hz	0.72/0.46	75%; 70 seconds ON, 24 seconds OFF, and 35% (max) at 150°F, 70 seconds ON, 130 seconds OFF	Class B	-40 to 150
Valvcon Series LVWX, LIWX or private brand series CLxxxx-Ex	3000	n/a	n/a	115/230 at 60Hz	0.72/0.46	55%; 75 seconds ON, 62 seconds OFF, and 25% (max) at 150°F, 75 seconds ON, 225 seconds OFF	Class B	-40 to 150

Valvcon series QBWX

Model(s)	Torque (lb/in)	Input Voltage (VDC)	Current (A dc max)	Input Voltage (VAC)	Input Current (A ac max)	Duty Cycle	Insulation Class	Ambient Temp (°F)
Valvcon series QBWX	600, 1200 (large enclosure)	24	2.4	115/230 at 60Hz	0.9/0.6	100% at 130°F (or below)	Class B	-40 to 130

Series Q6

Model(s)	Torque (lb/in)	Input Voltage (VDC)	Current (A dc max)	Input Voltage (VAC)	Input Current (A ac max)	Duty Cycle	Insulation Class	Ambient Temp (°F)
Series Q6	600	12	1.1	n/a	n/a	80%; 15 seconds ON, 3 seconds OFF	Class B	-40 to 150

Series QX

Model(s)	Torque (lb/in)	Input Voltage (VDC)	Current (A dc max)	Input Voltage (VAC)	Input Current (A ac max)	Duty Cycle	Insulation Class	Ambient Temp (°F)
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Series QX	150	12/24	1.9/2.4	n/a	n/a	80%; 5/3 seconds ON, 2/1 seconds OFF	Class B	-40 to 150
	300	12/24	1.9/2.4	n/a	n/a	80%; 10/5 seconds ON, 3/2 seconds OFF	Class B	-40 to 150
	600	12/24	1.9/2.4	n/a	n/a	80%; 15/8 seconds ON, 3/2 seconds OFF	Class B	-40 to 150
	1000	12/24	3.5A max	n/a	n/a	80%; 15 seconds ON, 4 seconds OFF	Class B	-40 to 150
	1500	12/24	3.5A max	n/a	n/a	80%; 20 seconds ON, 5 seconds OFF	Class B	-40 to 150
	2000	12/24	4.8A max	n/a	n/a	80%; 25 seconds ON, 7 seconds OFF	Class B	-40 to 150
	2500	12/24	4.8A max	n/a	n/a	80%; 30 seconds ON, 8 seconds OFF	Class B	-40 to 150
	3000	12/24	4.8A max	n/a	n/a	80%; 30 seconds ON, 8 seconds OFF	Class B	-40 to 150

Notes:

1.0 Standard features:

- Dual conduit entries;
- Position Indication (optional on Q6);

2.0 Options:

2.1 **Series VWX and LVWX actuators** can have the following options: C, H, I1, I2, I3, I4, J, K, P, S1, S2, S3, T, U Y1, Y2, Y3, and Z.

Position Indication - (Standard); indicator shaft VC001355;

- Electronic Positioner Board - (Option code "C"); Positioner board VC002975, or VC002475;
- Tropical Heater and Thermostat - (Option Code "H"); Heater thermostat assembly VC002392 or VC002391; (standard; not coded in model number after July 2021)



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- ISO Metric Output - (Option Code "I1", "I2", "I3", or "I4"); Output coupling VC007303, VC007304, VCM00021, VC007204, VC007205;
- Speed Control/Timer Board – (Option code "J"); Board VC002770;
- Brake - (Option Code "K"); Solenoid brake VC002660; (standard; not coded in model number after July 2021)
- Feedback Potentiometer - (Option Code "P"); Potentiometer VC002067;
- Additional Limit Switch - (Option Code "S1" - "S3" for one (1) to three (3) additional limit switches); Limit switch VC001020; (two additional switches standard; not coded in model number after July 2021)
- Heater and Thermostat - (Option Code "T"); Heater thermostat assembly VC002372 or VC002373;
- Iso/Read-back board - (Option Code "U"); Read back board VC002065;
- Keyed Output – (Option code "Y1", "Y2", or "Y3"); Keyed shaft VC007224, VC007324, VC007380 or VC007480;
- De-clutching Hand wheel - (Override Shaft, Option Code "Z"); Hand wheel VC001604, VC001622 or VC003045.

