

# ULTRA-ZONE<sup>®</sup>

Forced Air Zone Controls

## SUBMITTAL SHEET

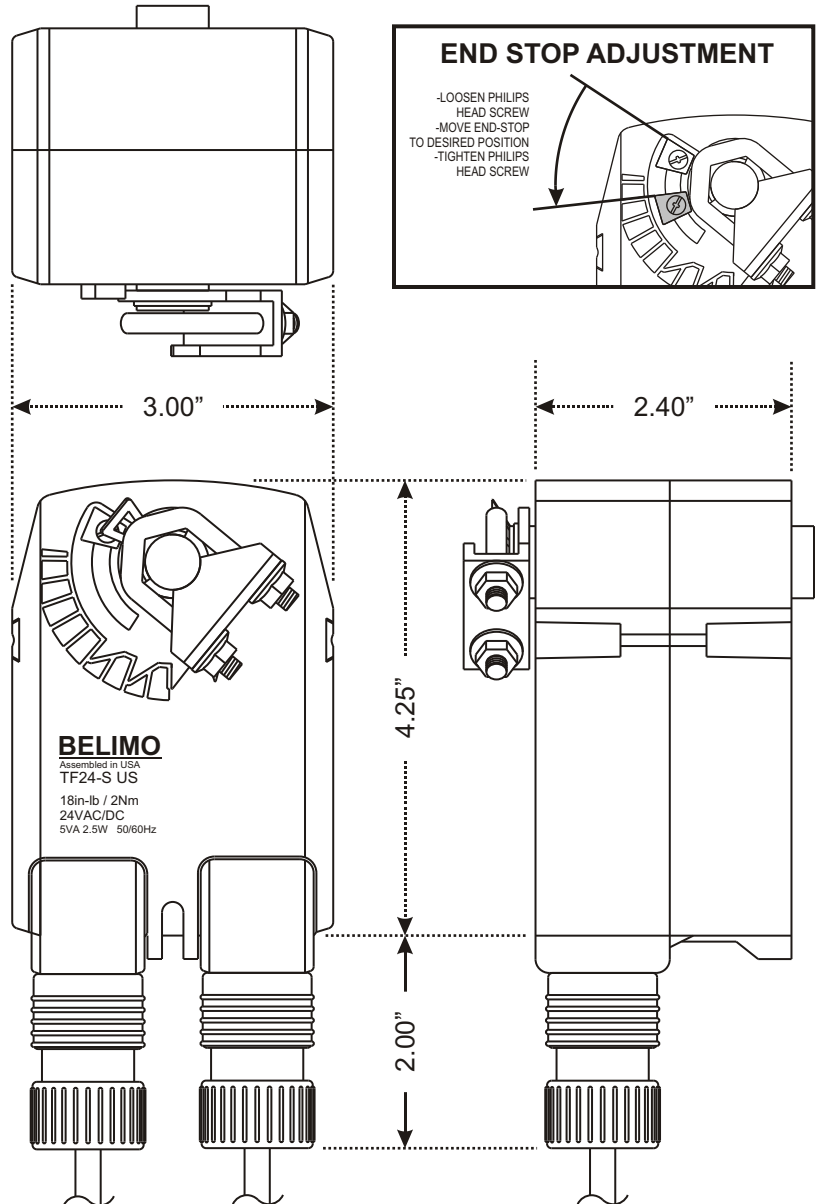
### Model MA-TF24-S Actuator

### Model MA-TF120-S Actuator

The MA-TF24-S and MA-TF120-S actuators can be specified on URD and ND style dampers. They are easy to wire up, and come with a 5 year warranty. The superior design insures long life and zero maintenance. *Airflow can be from either direction and the actuator can be oriented in any position in a conditioned area.* The TF-S series achieves Open/Close control of airflow dampers with a 1/2 inch shaft. The TF-S series also provides heavy duty spring return operation for reliable fail-safe operation. The spring return system provides consistent torque to the damper with and without power applied to the actuator. The TF series provides 95° of rotation and can be stalled at any point in its normal rotation. The TF-S series includes an integrated SPDT dry end switch to interlock various devices, such as exhaust fans or booster fans. It can also be used to prove damper (open) position for combustion make-up air. Power consumption is reduced in holding mode and the actuator is double insulated so an electrical grounding connection is unnecessary.

