



3085-IF
Rectangular Modulating VAV Damper

Application and Design

Young Regulator model 3085-IF is a rectangular, modulating, pressure dependant, VAV damper with a 95 second motor that includes a supply air temperature sensor pre-installed within the damper. The temperature sensor sends signals to the interface-board ("IF-BOARD"), which communicates with Young Regulator's T-720IF thermostat.

Each damper assembly comes with a pre-installed temperature sensor, primary actuator, and integrated interface-board for easy field connection to the T-720IF thermostat.

Easy field connection and accurate, high-quality components makes Young Regulator model 3085-IF ideal for standalone zone control.





*Paired with T-720IF thermostat (sold seperately)

STANDARD CONSTRUCTION	
Frame	.050 Aluminum Extrusion with Reinforcing Channels
Blade	.050 Aluminum Extrusion with Reinforcing Channels
Shaft	1/2" Plated Steel
Slide	Stainless Steel
Blade Bushing	Synthetic
Low Leak Seals	NOT AVAILABLE

SIZE INFORMATION (DAMPER 3/16" UNDERSIZED HIGH & WIDE)	
Frame Width	2-1/8" W
Mounting Plate	5" W x H
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	
N24V On-Off and Floating Point Control. Min and Max Air Adjustments Reflective Visual Position Indicator.	
Volts	24V
Watts	1.5W
VA	3VA
Noise	< 35 dB (A)
Timing	95 Seconds
Torque	45 in.oz.

ACCESSORIES	
Transformer (YR Model 3035)	
Thermostat (YR Model T-720IF)	

Quantity	Option	Notes

PROJECT	LOCATION
CONTRACTOR	DESIGN SPECIFIER



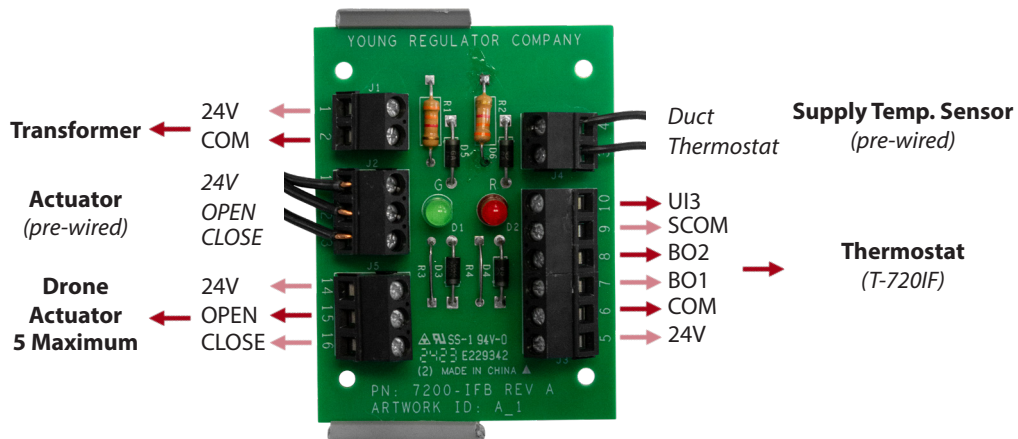
“IF” Engineering Specifications

The interface-board for YR “IF” Series models is a circuit board that allows communication between the pre-wired temperature sensor, actuator, and the T-720IF thermostat. Field connections consist of the transformer (to power the assembly) and thermostat wiring. For convenience, an extra terminal block is provided for integrating a drone damper.

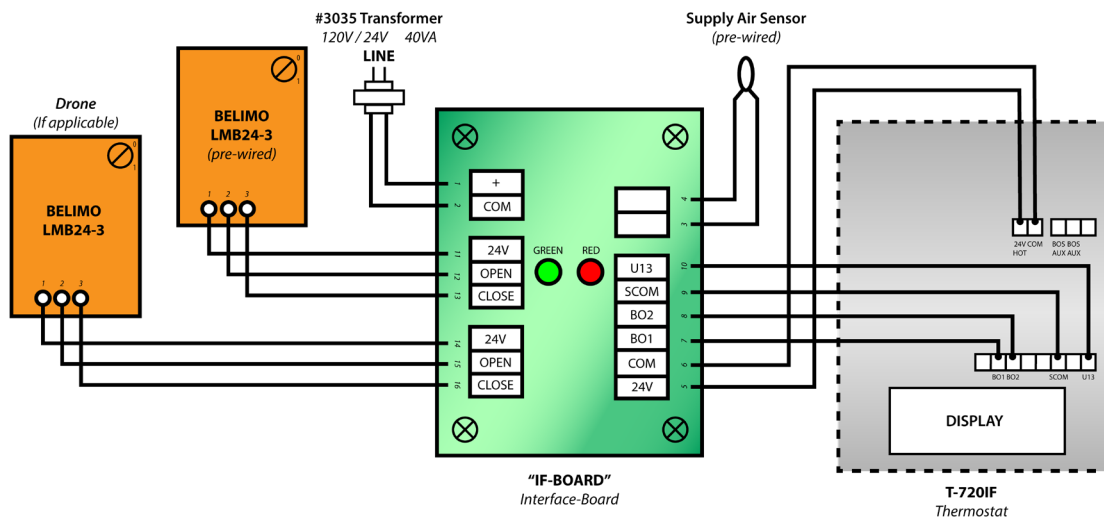
Sequence of Operation:

The supply temperature sensor (AKA ‘duct stat’) determines if warm or cold air is available in the airstream. This information is shown on the thermostat by displaying ‘Heating Mode’ or ‘Cooling Mode’. 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 light.

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



Wiring Schematic:



**18 gauge thermostat wire is recommended.*