2.2 **Series IWX and LIWX actuators** can have the following options: AS, DN, H, I1, I2, I3, I4, K, LN, S1, S2, S3, T Y1, Y2, Y3, and Z.

Position Indication - (Standard); Indicator shaft VC001355;

- AS-i Electronic Control Board - (Option Code "AS"); Control board VC002041;
- DeviceNet Protocol – (Option Code "DN"); Network Interface Board VC002370, DeviceNet Module MA0052031 (StoneL Module # IM461135A);
- Tropical Heater and Thermostat - (Option Code "H"); Heater thermostat assembly VC002391 or VC002392; (standard; not coded in model number after July 2021)
- ISO Metric Output - (Option Code "I1", "I2", "I3", or "I4"); Output coupling VC007303, VC007304, VCM00021, VC007204, VC007205;
- Brake - (Option Code "K"); Brake solenoid VC002660; (standard; not coded in model number after July 2021)
- LonWorks Electronic Control Board - (Option Code "LN"); Control board VC002040;
- Additional Limit Switch - (Option Code "S1" - "S3" for one (1) to three (3) additional limit switches); Limit switch VC001020;
- Heater and Thermostat - (Option Code "T"); Heater thermostat assembly VC002372, VC002373;
- Keyed Output – (Option code "Y1", "Y2", or "Y3"); Keyed shaft VC007224, VC007324, VC007380 or VC007480;
- De-clutching Hand wheel - (Override Shaft, Option Code "Z"); Hand wheel VC001604; Override shaft VC003045 or VC001622.

2.3 **Series ADCWX actuators** can have the following options: I1, I2, MB, S1, S2, S3, U, UB, UB1, UB3, U1, U2, U3, UL2, U4, UL4, U6, UL6, Y1, Y2 and Z.

- Position Indication - (Standard); Indicator shaft VC001355;
- Brake - (Standard);
- ISO Metric Output - (Option Code "I1", or "I2"); Output coupling VC007303 or VC007304.
- Modbus Communication – (Option Code "MB"); Modbus Communication Board VCB00020;
- Additional Limit Switch - (Option Code "S1" - "S3" for one (1) to three (3) additional limit switches); Limit switch VC001020;
- On/Off / Positioner Board – Option Codes "U2", "U4", or "U6"; Universal On/Off / Positioner Board VCB00010;
- Universal board (Valvcon P/N VCB00010 Rev. E or later) – Option Codes U, U1, U3;
- On/Off / Positioner Board – Option Codes "UL2", "UL4", or "UL6"; Universal On/Off / Positioner Board with Battery Back Up VCB00010 and VC001572;
- Universal board with battery back-up (Valvcon P/N VCB00010 Rev. E or later, and P/N VCE00015) – Option Codes UB, UB1, UB3;
- Keyed Output – (Option code "Y1", or "Y2"); Keyed shaft VC007324 or VC007380;
- De-clutching Hand wheel - (Override Shaft, Option Code "Z"); Hand wheel VC001604; Override shaft VC001622.



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2.4 **Series LADCWX actuators** can have the following options: I2, I3, I4, MB, L3, L5, S1, S2, S3, UB5, UB7, UB9, U2, UL3, U4, U5, UL5, U6, U7, UL7, U9, Y2, Y3 and Z.

- Brake - (Standard);
- Position Indication - (Standard); Indicator shaft VC001355;
- ISO Metric Output – (Option code “I2”, “I3” or “I4”); Output Coupling VCM00021, VC007204 or VC007205;
- Modbus Communication – (Option Code “MB”); Modbus Communication Board VCB00020;
- Additional Limit Switch - (Option Code “S1”- “S3” for one (1) to three (3) additional limit switches); Limit switch VC001020;
- On/Off / Positioner Board – Option Codes “U2”, “U4”, or “U6”; Universal On/Off / Positioner Board VCB00010;
- Universal board (Valvcon P/N VCB00010 Rev. E or later) – Option Codes U5, U7, U9;
- On/Off / Positioner Board – Option Codes “UL3”, “UL5”, or “UL7”; Universal On/Off / Positioner Board with Battery Back Up VCB00010 and VC002509;
- Universal board with battery back-up (Valvcon P/N VCB00010 Rev. E or later, and P/N VCE00015) – Option Codes UB5, UB7, UB9;
- Keyed Output – (Option code “Y2” or “Y3”); Keyed shaft VC007224 or VC007480;
- De-clutching Hand wheel - (Override Shaft, Option Code “Z”); Hand wheel VC001604; Override shaft VC003045.

