

# ULTRA-ZONE<sup>®</sup>

Forced Air Zone Controls

## SUBMITTAL SHEET

### Model MA-LM24 Actuator

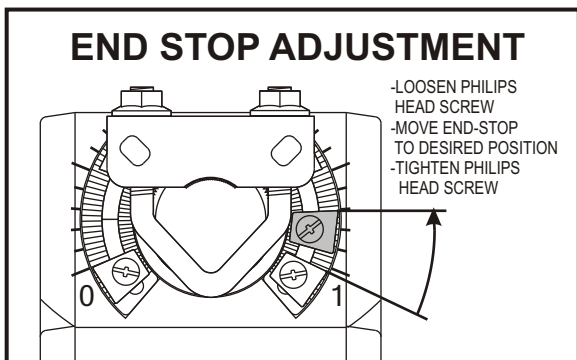
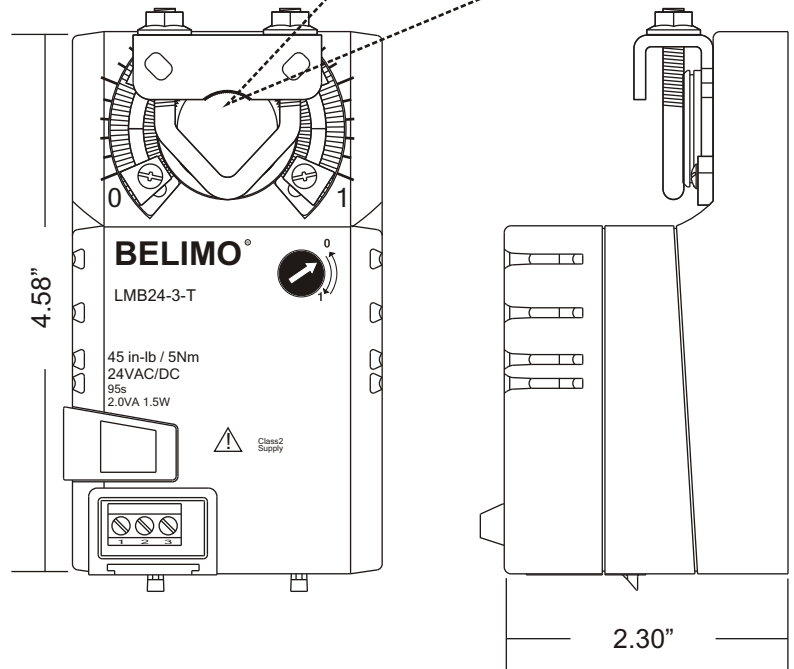
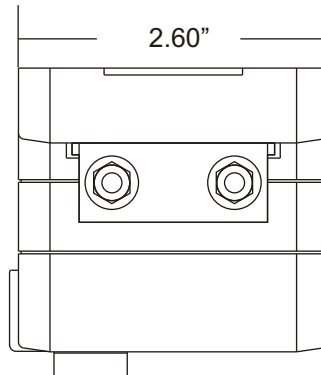
The MA-LM24 motor actuators are easy to install, easy to wire up, and come with a 5 year warranty. The superior design insures long life and no maintenance. *Airflow can be from either direction and the Motor can be oriented in any position in a conditioned area.* The UL Listed Motor Actuator is a 24vac 3 wire power open / power close type rated at 45 in.-lbs. of torque and 95 second rotation time. It includes an integrated terminal block, and NEMA1 rated housing. End-Stop adjustment allows for a percentage of Relief Air (Leakage) to be set when the damper is powered to close. A positional arrow is also included that provides visual indication of blade travel. Optional Model S1A, Auxiliary end-switch can be added if required.



Positional Indicator  
not attached for clarity

#### Technical Data

Power Supply	24 VAC ± 20% 50/60Hz 24 VDC ± 10%
Power Consumption	1.5 W
Transformer Sizing	2.0 VA(Class 2 power source)
Electrical Connection	Screw Terminal (26 to 14 GA Wire)
Torque	45 in-lb [2 Nm]
Direction of Rotation	Reversible with  switch
Manual Override	External Push Button
Running Time	95 seconds, constant independent of load
Humidity	5 to 95% RH Non-Condensing
Ambient Temperature	-22°F to +122°F [-30°C to +50°C]
Storage Temperature	-40°F to +176°F [-40°C to +80°C]
Housing	NEMA 1 / IP20
Housing Material	UL94-5VA
Agency Listings	cULus
Noise Level	< 35dB(A)



