

# VC Valve Actuators

## VC Series Proportional Actuators



Control central heating and/or cooling systems, fan coil systems, radiators and convectors. Depending on the model selected, it can be controlled by a low voltage SPST or SPDT switch, pulse-width modulated 24 Vac signal, or floating input, modulating controller such as a room thermostat, Aquastat control, flow switch or a 0/2 to 10 Vdc controller.

- Use with two-way or three-way valves
- Double insulated actuator
- Five foot plenum-rated cable
- Quick and easy replacement of moving parts
- Actuator head installation does not require draining the system
- Selectable/switchable electronic fail safe normally open or normally closed
- Available with valve bodies with 1000-series 2-way and 6000-series 3-way cartridges for new construction
- All VC Series actuator-valve combinations provide 60 psi close-off

**Actuator Type:** Valve

**Fail Safe Mode:** Stays in place

**Cable Entry:** Molded strain relief, conduit clamp

**Dimensions, Approximate:** 2.8 in. high x 3.7 in. wide x 2.7 in. deep  
(70 mm high x 94 mm wide x 68 mm deep)

**Electrical Protection:** Double Insulated

**Ingress Protection Rating:** IP40

**Frequency:** 50 Hz; 60 Hz

**Timing (seconds):** Nominal Driving @ 60 Hz: 120 sec.

**Manual operation:** Lever

**Mounting:** Direct Coupled

**Shaft Adapter Type:** Self-alignment

**Stroke:** 0.4 in. (10 mm)

**Close-off:** 60 psid

**Power Consumption (driving):** 6 VA

**Supply Voltage:** 24 Vac

**Materials:** Plastic housing

**Operating Humidity Range (% RH):** 5 to 95% RH, non-condensing

**Medium Temperature:** 203 F (95 C)

**Ambient Temperature Range:** 32 F to 150 F (0 C to 65 C)

**Temperature Ratings (Shipping):** -40 F to +150 F (-40 C to +65 C)

**Storage Temperature Range:** -40 F to +150 F (-40 C to +65 C)

**Weight:** 0.84 lb (0.38 kg)

**Used With:** 3000 Series 2-way and 7000 Series VC valve bodies only

**Approvals**

**Canadian Standards Association:** CSA Certified: LR1322-367

**Underwriters Laboratories, Inc:** Listed 94-5V

| Product Number | Control Signal                    | Type of Internal Auxiliary Switch | Switch Ratings                                                                                   | Cable Entry                         | Electrical Connections |        |        | Number of Internal Auxiliary Switch | Includes                 |
|----------------|-----------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------|------------------------|--------|--------|-------------------------------------|--------------------------|
|                |                                   |                                   |                                                                                                  |                                     | Type                   | Length |        |                                     |                          |
|                |                                   |                                   |                                                                                                  |                                     |                        | (inch) | (m)    |                                     |                          |
| VC6834ZZ11/U   | 24 Vac; SP3T (tri-state) Floating | SPDT                              | 2.2A (5 to 110 Vac)/1.0A (110 to 277 Vac) Inductive; Min. DC switching capability: 5 mA @ 24 Vac | Molded strain relief, conduit clamp | Plenum-rated cable     | 1.5 m  | 5 ft.  | 1                                   | Flexible conduit adapter |
| VC6931ZZ11/U   | 24 Vac; SP3T (tri-state) Floating | —                                 | —                                                                                                | Molded strain relief                | Cable                  | 1 m    | 39 in. | 0                                   | Flexible conduit adapter |
| VC6934ZZ11/U   | 24 Vac; SP3T (tri-state) Floating | —                                 | —                                                                                                | Molded strain relief, conduit clamp | Plenum-rated cable     | 1.5 m  | 5 ft.  | 0                                   | Flexible conduit adapter |
| VC7931ZZ11/U   | 2 to 10 Vdc                       | —                                 | —                                                                                                | Molded strain relief                | Cable                  | 1 m    | 39 in. | 0                                   | —                        |
| VC7934ZZ11/U   | 2 to 10 Vdc                       | —                                 | —                                                                                                | Molded strain relief, conduit clamp | Plenum-rated cable     | 1.5 m  | 5 ft.  | 0                                   | Flexible conduit adapter |