2.5 **Series Q6 actuators** can have the following options: H, I1, I2, T, Y1, Y2 and Z

- Position Indication - (Standard on Q6.2.2, Q6.2.4F, Q6.2.1, Q6.2.3 and Q6.2.2-NGA04); Indicator shaft VC001355;
- Brake (Standard; relay built-in on power boards);
- Power Board (Q6.2.2, Q6.2.4, Q6.2.4F and Q6.2.2-NGA04) VC001382;
- Power Board (Q6.2.1 and Q6.2.3) VC002250;
- Tropical Heater and Thermostat - (Option Code “H”); Heater thermostat assembly VC002388;
- ISO Metric Output - (Option Code “I1” or “I2”); Output coupling VC007303, VC007304;
- Heater and Thermostat - (Option Code “T”); Heater thermostat assembly VC002386;
- Keyed Output – (Option code “Y1”, or “Y2”); Keyed shaft VC007324 or VC007380;
- De-clutching Hand wheel - (Override Shaft, Option Code “Z”); Hand wheel VC001604; Override shaft VC001622.

2.6 **Series QX actuators** can have the following options: H, I1, I2, I3, I4, T, Y1, Y2, Y3, and Z

- Position Indication - (Standard); Indicator shaft VC001355;
- Brake - (Standard; relay integral to motor harness);
- Additional Limit Switches - (Standard); Limit switch VC001020;
- Tropical Heater and Thermostat - (Option Code “H”); Heater thermostat assembly VC002388 or VC002394;
- ISO Metric Output - (Option Code “I1”, “I2”, “I3”, or “I4”); Output coupling VC007303, VC007304, VCM00021, VC007204, VC007205;
- Heater and Thermostat - (Option Code “T”); Heater thermostat assembly VC002386 or VC002387;
- Keyed Output – (Option code “Y1”, “Y2”, or “Y3”); Keyed shaft VC007224, VC007324, VC007380 or VC007480;
- De-clutching Hand wheel - (Override Shaft, Option Code “Z”); Hand wheel VC001604; Override shaft VC001622, VC003045.

2.7 **Series QBWX actuators** can have the following options: I2, I3, I4, MB, Y2, and Y3

- Brake - (Standard);
- Position Indication - (Standard); Indicator shaft VC001355;
- ISO Metric Output – (Option code “I2”, “I3” or “I4”); Output Coupling VCM00021, VC007204 or VC007205;
- Modbus Communication – (Option Code “MB”); Modbus Communication Board VCB00020;
- Keyed Output – (Option code “Y2” or “Y3”); Keyed shaft VC007224 or VC007480.



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APPLICABLE REQUIREMENTS

CSA C22.2 No. 25-1966(R2004) - Enclosures for Use in Class II Groups E, F, and G Hazardous Locations - General Instruction No 1

CSA C22.2 No. 30-M1986 (Third Edition)(R2007) - Explosion-Proof Enclosures for Use in Class I Hazardous Locations Industrial Products - Third Edition; General Instruction No 1-2

CSA C22.2 No. 94.2.20 (Third Edition) - Enclosures for electrical equipment, environmental considerations

CSA C22.2 No. 139-19 (Fifth Edition) - Electrically operated valves

UL 50E (Third Edition) - UL Standard for Safety Enclosures for Electrical Equipment, Environmental Considerations

UL 429 - Seventh Edition - Electrically Operated Valves

UL 1203 - Fourth Edition - UL Standard for Safety Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations

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.

Method of Marking: CSA Certified adhesive type nameplate (items 8 and 217 of Descriptive Documents List) bonded to the actuator cover (items 216, 224, 344, or 346) or CSA Certified adhesive type nameplate (items 24, 218, 221, or 309) bonded to the actuator base (items 227, 228, 345 and 347). Label material is 2.0 mil metalized matte chrome polyester that is adhesive-backed with permanent acrylic adhesive.

- Listee name: "Valvcon" or CSA Master Contract Number "167265" or LR89729 adjacent to the CSA Mark in lieu of the manufacturer name.
- Model number: as specified in the PRODUCTS section, above.
- Serial number.
- Electrical ratings: as specified in the PRODUCTS section, above.
- Torque rating: as specified in the PRODUCTS section, above.
- Cycle time: i.e. "25 SEC/90 DEG".
- Duty cycle: as specified in the PRODUCTS section, above.
- Enclosure rating: as specified in the PRODUCTS section, above.
- Reference to instruction manual.
- The CSA Mark with "C" and "US" indicators, as shown on the Certificate of Compliance.



