



Young Regulator Co.

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Submit 2085 – 1-10

Model 2085

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

Application and Design

The 2085 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. When the supply duct air temperature is 72 degrees or greater, the relay board will switch the damper into heating mode. The damper will begin to close when room temperature is greater than the wall thermostat set point. When the supply duct air temperature is less than 72 degrees, the relay board will switch the damper into cooling mode, and in this case the 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	.050 Aluminum Extrusion with Reinforcing Channels
Blade	.050 Aluminum Extrusion with Reinforcing Channels
Mounting Plate	5" Wide x Damper Height
Shaft	1/2" Plated Steel
Slide	Stainless Steel
Blade Bushing	Individual Synthetic
Low Leak Seals	Not Available
SIZE INFORMATION Undersized = 3/16" High & Wide	
Frame Width	2 1/8" Wide
Blade Width	1.438" - Contained Within Frame
Max Size	24" x 24", 36" x 14" Bottom Mount
Min Size	3" x 3"

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	
OPTIONS	
Transformers Pt# 3035	T-312 Thermostat
	T-641 Thermostat

QUANTITY	WIDE	HIGH	NOTES

PROJECT	LOCATION
CONTRACTOR	DESIGN SPECIFIER