



Young Regulator Co.

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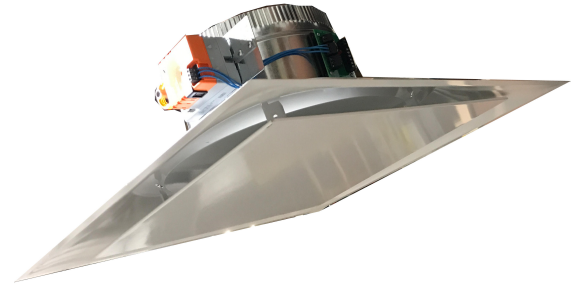
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Submit 9100IF 6/2018

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 | Lay-in frame Standard, Surface Mount Optional |
| Thermostat T-720A | 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 |
|-------------------|------|-------------------------|-------|-------|
| | | | | |
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| | | | | |
| | | | | |
| | | | | |
| Project | | Location | | |
| Contractor | | Design Specifier | | |



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:

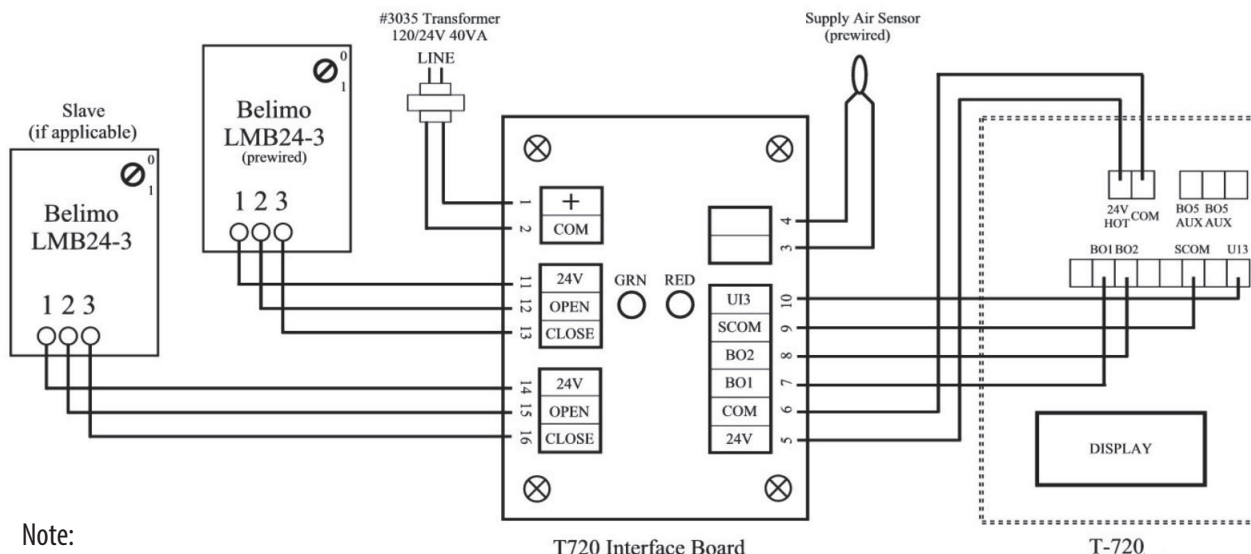
The supply temperature sensor (duct stat) determines if warm or cold air is available in the supply. (72°F Decision Pt.) This information is shown on the thermostat by displaying 'Heating mode' or 'Cooling mode'. As the thermostat works to control the space temperature to the set-point, the damper will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