

VA-7450 Series

# Electric Valve Actuators



VA-7450 Electric Valve Actuator

## Description

VA-7450 Series Electric Valve Actuators provide on/off, floating, or proportional control in Heating, Ventilating, and Air Conditioning (HVAC) applications. The compact design of this actuator series makes it ideal for installations in confined locations, such as fan coil applications. The VA-7450 Series Actuators are designed for easy mounting in the field, or they can be ordered factory coupled to Johnson Controls® VG4000 or VG5000 Series Zone Valves.

Refer to the *VA-7450 Series Electric Valve Actuators Product Bulletin (LIT-977324)* 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 light-emitting diode (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

## Accessories (Order Separately)

Code Number	Description
VA-7450-8900	Manual Override Ring for Use with VG5000 Series Zone Valve Bodies

## Repair Parts

Replace unit.

## To Order

Specify the code number from the following Selection Chart.

## Selection Chart

Code Number	Description
VA-7450-10011	24 VAC On/Off or Floating Control Electric Valve Actuator
VA-7452-90011	0 to 10 VDC Proportional Control Electric Valve Actuator

## Specifications

VA-7450 Series Electric Valve Actuators	
<b>Power Requirements</b>	24 VAC ±15% at 50/60 Hz; 5.0 VA at Maximum Power Supply; Class 2
<b>Input Signal</b>	VA-7450-10011 24 VAC, 50/60 Hz
	VA-7452-90011 0 to 10 VDC
<b>Input Signal Adjustments</b>	VA-7450-10011 None
	VA-7452-90011 Input Signal: 0 to 10 VDC, 0 to 5 VDC, or 5 to 10 VDC Direction: Direct (Drive Down) or Reverse (Drive Up) with Input Signal Increase Valve Type: Two-Way N.O. (PDTC), Two-Way N.C. (PDTO), or Three-Way Mixing Factory Settings: 0 to 10 VDC, Direct (Drive Down), and Two-Way N.O. (PDTC)
<b>Input Impedance</b>	VA-7450-10011 3,900 ohms
	VA-7452-90011 80,000 ohms
<b>Electrical Connections</b>	24 AWG Cable; 20 in. (508 mm) Long
<b>Mechanical Connections</b>	Threaded Coupling for Johnson Controls VG4000 or VG5000 Series Zone Valves
<b>Enclosure</b>	Glass and Mineral-Filled Kelon A Plastic Resin; NEMA 1, IP40 (EN 60529)
<b>Output Force</b>	21.5 lb (96 N) Minimum
<b>Stroke</b>	0.20 in. (5 mm) Maximum
<b>Full Stroke Cycle Time</b>	65 Seconds
<b>Full Stroke Cycles</b>	100,000
<b>Audible Noise Rating</b>	25 dBA Maximum at 3.3 ft (1 m)
<b>Fluid Temperature Limits</b>	35 to 203°F (2 to 95°C)
<b>Ambient Operating Conditions</b>	32 to 122°F (0 to 50°C), Noncondensing
<b>Ambient Storage Conditions</b>	-4 to 149°F (-20 to 65°C), Noncondensing
<b>Agency Compliance</b>	UL 873 Listed, File E27734, CCN XAPX, Suitable for Plenum Use; CSA C22.2 No. 139 Certified, File LR85083, Class 3221 01
<b>CE Conformity</b>	EMC Directive (89/336 EEC)