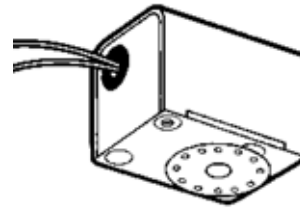


# Erie™ Two-Position Damper Actuator

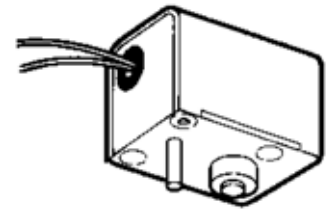
The 453L light duty damper actuators are designed for a variety of two-position, spring return, damper applications. They are suitable for up to 125 in<sup>2</sup> (806 cm<sup>2</sup>) of balanced damper. The 453L uses a two-wire thermostat control. Linkage hardware must be supplied by the end user.

The 453H medium duty damper actuators are designed for a variety of two-position, spring return damper applications. They are suitable for up to 250 in<sup>2</sup> (1,613 cm<sup>2</sup>) of balanced damper. The 453H uses a two-wire thermostat control. Linkage hardware must be supplied by the end user.

The 453R medium duty non-spring return damper actuators are designed for two-position, motor open and motor closed, damper applications. They are suitable for up to 500 in<sup>2</sup> (3,225 cm<sup>2</sup>) of balanced damper. The 453R uses a three-wire thermostat control. Linkage hardware must be supplied by the end user.



Linkage Drive



Direct Drive



Features:

- Available with end switch.
- Linkage or direct drive available.
- Hysteresis synchronous motor with a “lost motion” drive to protect the gear train from closing shock.

**Model Chart**

Model No.	Description	Voltage Vac	Drive Direction of Rotation <sup>a</sup>	Torque Rating in.-oz.				Stroke Speed in Seconds	
				Motor Driven		Spring Return		Motor Driven	Spring Return
				0°	84°	0°	84°		
453H0034GA00	Linkage Drive	24	CCW	55	35	35	55	27 @ 60 Hz 32 @ 50 Hz	8 @ 50/60 Hz
453H0034GB00		120							
453H0034GU00		230							
453H0038GA00		24							
453H0038GA01	Linkage Drive with End Switch	120	CW						
453H0038GB00	Linkage Drive								
453H0038GB01	Linkage Drive with End Switch								
453H0038GU00	Linkage Drive								
453H0038GU01	Linkage Drive with End Switch	230	CCW						
453H0074GA00	Direct Drive	24							
453H0074GB00	Linkage Drive	120							
453H0074GU00		230							
453L0034GA00		24							
453L0034GB00	Linkage Drive	120	CCW	45	25	17	25	18 @ 60 Hz 22 @ 50 Hz	6 @ 50/60 Hz
453L0034GU00		230							
453H0077GA00		24							

<sup>a</sup> Drive direction as viewed from the bottom of the actuator.

# 453L, 453H, 453R Series

## Model Chart (Continued)

Model No.	Description	Voltage Vac	Drive Direction of Rotation <sup>a</sup>	Torque Rating in.-oz.				Stroke Speed in Seconds	
				Motor Driven		Spring Return		Motor Driven	Spring Return
				0°	84°	0°	84°		
453H0077GA01	Direct Drive with End Switch	24	CCW	55	35	35	55	27 @ 60 Hz 32 @ 50 Hz	8 @ 50/60 Hz
453H0077GB00	Direct Drive	120							
453H0077GB01	Direct Drive with End Switch	230							
453H0077GU00	Direct Drive								
453L0038GA00		24	CW	45	25	17	25	18 @ 60 Hz 22 @ 50 Hz	6 @ 50/60 Hz
453L0038GA01	Linkage Drive with End Switch	120							
453L0038GB00	Linkage Drive								
453L0038GB01	Linkage Drive with End Switch	230							
453L0038GU00	Linkage Drive								
453L0038GU01	Linkage Drive with End Switch	24	CCW	45	25	17	25	18 @ 60 Hz 22 @ 50 Hz	6 @ 50/60 Hz
453L0074GA00	Direct Drive	120							
453L0074GB00		230							
453L0074GU00		24							
453L0077GA00		120	CW	45	25	17	25	18 @ 60 Hz 22 @ 50 Hz	6 @ 50/60 Hz
453L0077GA01	Direct Drive with End Switch								
453L0077GB00	Direct Drive								
453L0077GB01	Direct Drive with End Switch								
453L0077GU00	Direct Drive	230	CW	45	25	17	25	18 @ 60 Hz 22 @ 50 Hz	6 @ 50/60 Hz
453L0077GU01	Direct Drive with End Switch								
453R0077GA00	Direct Drive 3-wire Control	24	—	150	150	—	—	37 @ 60 Hz 45 @ 50 Hz	Non-Spring Return
453R0077GB00		120							
453R0077GU00		240							

