







| Type overview |    |
|---------------|----|
| Туре          | DN |
| Z2050QPT-F    | 15 |

# Te

| echnical data      |                          |  |
|--------------------|--------------------------|--|
| Functional data    | Valve Size               | 0.5" [15]                              |
|                    | Noise level, Motor       | dB(A)                                  |
|                    | Fluid                    | chilled or hot water, up to 60% glycol |
|                    | Fluid Temp Range (water) | 36212°F [2100°C]                       |
|                    | Body Pressure Rating     | 360 psi                                |
|                    | Close-off pressure Δps   | 200 psi                                |
|                    | Flow characteristic      | equal percentage                       |
|                    | Servicing                | maintenance-free                       |
|                    | Flow Pattern             | 2-way                                  |
|                    | Leakage rate             | 0%                                     |
|                    | Controllable flow range  | 75°                                    |
| Materials          | Valve body               | forged brass                           |
|                    | Spindle                  | stainless steel                        |
|                    | Seat                     | PTFE                                   |
|                    | Characterized disc       | incorporated into the ball             |
|                    | Diaphragm                | EPDM                                   |
|                    | Pipe connection          | NPT female ends                        |
|                    | O-ring                   | EPDM                                   |
|                    | Ball                     | stainless steel                        |
| Suitable actuators | Non-Spring               | СОВ                                    |
|                    | Electrical fail-safe     | CQKB(X)                                |

# Safety notes



- WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov
- If temperature exceeds 212°F operating range due to a boiler control failure the valve will safely contain the hot water but manufacturers product warranty becomes invalid. Valve and actuator replacement is at the expense of others.



# **Product features**

# Application

CQ

4.9" [125]

The PIQCV zone valves with its pressure independent technology are suited for large commercial buildings where higher close-off and dynamic balancing is required. Common applications include unit ventilators, fan coil units, VAV reheat coils, fin tube casing, radiant panels and duct coils. The valve fits in space restricted areas and can be assembled without the use of tools.

# **Dimensions** DN Type Z2050QPT-F 15 CQK В D 4.2" [107] 4.8" [122] 3.5" [89] 2.4" [62] 1.3" [33] 4.9" [125]

В

4.2" [107]

C

4.5" [114]

D

3.4" [87]

2.4" [62]

1.3" [33]



On/Off, Electrical Fail-Safe, AC 100...240 V

- Nominal voltage AC 100...240 V
- Control On/Off
- Position feedback

# **Technical data sheet**





**CQKBUP-RR** 



| Technical data  |                                    |  |
|-----------------|------------------------------------|--|
| Electrical data | Nominal voltage                    | AC 100240 V  |
|                 | Nominal voltage frequency          | 50/60 Hz   |
|                 | Power consumption in operation     | 2.5 W  |
|                 | Power consumption in rest position | 0.5 W  |
|                 | Power consumption for wire sizing  | 5 VA   |
|                 | Transformer sizing                 | 7 VA (class 2 power source)  |
|                 | Electrical Connection              | 18 GA appliance cable, 3 ft [1 m], with 1/2" conduit connector   |
|                 | Overload Protection                | electronic thoughout 090° rotation   |
| Functional data | Bridging time (PF)                 | 2 s  |
|                 | Pre-charging time                  | 520 s  |
|                 | Angle of rotation                  | 90°  |
|                 | Angle of rotation note             | adjustable with mechanical stop  |
|                 | Running Time (Motor)               | 75 s / 90°   |
|                 | Running time fail-safe             | <60 s  |
|                 | Noise level, motor                 | 35 dB(A)   |
|                 | Noise level, fail-safe             | 35 dB(A)   |
|                 | Position indication                | pointer  |
| Safety data     | Degree of protection IEC/EN        | IP40   |
|                 | Degree of protection NEMA/UL       | NEMA 2   |
|                 | Enclosure                          | UL Enclosure Type 2  |
|                 | Agency Listing                     | cULus acc. to UL60730-1A/-2-14, CAN/CSA<br>E60730-1:02, CE acc. to 2014/30/EU and<br>2014/35/EU; Listed to UL 2043 - suitable for use<br>in air plenums per Section 300.22(c) of the NEC<br>and Section 602.2 of the IMC |
|                 | Quality Standard                   | ISO 9001   |
|                 | Ambient temperature                | 1.740°C  |
|                 | Storage temperature                | -40176°F [-4080°C]   |
|                 | Ambient humidity                   | Max. 95% RH, non-condensing  |
|                 | Servicing                          | maintenance-free   |
|                 |                                    |  |

UL94-5VA

Materials

Housing material



#### **Product features**

#### Application

Electrical fail-safe On/Off ZoneTight actuator.

Valve selection should be done in accordance with the flow parameters and system specifications.

The actuator is mounted directly to the valve without the need for tools or additional linkage.

The actuator operates in response to AC 100...240 V. Angle of rotation is adjustable with the integrated mechanical stop.

### **Electrical installation**

### **INSTALLATION NOTES**

(A) Actuators with appliance cables are numbered.

\ Provide overload protection and disconnect as required.

Actuators may be connected in parallel. Power consumption and input impedance must be observed.



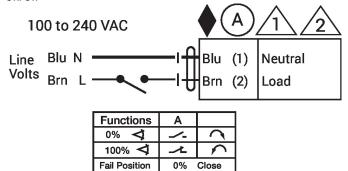
Meets cULus requirements without the need of an electrical ground connection.

#### Warning! Live electrical components!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

# Wiring diagrams

On/Off



#### **Dimensions**