



Young Regulator Co.

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Submit CVRT1 9-2019

Model CVRT1

Constant Volume - 1 Regulated / 1 Low Volume
 Ceiling Mount

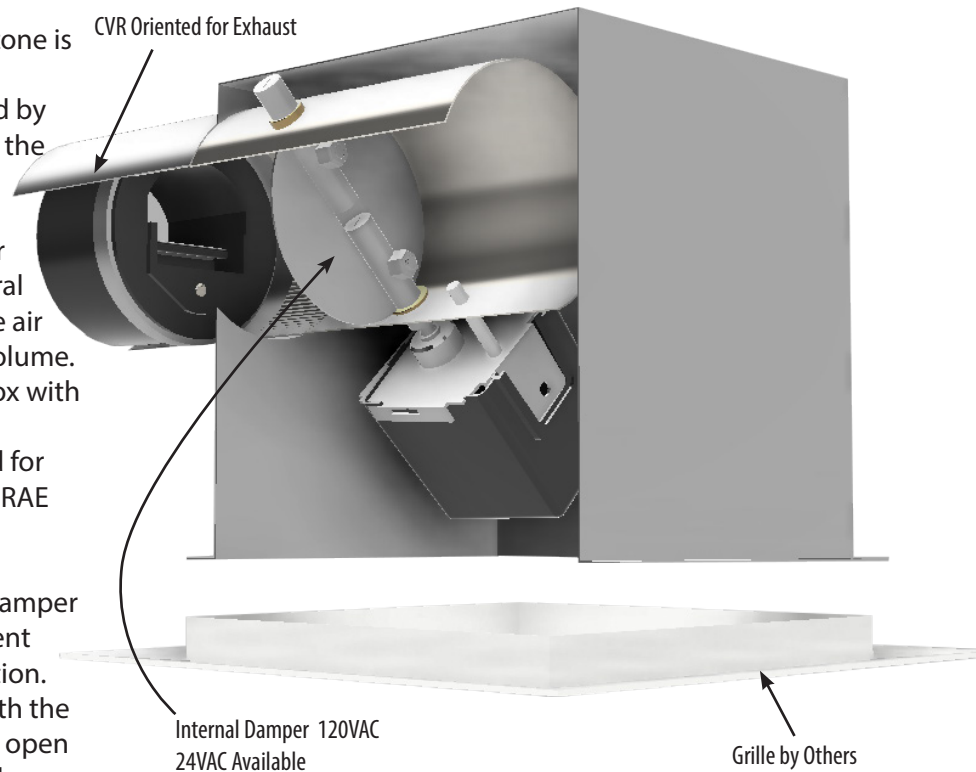
Application and Design

Regulating the volume of air into or out of a zone is the primary feature of ventilation systems. It satisfies the ventilation requirements required by code, while saving energy by ventilating only the required volume of air into or out of a zone.

The Young Regulator CVRT is a ceiling register terminal box used in conjunction with a central rooftop ventilator unit. The CVRT controls the air into or out of the zone to a pre-established volume. Each assembly consists of a ceiling register box with a motorized damper and a Constant Volume Regulator (CVR). The CVRT has been designed for fresh-air applications in compliance with ASHRAE Standard 62.1 and similar IAQ codes.

When a room is unoccupied, the motorized damper in the CVRT1 is in the closed position to prevent excess ventilation and limit energy consumption. When occupied, the damper (wired in-line with the light switch or occupancy sensor) powers the open position and allows the CVR to control the volume of ventilation air.

CVRT1 Cutaway Image



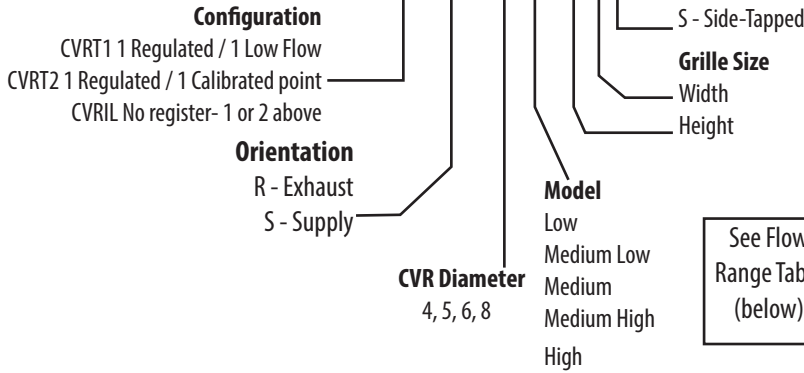
PRODUCT PARAMETERS		SIZE INFORMATION		CVR CONSTRUCTION	
Enclosure & Sleeve	24 ga. Galvanized Steel	DIAMETER	Enclosure Dimension	Material	Molded UL94 V0 ABS Plastic
				Accuracy	Desired Setpoint +/- 10% Avg.
Blade	20 ga. Galvanized Steel	4	8 x 8 x 11	Pressure Range	0.2 to 0.8 InWC
Motor	110VAC (24VAC available)	5	8 x 8 x 11	CVR Mounting	Friction Fit Rubber Gasket
Shaft	1/2" Zinc Plated Steel	6	8 x 8 x 11	Safety Ratings	UL2043 Flame and Smoke European Fire and Smoke M1
Bushing	Oil Impregnated Bronze	For Volume Ranges - See Reverse Side			

