

# CERTIFICATE OF CONFORMITY



- HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS**
- Certificate No:** FM16CA0177
- Equipment:** Models 7200, 7300, 7600, and 7700 Series  
**(Type Reference and Name)** Network Valve Monitors
- Name of Listing Company:** Westlock Controls Corporation
- Address of Listing Company:** 280 Midland A venue  
Saddle Brook, NJ 07662  
United States
- The examination and test results are recorded in confidential report number:  

3013944 dated 11<sup>th</sup> July 2002
- FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:  

CSA-C22.2 No. 0.4-04:2004, CSA-C22.2 No. 0.5:R2008, CSA-C22.2 No. 157:R1991,  
CSA-C22.2 No. 213:R2008, CSA-C22.2 No. 142:R2009,  
CSA-C22.2 No. 94:R2011, CAN/CSA-E79-0-95:1995, CAN/CSA-E79-11-95:1995
- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
- Equipment Ratings:**  
Refer to the Annex for equipment ratings.
- The marking of the equipment shall include:  
Refer to the Annex for equipment marking.

**Certificate issued by:**

  
\_\_\_\_\_  
J.E. Marquedant  
VP, Manager - Electrical Systems

10 February 2023  
\_\_\_\_\_  
Date

To verify the availability of the Approved product, please refer to [www.approvalguide.com](http://www.approvalguide.com)

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA  
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# SCHEDULE



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## 12. Description of Equipment:

**General** - The models 7200, 7300, 7500, 7600, and 7700 are network valve monitors for use in valve positioning applications. The model 7200 is a Profibus network valve monitor. The model 7300 is a Foundation Fieldbus network valve monitor. The model 7500 is a MODBUS network valve monitor. The model 7600 is a Device Net network valve monitor. The model 7700 is an ASI network valve monitor.

**Construction** - The network valve monitor's electronics is located on one circuit board that is encapsulated into a plastic shell. This electronics module contains a separate connector for the network communications and a connector for all internal I/O. The Profibus and Foundation Fieldbus network valve monitors have Program/Configuration port located on the top of the electronics module. Access to the communication port requires the enclosure to be opened and usage is not allowed if the area is known to contain flammable material.

The polymeric (44) and aluminum (04) enclosure enclosure fits within an envelope measuring 130 x 133 x 71 mm. The alternate polymeric (45) enclosure fits with in an envelope measuring 174 x 131 x 94 mm. There is a valve body attached to the side of the enclosure made of hardened anodized aluminum, Brass, or 316 stainless steel. The combined size of the polymeric enclosure and manifold is 190 x 133 x 93 mm. This enclosure has a tool secured access cover. The enclosure is a polymeric material and has the ability for conduit connections or a cable gland entry suitable for Class I, and II environments, or a 5 pin screw locking connector suitable for Class I environments. Configuration adjustments can be made with the internal switches. The valve monitor houses two hermetically sealed sensors for valve positioning monitoring.

**Ratings** - The Network Valve Monitors operates at on a nominal supply of 24 VDC and upto 24mA. The Division 1 versions maintain the following entity parameters:

FISCO Input Parameters:  $U_i = 17.5 \text{ V}$ ,  $I_i = 380 \text{ mA}$ ,  $P_i = 5.32 \text{ W}$ ,  $C_i = 5 \text{ nF}$ ,  $L_i = 10 \text{ } \mu\text{H}$

Entity Input Parameters:  $U_i = 30 \text{ V}$ ,  $I_i = 100 \text{ mA}$ ,  $P_i = 0.75 \text{ W}$ ,  $C_i = 5 \text{ nF}$ ,  $L_i = 10 \text{ } \mu\text{H}$

The transmitters are rated for use in an ambient temperature range of  $-40^\circ\text{C}$  to  $+80^\circ\text{C}$ .

Refer to the Annex for model codes.

## 13. Specific Conditions of Use:

None.

## 14. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals Canadian Certification Scheme.

## 15. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

## 16. Certificate History

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Details of the supplements to this certificate are described below:

Date	Description
11 <sup>th</sup> July 2002	Original Issue.
23 <sup>rd</sup> November 2016	<u>Supplement 7:</u> Report Reference: RR206400 dated 23 <sup>rd</sup> November 2016. Description of the Change: Updated FISCO parameters and updated certificate to new format.
10 <sup>th</sup> February 2023	<u>Supplement 8:</u> Report Reference: RR235266 dated 10 <sup>th</sup> February 2023. Description of the Change: Delist Group 2 products (7a79b) and renumber Groups. Ratings, marking and model codes moved to the certificate Annex. Standard Nos. 25 and 30 removed. "X" removed from certificate number as there are no conditions of use.

