VA-748x Electric Valve Actuators Catalog Page

2019-10-30 LIT-1900866

Description

Figure 1: VA-7480 Electric Valve Actuator



VA-748x Series Electric Valve Actuators provide floating or proportional control in HVAC applications. The compact design of this actuator series makes it ideal for installations in confined locations, such as fancoil applications.

The VA-748x Series Actuator is designed for field mounting onto the terminal unit valves made by Johnson Controls and its competitors. Due to the innovative concept of auto stroke detection, the VA-748x actuator can be installed over most of the conventional terminal unit valves in the market and pressure independent control valves with variable strokes.

Refer to the *VA-748x Electric Valve Actuator Product Bulletin (LIT-12011893)* for important product application information.

Features

- Auto-commissioning simplifies installation, since models require no adjustments in the field
- Auto-shutoff actuator motor extends actuator life by reducing drive time and excessive motor wear
- Durable, heat-stabilized, plastic resin enclosure allows the actuator to be used in applications with fluid temperatures up to 203°F (95°C)
- Actuator can be mounted after the valve body is piped, simplifying installation and providing application flexibility
- Compact design allows for installation in confined locations, such as fan coil applications
- Operating status LED provides direct, visual indication of the actuator operating status
- Actuator can be rotated after it is mounted on the valve body, simplifying installation by allowing the actuator wiring entry to be located in any direction

Repair information

If the VA-748x Electric Actuator fails to operate within its specifications, replace the unit. For a replacement VA-748x Electric Valve Actuator, contact the nearest Johnson Controls® representative.

Selection chart

Table 1: Selection chart

Code number	Power supply	Control type	Actuator speed	Mounting thread nut	Cable length (factory mounted)
VA-7480-0312	24 VAC	Floating	13 s/mm	M28 x 1.5	118 in. (3 m)
VA-7482-0312	24 VAC/VDC	Proportional	8 s/mm	M28 x 1.5	118 in. (3 m)
VA-7482-8002-RA	24 VAC/VDC	Proportional	8 s/mm	M30 x 1.5	59 in. (1.5 m)
VA-7482-9002-RA	24 VAC/VDC	Proportional	8 s/mm	M30 x 1.5	59 in. (1.5 m)

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Technical specifications

Table 2: Technical specfications

VA-748x Series Electric Valve Actuators		
Power requirements	VA-7480-0312	24 VAC ±15% at 50/60 Hz; 2.5 VA at maximum power supply; Class 2
	VA-7482-xxx2	24 VAC ±15% at 50/60 Hz; 24 VDC ±15% at 2.5 VA at maximum power supply; Class 2
Input signal	VA-7480-0312	24 VAC, 50/60 Hz
	VA-7482-xxx2	0 VDC to 10 VDC
Input signal adjustments	VA-7480-0312	None
	VA-7482-xxx2	Input signal: 0 VDC to 10 VDC, 2 VDC to 10 VDC, 0 VDC to 5 VDC, 5 VDC to 10 VDC, 0 mA to 20 mA, or 4 mA to 20 mA Direction: direct (drive down) or reverse (drive up) with input signal increase
Input impedance	VA-7480-0312	3,900 ohms
	VA-7482-xxx2	100,000 ohms
Electrical connections	VA-7480-0312 VA-7482-0312	18 AWG cable; 118 in. (3 m) long
	VA-7482-8002-RAVA-7482-9002-RA	18 AWG cable; 59 in. (1.5 m) long
Mechanical connections		Threaded coupling for Johnson Controls VG4000, VG5000, M28x1, and M28x5 Series Zone Valves Threaded coupling for Johnson Controls VG6000, V5000, VP100, M30x1, and M30x5 Series Zone Valves
Protection		NEMA 2, IP43
Output force	VA-7480-0312 VA-7482-0312	21.5 lb (96 N) minimum
	VA-7482-8002-RAVA-7482-9002-RA	31.4 lb (140 N) minimum
Mechanical stroke		0.25 in. (6.3 mm) maximum
Full stroke cycle time		Floating 13 s/mm, proportional 8 s/mm
Full stroke cycles	VA-7480-0312 VA-7482-0312	250,000
	VA-7482-8002-RAVA-7482-9002-RA	150,000
Audible noise rating		<30 dBA
Fluid temperature limits		35°F to 203°F (2°C to 95°C)
Ambient operating conditions		32°F to 122°F (0°C to 50°C), noncondensing
Ambient storage conditions		-4°F to 149°F (-20°C to 65°C), noncondensing
Compliance	United States	Tested per UL2043. Suitable for Use in Other Environmental Air Space (Plenums) in Accordance with Section 300.22 (C) of the National Electrical Code. UL 60730-1 Listed Type 2 Enclosure, File E194024 XAPX XAPX7
	Canada	CSA C22.2 No. 139 Certified, File LR85083, Class 3221 01
CE	Europe	CE Mark – Johnson Controls declares that this product is in compliance with the essential requirements and other relevant provisions of the EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC.

Patents

Patents: https://jcipat.com

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Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Single point of contact

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