

# Technical data sheet

# Z3100Q-J







#### Type overview

Туре	DN
Z3100Q-J	25

#### **Technical data**

Functional data	Valve Size	1" [25]
	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	40 psi
	Flow characteristic	linear
	Servicing	maintenance-free
	Flow Pattern	3-way Diverting
	Leakage rate	0%
	Controllable flow range	75°
	Cv	4.4
Materials	Valve body	forged brass
	Spindle	brass
	Seat	PTFE
	Pipe connection	NPT female ends
	O-ring	EPDM (lubricated)
	Ball	chrome plated brass
Suitable actuators	Non-Spring	CQB
	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

The QCV zone valves are suited for large commercial buildings where higher close-off and the ability to change flow is desired. 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.



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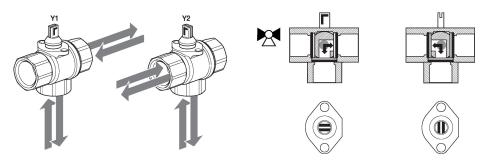


Flow/Mounting details

CQ

A

4.6" [118]



# Dimensions **Type** Z3100Q-J DN 25 CQK С Ε A В D F 1.2" [30] 4.6" [118] 2.8" [70] 5.1" [129] 2.8" [70] 1.2" [31]

В

2.8" [70]

С

4.9" [124]

D

2.6" [65]

Ε

1.2" [30]

F

1.2" [31]

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- Nominal voltage AC/DC 24 V
- Control On/Off
- Position feedback





CQKB24-RR

# **Technical data**

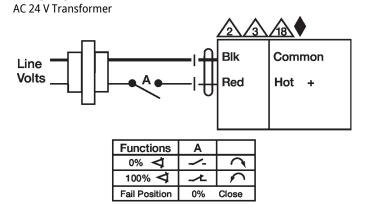
Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	2.5 W
	Power consumption in rest position	0.5 W
	Power consumption for wire sizing	5 VA
	Transformer sizing	5 VA (class 2 power source)
	Electrical Connection	18 GA plenum cable, 3 ft [1 m], 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 E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU; Listed to UL 2043 - suitable for use in air plenums per Section 300.22(c) of the NEC 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
Materials	Housing material	UL94-5VA



Product features	
Applicatio	<ul> <li>Electrical fail-safe On/Off ZoneTight actuator.</li> <li>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.</li> <li>The actuator operates in response to AC/DC 24 V.</li> </ul>
	Angle of rotation is adjustable with the integrated mechanical stop.
Electrical installation	
	<ul> <li>INSTALLATION NOTES</li> <li>Actuators with appliance cables are numbered.</li> <li>Actuators may be connected in parallel. Power consumption and input impedance must be observed.</li> <li>Actuators may also be powered by DC 24 V.</li> <li>Actuators with plenum cable do not have numbers; use color codes instead.</li> <li>Meets cULus requirements without the need of an electrical ground connection.</li> <li>Warning! Live electrical components!</li> <li>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</li> </ul>

could result in death or serious injury.

Wiring diagrams



## Dimensions