



Young Regulator Co.

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Submit 2045 – 1-10

Model 2045

*Motorized Rectangular Zone Damper
 Modulating Automatic Changeover VAV
 Heavy Duty Opposed Blade Damper*

Application and Design

The 2045 rectangular modulating zone dampers by Young Regular combine the advantages of Variable Air Volume and simple installation. This damper provides pressure dependent, zone control with a thermostat and automatic changeover between heating and cooling-without the need for an expensive VAV box.

These modulating dampers are operated by a 3-wire, 24-volt, stall type reversing motor. They are controlled with a single pole/double throw/center off thermostat like the Young models # T-312 and T-641, ordered separately. In a heat/cool system, they vary the volume of air into a zone to maintain room temperature. They are used independent of a zone control panel to solve isolated over heating and/or over cooling problems.

The automatic changeover relay consists of a duct sensor and relay board. The duct sensor is factory installed on our damper to be positioned upstream to sense supply air temperature. Supply duct air temperatures 72 degrees or greater will direct the relay board to put the damper in the heating mode, so that damper will begin to close when room temperature is greater than the wall thermostat set point. Supply duct air temperatures less than 72 degrees will direct the relay board to put the damper in the cooling mode, so that damper will begin to open when room temperature is greater than the wall thermostat set point.



The opposed blade design allows for more even distribution of air for a quieter system and less turbulence.

STANDARD CONSTRUCTION	
Frame	14 ga. Roll Formed Galvanized Steel
Blade	16 ga. Galvanized
Mounting Plate	5" Wide x Damper Height
Shaft	½" Plated Steel
Bearings	Oil Impregnated Bronze
Dampers Less Than 12" High Will Be Single Blade Design	
SIZE INFORMATION Damper = 1/4" Undersized High & Wide	
Frame Width	3 ½" Wide
Max Size	48" x 48" Single Piece
Min Size	6" x 6"

HONEYWELL ML6161 ACTUATOR	
Non-spring return direct-coupled actuators. Floating actuators used with single pole double throw (SPDT) thermostats.	
Volts	24V
Watts	2.0
VA	2.2
Amp	0.085
Timing	7 Minutes
Torque	35 in. lbs.
Built in motor stop for minimum and maximum air	
Automatic Changeover Relay Board w/ Duct Sensor Wired at the Factory	
OPTIONS	
Transformers	Thermostats
Jackshaft for larger sizes	

QUANTITY	WIDE	HIGH	NOTES

PROJECT	LOCATION
CONTRACTOR	DESIGN SPECIFIER