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## ANNEX

### Group 1:

#### Equipment Ratings:

Class I, Zone 0 Ex ia IIC T4 Ta = -40°C to +80°C; Type 4X  
Intrinsically Safe Class I, Division 1, Groups A, B, C, & D T4 Ta = -40°C to +80°C; Type 4X  
Class I, Division 2, Groups A, B, C, & D; T4 Ta = -40°C to +60°C; Type 4X  
Suitable For Class II, III, Division 2, Groups F&G T4 Ta = -40°C to +60°C; Type 4X

#### Equipment Marking:

Class I, Zone 0 Ex ia IIC T4 Ta = -40°C to +80°C; Type 4X  
Intrinsically Safe Class I, Division 1, Groups A, B, C, & D; T4 Ta = -40°C to +80°C; Type 4X  
Class I, Division 2, Groups A, B, C, & D;  
Class II, III, Division 2, Groups F&G;  
T4 Ta = -40°C to +80°C; Type 4X

#### Model Code:

#### **7abcdef 00 g \* . Network Valve Monitor.**

a = Series: 3.  
b = Enclosure: 04, 44, 45.  
c = Shaft: S, N 0, D.  
d = Beacon: Any.  
e = Entry: None, 1A.  
f = Position Switches: 2HEM, 2HES, 2HEK, 2APO  
g = Solenoid: 0, D, F, I.  
\* Note: may include optional enclosure code 00124.

### Group 2:

#### Equipment Ratings:

Class I, Division 2, Groups A, B, C, & D T4 Ta = -40°C to +60°C; Type 4X  
Class II, III, Division 2, Groups F&G; T4 Ta = -40°C to +80°C; Type 4X

#### Equipment Marking:

Class I, Division 2, Groups A, B, C, & D;  
Class II, III, Division 2, Groups F&G;  
T4 Ta = -40°C to +60°C; Type 4X

#### Model Code:

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## **7abcdef 00 g\*Network Valve Monitor.**

a = Series: 2, 3, 4, 5, 6, 7.

b = Enclosure: 04, 44, 45.

c = Shaft: S, N 0, D.

d = Beacon: Any.

e = Entry: None, 1A.

f = Position Switches: 2HEM, 2HES, 2HEK, 2APO

g = Solenoid: 0, D, F, I.

\* Note: may include optional enclosure code 00124.

## **Group 3:**

Equipment Ratings:

Class I, Division 2, Groups A, B, C, & D; T4 Ta = -40°C to +60°C; Type 4,4X

Equipment Marking:

Class I, Division 2, Groups A, B, C, & D; T4 Ta = -40°C to +60°C; Type 4X

Model Code:

## **7abcdef 00 g \* Network Valve Monitor.**

a = Network: 5, 6, 7.

b = Enclosure: 04, 44, 45, 00124.

c = Shaft: S, N 0, D.

d = Beacon: Any.

e = Entry: 1M, 1U, 2M, 2U.

f = Position Switches: 2HEM, 2HES, 2HEK, 2APO

g = Solenoid: 0, D, F, I.

\* Note: may include optional enclosure code 00124.

## **7abcdef 00 g \* Network Valve Monitor.**

a = Network: 5, 6, 7\*

b = Enclosure: 04, 44, 45, 00124.

c = Shaft: S, N 0, D.

d = Beacon: Any.

e = Entry: 1M, 1U, 2M, 2U.

f = Position Switches: 2HEM, 2HES, 2HEK, 2APO

g = Solenoid: 0, D, F, I.

\* Note: may include optional accessory 77-ANT or enclosure code 00124.

## **Group 4:**

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## Equipment Ratings:

Class I, Division 2, Groups A, B, C, & D; T4 Ta = -40°C to +85°C; Type 4,4X

## Equipment Marking:

Class I, Division 2, Groups A, B, C, & D; T4 Ta = -40°C to +85°C; Type 4X

## Model Code:

**Tabcdef 00 g \* . Network Valve Monitor.**

a = Network: 3.

b = Enclosure: 04, 44, 45, 00124.

c = Shaft: S, N 0, D.

d = Beacon: Any.

e = Entry: 1M, 1U, 2M, 2U.

f = Position Switches: 2HEM, 2HES, 2HEK, 2APO

g = Solenoid: 0, D, F, I.

\* Note: may include optional enclosure code 00124.

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