ACTUATOR	Parameter	Data
Special windings and heavy-duty steel gearing provide for long life and easy spring return operation. Direct drive, stall type actuator features a hysteresis synchronous motor designed for long life with a "lost motion" drive to protect the gear train from closing shock. Damper motor is whisper quiet. UL Listed Motor	Volts	120 VAC (24VAC available)
	Watts/VA	6 Watts / 10VA
	Torque	65 in oz. Average
	Timing	30 sec. - Open / 8 Sec. - Close
	Wire Count	2 - Hot and Common

Summary and Customer Information on Reverse

Constant Volume Register Terminal Configuration Guide

CVRTx-(R/S)DDM-HWS

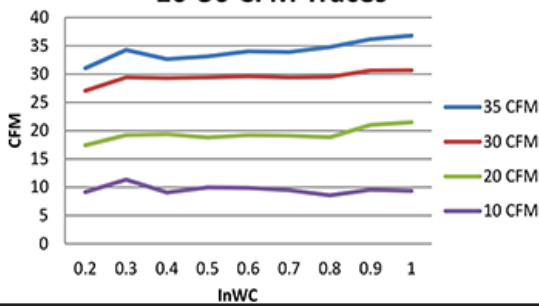


CVRT Family of Products

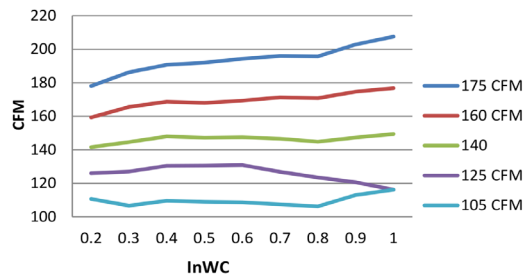
Model	Description
Room Terminal Units	Supply or Exhaust
CVRT1	Occupied- CVR regulated volume - Unoccupied spring closed
CVRT2	Occupied- CVR regulated volume - Unoccupied low flow position
Duct Based Units	
CVRIL	Inline configuration

Performance Characteristics

10-30 CFM Traces

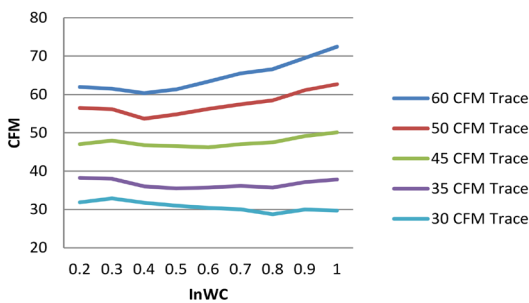


105-175 CFM Traces

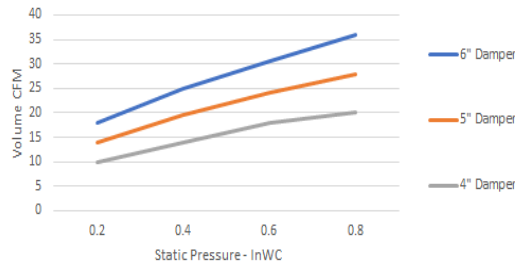


CFM Trace charts describe the performance of standard CVRs.

30-60 CFM Traces

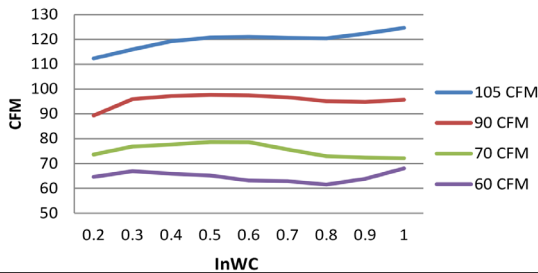


Damper Closed Bypass Rates



Bypass Rate chart indicates the amount of air that will pass a closed damper at any given static pressure. This can be adjusted (CVRT2) by adjusting the damper stop or by adding low leak seals.

60-105 CFM Traces



Part #	Standard CVR Available Flow Ranges CFM (0.2 to 0.8 InWC)					
	Diameter (inches)					
	3	4	5	6	8	10
CFM Range	10-30	10-30	10-30	10-30		
		CVR-04L	CVR-05M	CVR-06ML		
		30-60	30-60	30-60		
			CVR-05H	CVR-06MH	CVR-08L	
			60-105	60-105	60-105	
			CVR-06H	CVR-08M	CVR-10L	
			105-175	105-175	105-175	
				CVR-08H	CVR-10M	
				175-295	175-295	
				CVR-10L		
				295-410		

Also available in special configurations:
 low pressure (0.1 to 0.4 InWC)
 high pressure (0.6 to 2.4 InWC)

CVRs come in several models by pressure range and diameter. this chart show the available pressure ranges.

Quantity	Supply/Exhaust	CVR Size	CFM Low	CFM High	Grille Size	Voltage	Notes
Project					Location		
Contractor					Design Specifier		