### **Electric Non-Spring Return Rotary-Motion Actuators**

### **Installation and Operation Instructions**

These bi-directional actuators do not require a damper linkage and are easily installed on a damper with a round shaft of 13 mm (1/2") in diameter or a square shaft of 10 mm (3/8") for small actuators, or with a round shaft of 8 to 13 mm (5/16" to 1/2") in diameter or a square shaft of 10 to 18 mm (3/8" to 11/16") for medium and large actuators, and with an anti-rotation bracket. They may also be mounted to a ball valve or butterfly valve which comes with a direct-coupled mounting bracket and an extended valve shaft.

Rotation is mechanically limited to 95° by integral endstops. The position of the actuator is marked from 0 to 90° on the gear box face plate. An anti-rotation bracket prevents lateral movement of the actuator. Pressing the spring-loaded gear release on the actuator cover disengages the gear train for manual repositioning of the shaft coupler. The actuator rotation is field adjustable from 30° to 90° at 10° increments.

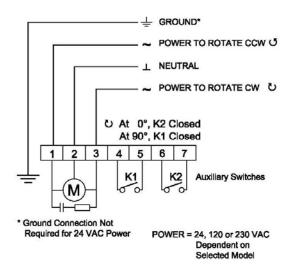
# Optional Auxiliary Switches (On-Off/Floating Models Only)

The RA Series actuators are available with one or two built-in auxiliary switches as an option on all on-off/floating models that allow setting at any angle between 0° and 90°.

#### Feedback Signal (Proportional Models Only)

The RA Series actuators are provided with 0-5 VDC position feedback signal on all proportional models.

#### For 3-Wire On-Off/Floating Actuators



## Direct Action (DA) and Reverse Action (RA) Jumper Selection (Proportional Models Only)

DA is set for clockwise (CW) rotation and RA for counter clockwise (CCW) rotation. The factory setting is for DA. Can be changed in the field to RA by moving the jumper from DA to RA position on the PC board.

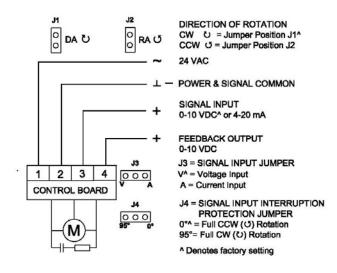
## Input Signal Interruption Protection (Proportional Models Only)

When there is no input signal or input signal is open-circuited, the actuator will return to its full counter clockwise or clockwise rotation position, depending on the J4 jumper setting. 0° is set for full counter clockwise rotation and 95° is set for full clockwise rotation. The factory setting is 0°. Can be changed in the field to 95° by moving the jumper from 0° to 95° position on the PC board.

**CAUTION:** Equipment Damage Hazard. Do not install the actuator in atmospheres where explosive or corrosive vapors or escaping gases are present. This could result in damage to the unit.

**WARNING:** All RA Series actuators are designed for use only in conjunction with operating controls. Where an operating control failure would result in personal injury and/or loss of property, it is the responsibility of the installer to add safety devices or alarm systems that protect against, and/or warn of, control failure.

#### For Proportional Actuators



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