

# CQKB24-SR-LR

Modulating, Electronic Fail-Safe, 24 V, for 2 to 10 VDC or 4 to 20 mA Control Signal



Technical Data	
Power Supply	24 VAC, $\pm 20\%$ , 50/60 Hz, 24 VDC, $\pm 10\%$
Power Consumption Running	2.5 W
Power Consumption Holding	0.5 W
Transformer Sizing	5 VA (class 2 power source)
Electrical Connection	3ft [1m], 18 GA plenum cable with 1/2" conduit connector
Overload Protection	electronic throughout 0° to 90° rotation
Operating Range Y	2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 $\Omega$ , 1/4 W resistor)
Angle of Rotation	90°, adjustable with mechanical stop
Position Indication	pointer
Running Time (Motor)	75 sec
Running Time (Fail-Safe)	<60 sec
Bridge Time	2 sec delay before fail-safe activates
Pre-charging Time	5 to 20 seconds
Ambient Humidity	5 to 95% RH non-condensing
Ambient Temperature Range	35°F to 104°F [1.7°C to 40°C]
Storage Temperature Range	-40°F to 176°F [-40°C to 80°C]
Housing	IP40, NEMA 2
Housing Material	UL94-5VA
Agency Listings†	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC
Noise Level (Motor)	max. 35 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001
Weight	0.4 lb [0.2 kg]
Degree of Protection IEC/EN	IP40

Date created, 06/08/2018 - Subject to change. © Belimo Aircontrols (USA), Inc.

**Wiring Diagrams**
**INSTALLATION NOTES**

- Actuators with appliance cables are numbered.
- Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- Actuators may also be powered by 24 VDC.
- Only connect common to negative (-) leg of control circuits.
- A 500 Ω resistor (ZG-R01) converts the 4 to 20 mA control signal to 2 to 10 VDC.
- Actuators with plenum cable do not have numbers; use color codes instead.
- 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.