#### Technical Data

Power Supply	
TF24-S	24VAC ± 20%, 50/60 Hz 24VDC ±10%
TF120-S	100 to 240 VAC, 50/60 Hz
Power Consumption	
TF24-S	running 2 W / holding 1.3 W
TF120-S	running 2.5 W / holding 1.3 W
Transformer Sizing	5 VA (Class 2 power source)
Electrical Connection	3 ft, 18 GA appliance cable 1/2" Conduit connector
Auxiliary Dry Switch	1 x SPDT @ 250vac
Contact rating = 3amp resistive / 0.5amp inductive	
Use for Pilot Duty only if load exceeds contact rating.	
Torque	18 in-lb [2 Nm]
Shaft / Axle Size	1/2 Inch
Direction of Rotation	CW / CCW reversible
Running Time	
Motor	<75 seconds
Spring	<30 seconds
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 2 / IP42
Housing Material	UL94-5VA
Agency Listings	cULus
Noise Level	
Motor	<50 db
Spring	62 db



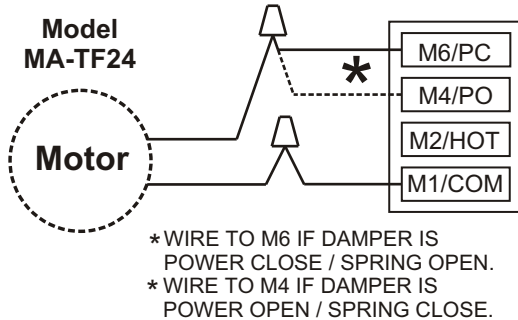
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Englishtown, NJ 07726  
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#### SUBMITTAL FORM

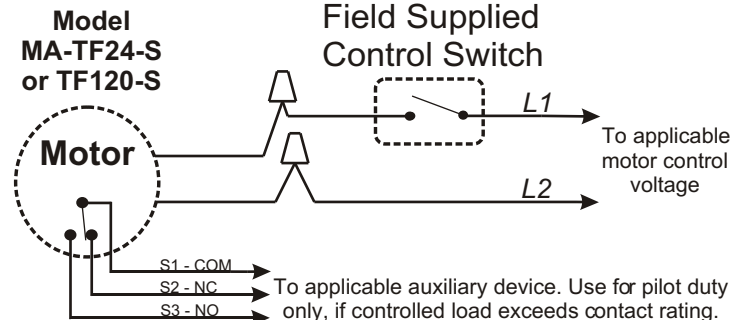
SUBMITTED BY: \_\_\_\_\_  
 JOB: \_\_\_\_\_  
 ARCHITECT: \_\_\_\_\_  
 ENGINEER: \_\_\_\_\_  
 CONTRACTOR: \_\_\_\_\_  
 LOCATION: \_\_\_\_\_

### WIRING SOLUTIONS

#### Wiring to Zone Control Panel



#### Wiring with Field Supplied Control



### FIELD REPLACEMENT OF EXISTING SPRING RETURN MOTOR

1. Remove existing Motor Actuator from Damper.
2. Insert Shaft Adaptor in Damper Shaft and secure with supplied Machine screw. (Figure 1).
3. Slide MA-TF24/120 over Shaft Adaptor and tighten U-Bolt with the damper blade in the proper relaxed (Unpowered) position for your application. (Figure 2).
4. Slide Mounting bracket into the slot on the bottom of the MA-TF24/120. (Figure 3).
5. Secure Mounting Bracket with supplied self-tapping screws. (Figure 4).