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- Hazardous Location designation: as specified in the PRODUCTS section, above.
 - The phrase: "SEAL ALL CONDUITS WITHIN 18" or equivalent.
 - The phrase: "KEEP COVER TIGHT WHEN CIRCUITS ARE ALIVE" or equivalent.
 - The phrase: "WARNING: MORE THAN ONE LIVE CIRCUIT, SEE DIAGRAM" or equivalent.

For actuator models that operate as extra-low voltage (30V or less) devices, the following marking shall appear:

- The phrase: "TO BE CONNECTED TO A CLASS 2 CIRCUIT ONLY" or equivalent.

Note - Jurisdictions in Canada may require these markings to also be provided in French language. It is the responsibility of the manufacturer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to the "Markings".



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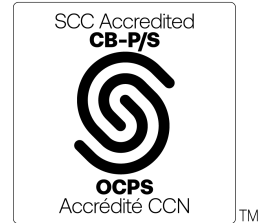
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Notes:

Products certified under Class(es) C322802, C322882 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





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

Project	Date	Description
80227069	2024-10-09	Update CSA Report 1002332 to add the alternate new baked-on powder coat finish for cover of actuator enclosures.
80124289	2022-12-07	Update to Report 1002332 as follow. - Add the QB-Series actuators to report No. 1002332. - Update CSA C22.2 No. 94-M94 (R 2006) to CSA C22.2 No.94.2:20 and UL 50, 12th Edition to UL 50E Third Edition.
80010720	2020-01-09	Update to Report 1002332 as follow. a) Qualification of QB (formerly QTR) enclosure for Class I, Groups C and D. b) Over pressure Test and the Flame Propagation Test will be performed to qualify this enclosure. c) The Explosion Pressure Test has been performed under project 70132750. d) Update drawing VC001343.
80000771	2019-06-13	Update to Report 1002332 to add new revisions of drawings and to increase ambient temperature from 130°F to 150°F for ADCW and LADCW series. This quotation assumes that no testing is required. This quote assumes that all components are suitably certified. Samples and documents are due by April 19, 2019
70216189	2019-04-17	Update to Report 1002332 to add alternate paint for Type 4X rating New formulation (Protech) to be added to the file for the tan and blue paints Note: The following samples and documentation are needed by February 28, 2019: 1 sample for testing with dimensions of 8.5"Lx7.5"Wx9"H and the specifications of the paints.
70210287	2019-02-11	Update to Report 1002332 to add alternate paint Note: The following samples and documentation are needed by November 30, 2018: 2 samples for testing with dimensions of 8.5"Lx7.5"Wx9"H and the specifications of the paints.
70173807	2018-06-08	update the existing North America certificate 1002332
70012965	2014-10-23	Update to report 1002332 to include the new revision of the VCB00010 board and compliance with C22.2 No. 139-13.



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70006862	2014-09-22	Update to report 1002332 to clarify the intention to show heater and thermostat as optional
2706328	2014-04-24	Update to include revised drawings.
2632636	2013-09-05	Update to Report 1002332 to to cover the use of revised covers and the use of “captive” cover screws
2592065	2013-03-14	Update to Report 1002332 to add a new ADC-Series board.
2486640	2012-01-13	Update of Report 1002332 to include additional protocol options per witness testing.
2469460	2011-10-28	Update Report 1002332 to include addition of actuator model Q6.2.2- NGA04.
2387301	2011-08-03	Update Report 1002332 to add QX and Q6 models, new speed control/timer board for the V series, 115 & 230V versions of the LADC series and new keyed output shafts.
2333701	2010-09-09	Update Report 1002332 to include ADC and LADC actuators with DC brushless motor. CSA_US approval added to ADC and LADC actuators.
2175303	2010-01-06	Update to Report 1002332 to delist obsolete models, revamp report, document model number breakdowns, define and document third-party product models and reflect changes to drawings.
1948393	2007-10-30	Update to cover addition of ADC and LADC series and replace obsolete switch
1761060	2006-02-13	Update to cover addition of IERV and ERV series and dc models
1476080	2004-03-11	Update to cover addition of variations of the previously listed models.
1283324	2003-01-24	Update to cover the use of alternate covers.
1002332	2000-03-31	Original Certification.