

Controls Group 507 E. Michigan Street P.O. Box 423, Milwaukee, WI 53202 Code No. LIT-1924175

VA-715x Series Electric Valve Actuator



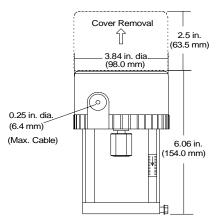
VA-715x Electric Valve Actuator

Description

The VA-715x Series synchronous, motordriven actuator provides incremental (three-wire), incremental with feedback, or proportional control of valves with up to 3/4 in. stroke in heating, ventilating, and air conditioning applications.

This compact, non-spring return actuator has a 90 lb (400 N) force minimum, and responds to a variety of input signals.

The VA-715x Series can be easily field mounted or ordered factory coupled to VG7000 Series Bronze Control Valves. In addition, the VA-715x Series can be field mounted to VB-3766, 3966, and 4332 bronze flare valve bodies.



Dimensions in. (mm)

Features

- magnetic clutch provides constant output force for positive closeoff of valves, and protects the motor in stall conditions
- selectable direct and reverse action simplifies setup and installation
- durable construction provides a longer cycle life
- compact unit provides 90 lb force output, covering a wide range of applications with just one actuator
- unique yoke design enables easy field mounting to valves, reducing installation and stroke adjustment time

Applications

The VA-715x Series Actuator is used in conjunction with VG7000 Series Valves for hot water and chilled water systems. For factory mounted options, refer to *Electric Valve and Actuator Selection Charts*. For VG7000 Series Valve options, refer to *VG7000 Series Bronze Valves, 1/2 Through 2 in. (15 to 51 mm), Two-Way and Three-Way with Electric Actuators.*

Repair Parts

Unit replacement only.

Specifications

| VA-715x Series Electric Valve Actuator | | | |
|--|---|--|--|
| Power Requirements | 24 VAC (20 to 30 VAC), 50/60 Hz | | |
| Input Signal | Incremental: 24 VAC, 50/60 Hz | | |
| | Incremental with Position Feedback: 24 VAC, 50/60 Hz | | |
| | Proportional: 0 to 10 VDC | | |
| Input Signal | Input Signal: 0 to 5, 5 to 10, 0 to 10 VDC (Jumper Selectable) | | |
| Adjustments | Action: Drive Up (RA) or Drive Down (DA) on Signal Increase (Jumper Selectable) | | |
| (Proportional) | Factory Setting: 0 to 10 VDC Over 3/4 in. (19 mm) Stroke, DA | | |
| Input Impedance | 100.000 Ohms | | |
| (Proportional) | | | |
| Feedback Signal | Proportional: 0 to 2000 Ohm ±25%, 1/4 Watt, Over 3/4 in. (19 mm) Stroke | | |
| Mechanical Output | 90 lb Force (400 N) Minimum | | |
| Stroke Range | 5/16 to 25/32 in. (8 to 20 mm) | | |
| Nominal Stroke Timing | 50 Hz: 85 Seconds 5/16 in. (8 mm) Stroke | | |
| | 135 Seconds 1/2 in. (13 mm) Stroke | | |
| | 200 Seconds 3/4 in. (19 mm) Stroke | | |
| | 60 Hz: 70 Seconds 5/16 in. (8 mm) Stroke | | |
| | 110 Seconds 1/2 in. (13 mm) Stroke | | |
| | 165 Seconds 3/4 in. (19 mm) Stroke | | |
| Media Temperature | 280°F (138°C) Maximum | | |
| Electrical Connection | Screw Terminals for 16 AWG Maximum | | |
| Mechanical Connection | For 1/4 - 28 UNF Valve Stem | | |
| Enclosure | NEMA 2, IP42 | | |
| Ambient Conditions | Operating: 0 to 140°F (-18 to 60°C); 10 to 90% RH Non-Condensing | | |
| | 86°F (30°C) Maximum Dew Point | | |
| | Storage: -4 to 150°F (-20 to 65°C); 5 to 90% RH, 86°F (30°C) Maximum Dew Point | | |
| Agency Listings | UL 873 Listed, File E27734 CSA C22.2 No. 139 Certified, File LR85083 | | |

To Order

Refer to the selection chart below for ordering information.

Selection Chart

| Code Number | Description |
|--------------|--|
| VA-7150-1001 | Three-Wire Incremental |
| VA-7153-1001 | Three-Wire Incremental with Position Feedback |
| VA-7152-1001 | Proportional, 0 to 10 VDC |

Accessories

| Code Number | Description |
|----------------|---|
| V-9999-670 | Bonnet Adaptor (Used for Field Mounting to VT Series Valve Body with Threaded Stem) |
| Y20EBE-2 | Adaptor Kit (Used for Field Mounting to VT Series Valve Body with Slotted Stem) |
| VA-7150-1900 | Conduit Adaptor Kit |
| V-9999-HW1 | Mounting Kit to Mount VA-715x or VA-720x Series Electric Actuators to Honeywell® V75011A, F, G, 1/2 Through 3 in. Single-Seated and V5013F Three-Way Valves |
| V-9999-BC1 | Mounting Kit to Mount VA-715x or VA-720x Series Electric Actuators to Barber-Colman [®] 1/2 Through 1-1/4 in. VB-9xxx Valve Bodies |

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products. © 08/00 Johnson Controls, Inc.