

### Young Regulator Co.

7100 Krick Rd • Walton Hills, OH 44146 P: 440-232-9700 • F: 440-232-8266 www.youngregulator.com

Submit 3085-IF

2-18

### Model 3085-IF

Rectangular Opposed Blade Damper w/ Belimo LMB24 Motor for On-Off and Interface Board

### **Application and Design**

Young Regulator's "Simple Zone" product line makes stand-alone zoning easier than ever. Each damper assembly comes with a pre-installed temperature sensor, primary actuator and integrated interface board for an easy field connection to our T-720A thermostat.

The 3085-IF Rectangular Zone Damper is constructed of 20 ga. aluminum frame and blades, with a stainless steel slide mechanism and a 1/2"round plated steel damper shaft that pivots in a oil impregnated bronze bushing. A mounting plate facilitates slip-in installation. By cutting a 2 1/2" slot in the side of the duct, the damper is secured to the side with 4 screws.



\*Paired with T-720A Thermostat (Sold Separately)

STANDARD CONSTRUCTION		
Frame	.050 Aluminum Extrusion with Reinforcing Channels	
Blade	.050 Aluminum Extrusion with Reinforcing Channels	
Shaft	½" Plated Steel	
Slide	Stainless Steel	
Blade Bushing	Oil-Impreganted Bronze	
Low Leak Seals	Not Available	
SIZE INFORMATION Damper 3/16" Undersized High & Wide		
Frame Width	2 1/8" Wide	
Mounting Plate	5" Wide x Damper Height	
Blade Width	1.438" - Contained Within Frame	
Max Size	24" x 24", 36" x 14" Bottom Mount	
Min Size	3" x 3"	

BELIMO LMB24 ACTUATOR	
24v On-Off and Floating Point Contr	ol
Volts	24V
Watts	1.5
VA	3
Noise Level	<35 dB (A)
Timing	95 Seconds Constant
Torque	45 in. lb.
Built in motor stop for minimum an	d maximum air also,
Reflective visual position indicator	
OPTIONS	
Transformers	Aux. Switch

QUANTITY	WIDE	HIGH	NOTES

PROJECT	LOCATION
CONTRACTOR	DESIGN SPECIFIER



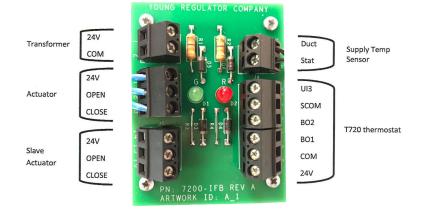
## **Engineering Specifications**

The interface board for the T720 thermostat is provided to aid in the installation of the thermostat and damper assembly. With this option, the supply temperature sensor is preinstalled in the damper and the connections are prewired to the primary actuator and sensor at the factory. Field connections consist of the transformer and thermostat wiring. For convenience, an extra terminal block is provided for installation to a slave damper.

#### Sequence of Operation:

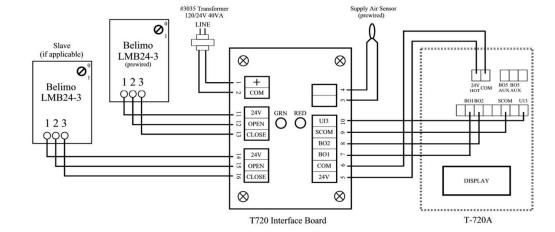
The supply temperature sensor (AKA £uct stat) determines if warm or cold air is available in the supply. This information is shown on the thermostat by displaying £leating modeqor £ooling modeq As the thermostat works to control the space temperature to the set-point, the damper will open, close, or modulate as needed. The Interface Board features a GREEN and a RED LED. When lit,

- The GREEN LED indicates the damper is opening
  - The RED LED indicates the damper is closing
- When BOTH are lit, the thermostat is satisfied and the damper is stalled



# WIRING SCHEMATICS

NOTE: Young Regulator recommends the use of 18 gauge thermostat wire





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