<sup>a</sup> Drive direction as viewed from the bottom of the actuator.

## Specifications

### Inputs

<b>Control signal</b>	SPST for spring return, SPDT for non-spring return. 24 Vac @ 50/60 Hz; 110/120 Vac @ 50/60 Hz; 220/230 Vac @ 50/60 Hz.
<b>Power</b>	<b>453L, 453R:</b> 6.5 W, 7 VA. <b>453H:</b> 6.5W, 10 VA. End switch: 10 Amps @ 120 Vac.

### Outputs

<b>Motor Type</b>	Synchronous AC.
<b>Mechanical</b>	Direction of rotation: CW or CCW rotation. Maximum close-off torque: See Model Chart.

### Environment

<b>Ambient temperature limits</b>	Shipping and storage: -40 to 169°F (-40 to 71°C). Operating: 0 to 120°F (-17 to 49°C).
<b>Humidity</b>	Non-condensing.
<b>Locations</b>	NEMA Type 1.

### Agency Listings

<b>UL</b>	File #E37601.
<b>CSA</b>	File #LR19535 listed, CE compliant.

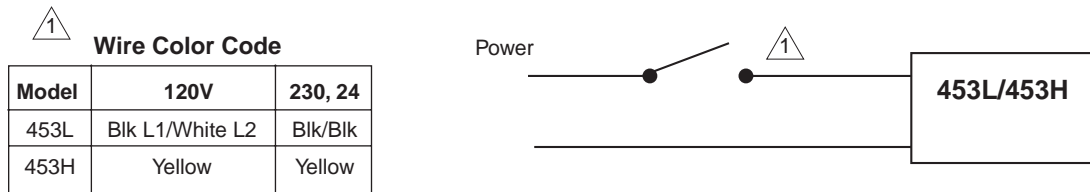
### General Instructions

	Refer to F-27028.
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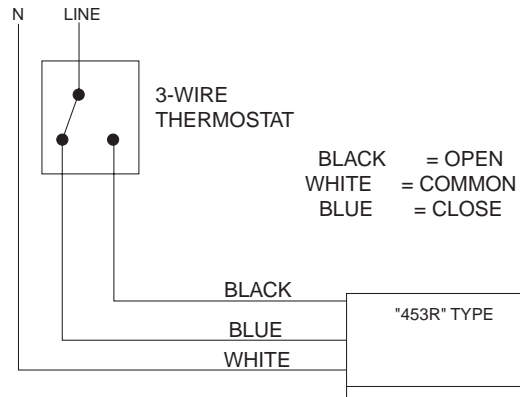
## Accessories

Model No.	Description
453-52	6 to 12 in. damper shaft extension kit.
453-69	12 to 20 in. damper shaft extension kit.
453-239	5/16 to 1/2 in. shaft adaptor.

## Typical Applications



**Figure 1 Typical Wiring Diagram, 453L/453H Models.**



**Figure 2 453R with Three-Wire Thermostat.**