



## Young Regulator Co.

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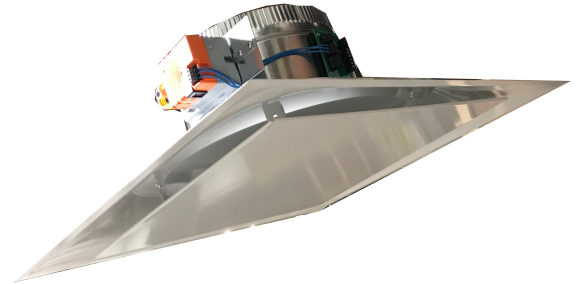
Submit 9100IF 6/2018

### Model 9100-IF

Variable Air Volume Ceiling Diffuser  
with Interface Board

Young Regulator's "Simple Zone" product line makes stand-alone zoning easier than ever.

The Young Regulator 9100-IF is a plaque style diffuser. It has been designed to maintain the coanda effect discharging air along the ceiling for predictable even comfort. It features a removable face plate, constructed of 18 gauge steel and attached to a unitary stamped seamless back cone with integral modulating disk. (picture right) The face plate and back cone are coated with corrosion resistant baked enamel white paint. Locating the electronics outside of the air stream makes servicing easy.



T-720  
Thermostat

Each damper assembly comes with a pre-installed temperature sensor, primary actuator and integrated interface board for easy field connection to the Young Regulator T-720 thermostat. (Wiring Diagram on Back)

Standard Construction	
Back Cone	Unitary stamped seamless construction with 4-way discharge pattern
Face Plate	Removable Plaque Style
Finish	Baked Enamel
Size Information	
Size	24" x 24" 6" Neck through 14" Neck - Nominal - 1/4" 12" x 12" 6" and 8" Neck - Nominal - 1/4"
Frame	Surface mount Standard, Lay-in frame Optional
Thermostat <b>T-720A</b>	Proportional; Modulation and Supply Air Sensor for automatic changeover
Drone	Use 9100E Up to 8 units on one thermostat

Belimo LMB24 Actuator		
Controls	24VAC/DC On/Off and Floating Point Min & Max Air Adjustments, Reflective Visual Position Indicator	
Electricity	24Vac/24VDC Watts 1.5 VA 3.0	
Noise	<35dB (A)	
Timing	95 Seconds Constant	
Torque	45 in. Lbs	
Min and Max Airflow Adjustment via Reflective Position Indicator		
Options		
Pneumatic Motor	Relief Ring	Other Direct Drive Motors

Quantity	Neck	Face	Frame	Notes
<b>Project</b>		<b>Location</b>		
<b>Contractor</b>		<b>Design Specifier</b>		



## Interface Board Engineering Specifications

The interface board for the T720 thermostat is provided to simplify the installation of the thermostat and damper assembly. The 9100-IF features the supply temperature sensor preinstalled in the damper and the connections are pre-wired 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 of slave damper(s).

### Sequence of Operation:

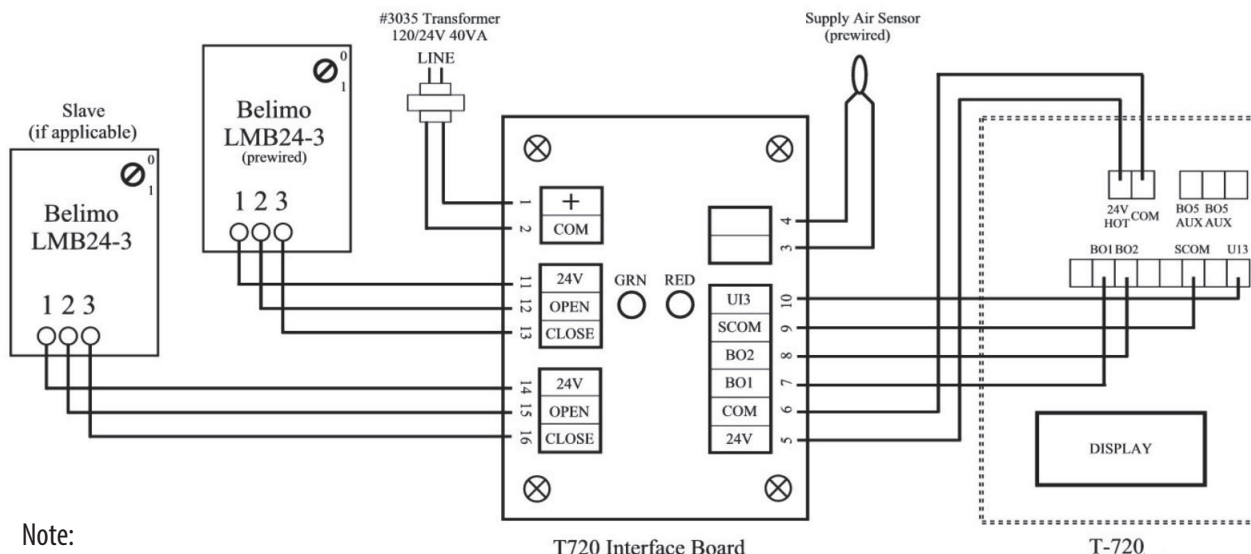
The supply temperature sensor (duct stat) determines if warm or cold air is available in the supply. (72°F Decision Pt.) This information is shown on the thermostat by displaying 'Heating mode' or 'Cooling mode'. As the thermostat works to control the space temperature to the set-point, the damper will open, close, or modulate as needed.

## Interface Board Wiring

**LED Codes**  
 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

## System Wiring Diagram



Note:  
Young Regulator recommends the use of 18 AWG thermostat wire