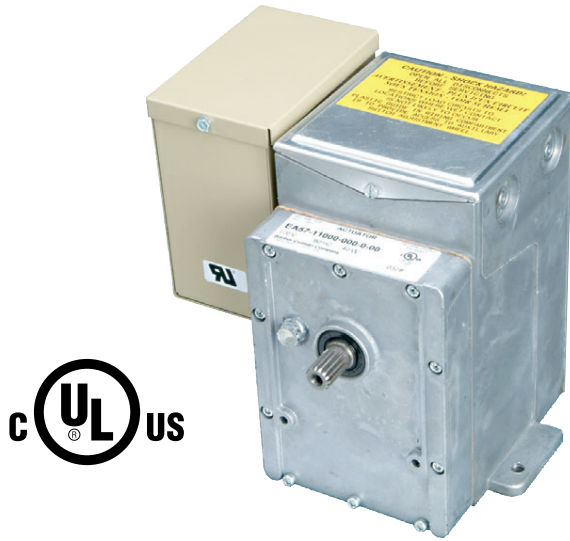


Series 659 Resistance to Position Converters for Electric Actuators



Features

- Solid state switching output
- Fast response
- Adjustable deadband
- Input from 90 to 1000 Ohm slidewire

The Series 659 is a resistance to position converter typically located electrically between a retransmitting slidewire and an electric actuator. The primary application of the Series 659 is in tandem operation of electric actuators.

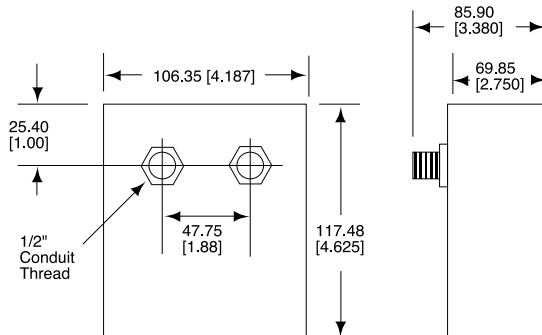
Triac switching in the 659 drives the actuator through an angle corresponding to the position of the master control slidewire. A potentiometer built into the actuator (with its wiper arm driven by the output shaft) provides a correc-

tional feedback signal to the 659 to provide proportional action. The triac switching and feedback continues until balance is reached. Deadband (the difference between the input signal which will drive the motor one way and the input signal that will drive it the other way) is adjustable from 0.1% to 8% of the master control slidewire span. A deadband is recommended for less critical processes, since it reduces mechanical wear on the actuator.

Mounting Dimensions for Resistance to Position Converters:

Model 659A

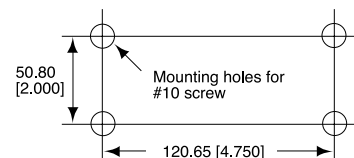
Note that dimensions are slightly different on units designed for mounting to high torque actuators.



Model 659B

Overall dimensions:

136.52 [5.375] H x 139.70 [5.500] W x 69.85 [2.750] D



Specifications

Input signal:

100 Ohm to 1000 Ohm slidewire

Zero and span:

No adjustment

Input/output connections:

Color coded pigtail leads on 659A. Numbered barrier terminal strip on 659B.

Load:

Low, medium or high torque actuators

Feedback slidewire inputs:

100 to 1000 Ohms to match input resistance

Grounded input:

Grounding any input wire will not cause damage.

Linearity:

0.15% of slidewire

Deadband:

0.1% to 8.0% of input span

Ambient temperature limits:

-25 to 58°C

Power consumption:

7.0 VA at 120 or 240 Vac, 50 or 60 Hz.

Max. continuous output current rating:

2.0 Amps at 24 to 240 Vac rms.

Line regulation:

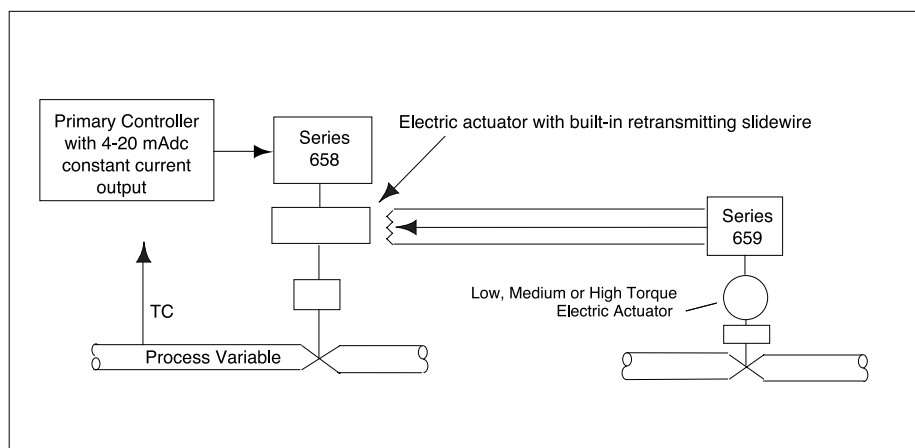
120 or 240 Vac, $\pm 10\%$ variation, with fixed input signal offset of 1% max.

Mounting:

Upright recommended (as shown) for Model 659A, but other positions are acceptable.

Shipping weight:

3 lbs. (659 only)



Ordering codes

Model Series	Base Model	Reserved	Enclosure	Reserved	Reserved	Reserved	Reserved
659		000		0	000	0	00

Base Model	
A	Actuator
B	In-panel (flange)

Enclosure	
0	Standard Mount, Standard Housing
1	Standard Mount, Rain Tight Housing (659A only)
2	EA7X Mount, Standard Housing (659A)
3	EA7X Mount, Rain Tight Housing (659A)