



3151-IF

Rectangular 2-Position Damper w/ Automatic Changeover

Application and Design

The Young Regulator Model 3151 is a motorized, rectangular, opposed-blade damper. It is constructed of an extruded aluminum frame, stainless steel slide, and a 24VAC spring return motor.

The actuator configuration is power-open / spring-close (PO/SC) only.

Model 3151-IF features a direct drive, stall type actuator with a hysteresis synchronous motor designed for long life with a "lost motion" drive to protect the gear train from closing shock.

The 3151-IF includes our Interface Board that simplifies field wiring. (See Page 2)



*Paired with T-720IF-2P thermostat
(sold separately)

STANDARD CONSTRUCTION	
Frame	.050 Aluminum Extrusion with Reinforcing Channels
Blade	.050 Aluminum Extrusion with Reinforcing Channels
Slide	Stainless Steel
Blade Bushing	Synthetic
Low Leak Seals	NOT AVAILABLE
SIZE INFORMATION (DAMPER $\frac{3}{16}$ " UNDERSIZED HIGH & WIDE)	
Frame Width	2- $\frac{1}{8}$ " 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	4" x 4"

Quantity	Option	Notes
PROJECT		LOCATION
CONTRACTOR		DESIGN SPECIFIER

SYNCHRONOUS ANTI-BACKLASH ACTUATOR	
Volts	24V
Watts	6W
VA	10 VA
Amp	.45 Amp
Timing	30Sec Powered / 8Sec Spring Return
Torque	65 In. Oz. Average
OPTIONS	
120V Actuator	
Low Leak Seals	
Power Close / Spring Open	
ACCESSORIES	
Transformer (YR Model 3035)	
Thermostat (YR Model T-720IF-2P)	



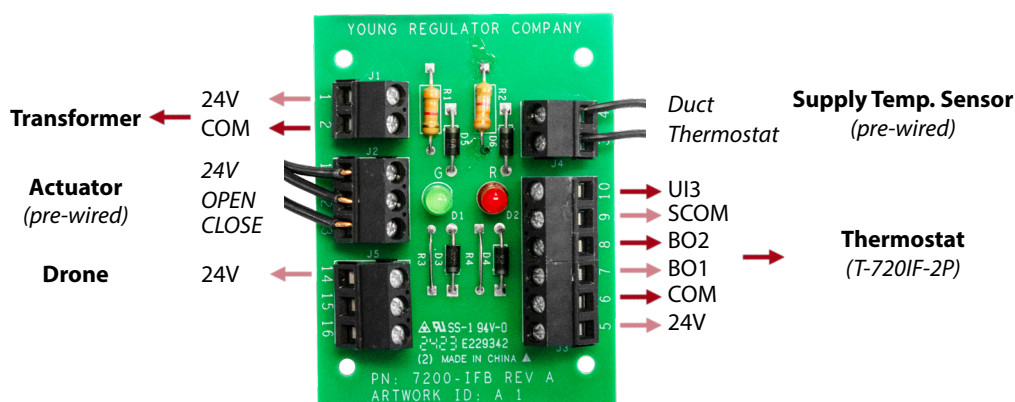
“IF” Engineering Specifications

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.

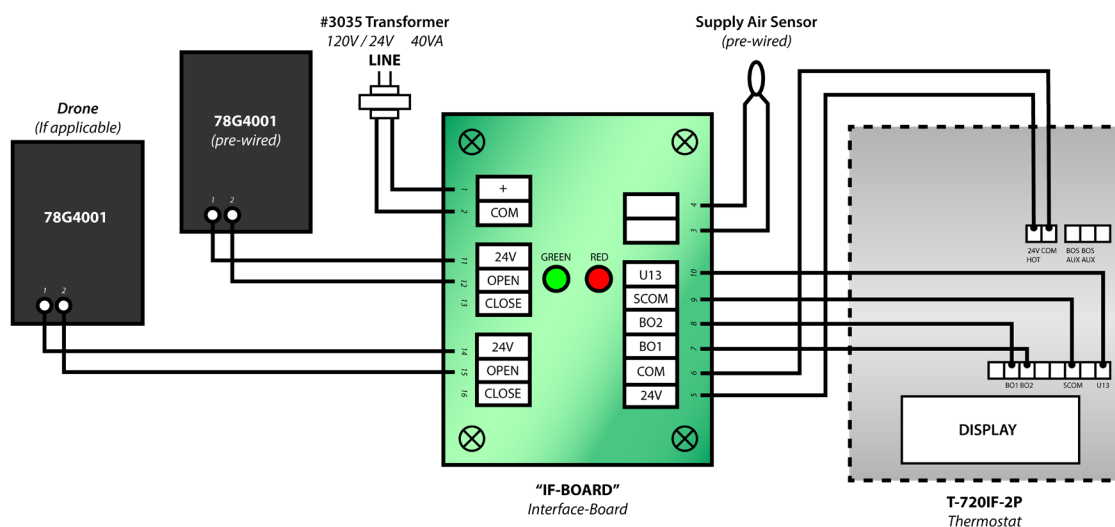
Sequence of Operation:

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 or close as needed. The interface-board features a GREEN and a RED light.

- The **GREEN LED** indicates the damper is open
- The **RED LED** indicates the damper is closed



Wiring Schematic:



**18 gauge thermostat wire is recommended.*