#### SUBMITTAL FORM

SUBMITTED BY: \_\_\_\_\_

JOB: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

LOCATION: \_\_\_\_\_



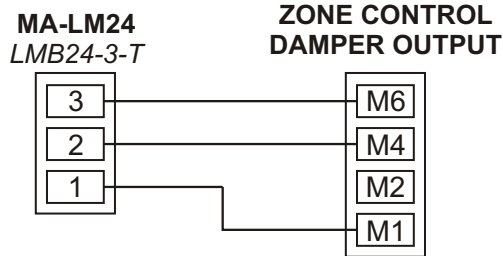
385 Hwy. 33  
Englishtown, NJ 07726  
Ph: 800-446-3110  
Fx: 732-446-5362

### WIRING SOLUTIONS

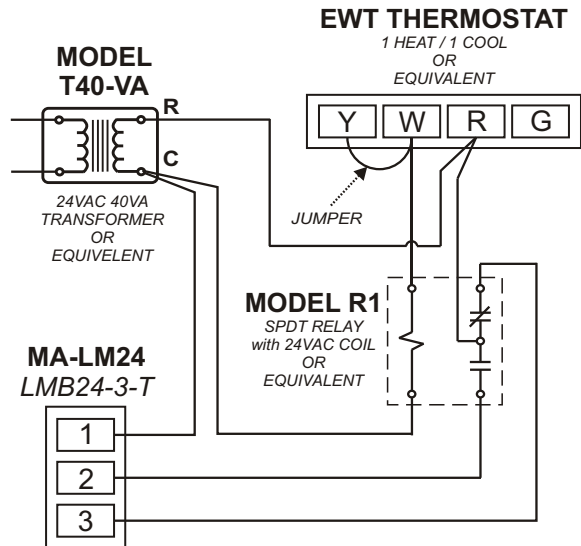
#### Motor Actuator Terminals

TERMINAL	Direction Switch	
	0 ↶	↷ 1
1	24v Com.	24v Com.
2	Counter Clockwise	Clockwise
3	Clockwise	Counter Clockwise

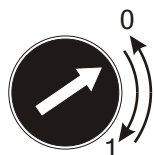
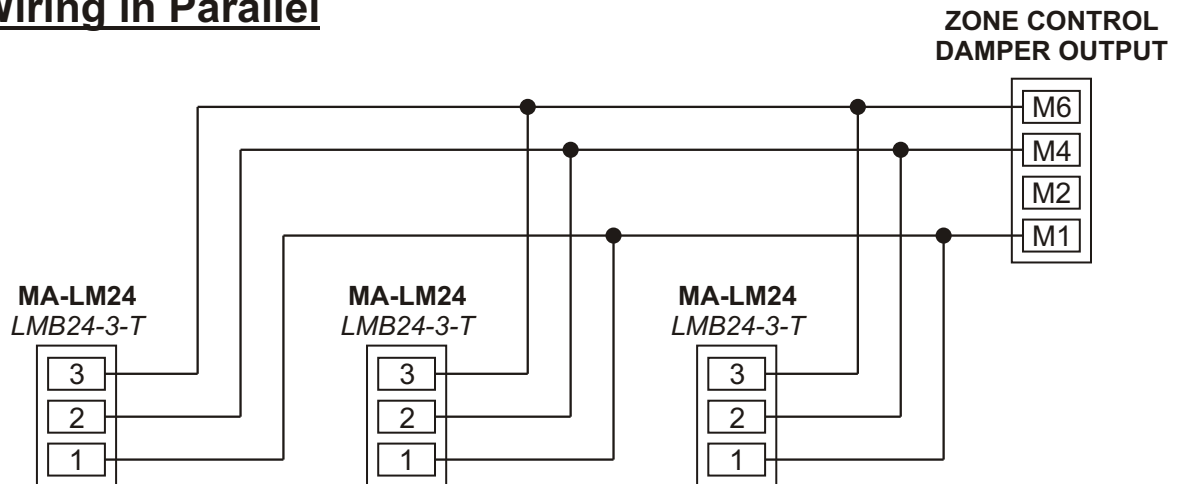
#### Wiring to a Zone Control Panel



#### Wiring a Thermostat to Control a Single Damper



#### Wiring in Parallel



#### DIRECTION OF ROTATION

Clockwise = Close  
Counter-Clockwise = Open

\*For reverse operation Change switch position