GKRX24-EV

Modulating, Electronic Fail-Safe, 24 V, Shared Logic Technology®

Technical Data	
Power Supply	24 VAC ± 20%, 50/60 Hz, 24 VDC ± 10%
Power Consumption Running	17 W
Transformer Sizing	29 VA (class 2 power source)
Electrical Connection	18 GA plenum rated cable and RJ45 socket (ethernet)
Overload Protection	electronic thoughout 0° to 90° rotation
Operating Range Y	2 to 10 VDC (default) VDC variable
Input Impedance	100 kΩ (0.1 mA), 500 Ω
Feedback Output U	2 to 10 VDC (default) VDC variable
Angle of Rotation	90°
Direction of Rotation (Motor)	reversible with web view
Direction of Rotation (Fail-Safe)	reversible with switch
Position Indication	integrated into handle
Manual Override	external push button
Running Time (Motor)	90 sec
Running Time (Fail-Safe)	35 sec
Ambient Humidity	<95% RH non-condensing
Ambient Temperature Range	-22°F to 122°F [-30°C to 50°C]
Storage Temperature Range	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 1, IP54, UL Enclosure Type 1
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. 45 dB (A)
Noise Level (Fail-Safe)	<45 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001
Weight	5.5 lb [2.5 kg]
Communication	BACnet IP, BACnet MS/TP, listed by BTL, Modbus RTU, Modbus IP, web server, Belimo MP-Bus

The Energy Valve is based on Belimo patent and patent pending technology, US-Patent 6,039,304: Ball valve with modified characteristics, US-Patent Pending: 2011/0153089: HVAC actuator comprising a network interface, data store and a processor, US-Patent Pending: 2009/009115: Control of sensor less and brushless DC-Motor.
The Energy Valve incorporates additional technology - Powered by Optimum Energy TM.

Wiring Diagrams

INSTALLATION NOTES

Ⓐ Actuators with appliance cables are numbered.

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

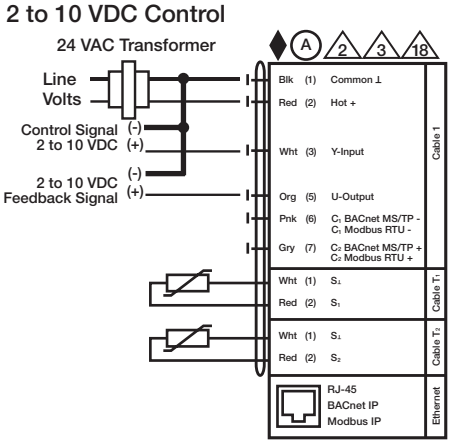
△3 Actuators may also be powered by 24 VDC.

△18 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.



2-10 VDC, BACnet MSTP/IP, Modbus RTU/IP