

VARIABLE REFRIGERANT FLOW SYSTEMS



PRODUCT SPECIFICATIONS

VRF VRVA

Energy Recovery Ventilators - 60HZ

Bulletin No. 210700

July 2014

Energy Recovery Ventilator provides fresh, clean outdoor air while reducing room temperature fluctuations by reclaiming heat energy normally lost through ventilation. Unit is encased in galvanized steel with quiet three speed dual centrifugal fans. Compact design allows for installation in reduced spaces.



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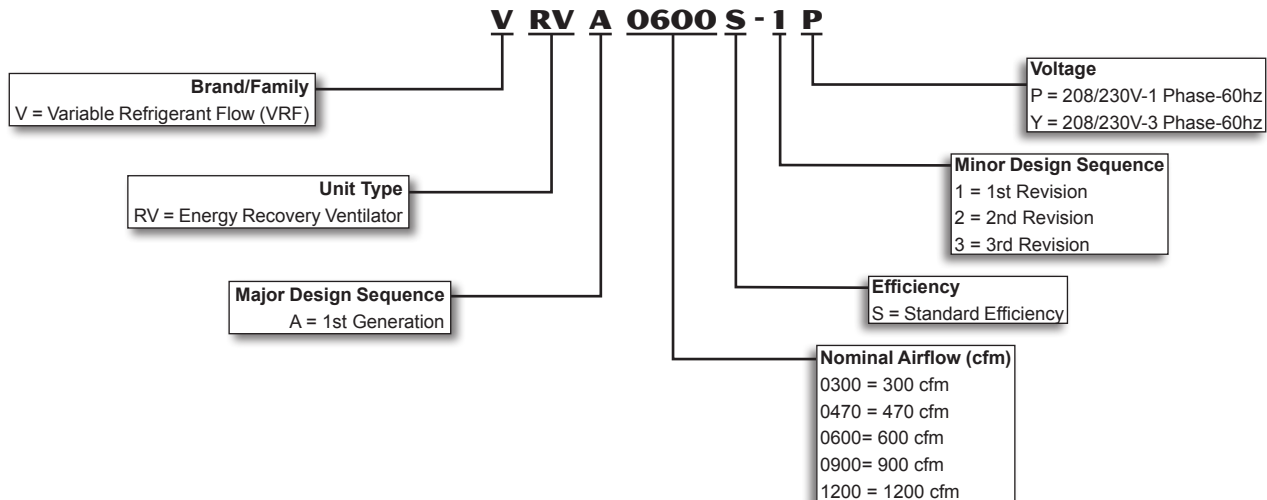
WARRANTY

- **Components** - Limited one year.

FEATURES

- Energy Recovery Ventilators introduce outdoor air to inside spaces with energy saving heat recovery.
- Recommended in regions where normal humidity levels occur.
- Intake and exhaust air passes through a thermally conductive heat exchanger core where heat is transferred between exhaust air and incoming air.
- Centrifugal blowers bring in fresh outdoor air while at the same time exhausting an equal amount of stale indoor air. A duct system distributes the fresh air and collects the stale air for removal from the building.
- Flexible Unit Control - Unit can be centrally controlled by other indoor unit controllers.

MODEL NUMBER IDENTIFICATION



FEATURES/BENEFITS

FEATURES (continued)

- Multi-Mode Function - Model features five modes for heating and cooling comfort based on the difference in the temperature of the indoor and outdoor air.
- Heat Recovery Mode - During warm days, high temperature incoming outdoor fresh air is cooled by outgoing indoor exhaust air; on cold days, low temperature incoming outdoor air is heated by outgoing indoor exhaust air. Energy contained in the exhaust air is reclaimed, reducing energy costs.
- Bypass Mode - In mild climates or seasons, when temperature and humidity level differences between indoor and outdoor are small, the unit works as conventional ventilation fan. Both supply and exhaust fans operate at the same speed.
- Air Supply Mode - Supply fan speed is higher than exhaust air fan speed. For milder climates where larger amounts of fresh air are required.
- Exhaust Air Mode - Exhaust fan speed is higher than supply air fan speed. For milder climates where larger amounts of exhaust air must expelled.
- Auto Mode - Optional controller selects Exchange Mode or Bypass Mode based on the outdoor and indoor air temperature difference.

OPTIONS / ACCESSORIES

ERV Controller

Complete control of Energy Recovery Ventilator from one central location.

Wired controller features backlit LCD display.

Function buttons for Mode Selection (Auto-Heat Recovery-Exhaust-Bypass), Power, Fan Speed Selection, Timer On, Timer Off, Adjustment Up and Down, Clock, Reset, Confirm and Lock.

Hardware is furnished for wall mounting.



SPECIFICATIONS

General Data		Model Number	VRVA0300S	VRVA0470S	VRVA0600S	VRVA0900S	VRVA1200S
		Nominal CFM	300	470	600	900	1200
Cooling	Temperature Effectiveness (%)		60	60	60	60	60
	Enthalpy Effectiveness (%)		50	50	50	50	50
Heating	Temperature Effectiveness (%)		70	70	70	70	70
	Enthalpy Effectiveness (%)		60	60	60	60	60
Indoor Fan Motor	Input (W)		120	360	360	450	450
	rpm		1250	1350	1350	1350	1350
Indoor Fan	Diameter - in.		7-5/8	8	9-5/8	9-7/8	9-7/8
	Airflow (standard external static pressure) - cfm		300	470	600	900	1200
	Standard External Static Pressure (High) - in. w.g		0.32	0.4	0.4	0.64	0.68
	Sound Pressure Level - dBA		45	46	47	55	56
Signal Wiring (AWG)		18 gauge (3-core shielded)					
Controller		Wired ERV Controller					
Duct Connections	in.	7-5/8 dia.	9-1/2 dia.	9-1/2 dia.	11-3/4 x12-5/8	11-3/4 x12-5/8	
Dimensions and Weight Data	Unit dimensions (W x H x D) - in.	40-7/8 x 40-3/8 x 10-5/8	50-5/8 x 39-5/8 x 15-1/4	50-5/8 x 49-1/2 x 15-1/4	63 x 50 x 21-1/4	65 x 57-7/8 x 21-1/4	
	Unit weight (net / shipping) - lbs.	91 / 141	137 / 194	174 / 242	359 / 493	401 / 544	

ELECTRICAL DATA

Line voltage data - 60 hz	208/230v-1ph	208/230v-1ph	208/230v-1ph	208/230v-3ph	208/230v-3ph
Maximum overcurrent protection (amps)	15	15	15	15	15
Minimum circuit ampacity	1.25	2.5	3.0	4.0	4.5
Indoor Blower Motor - Full load amps	1.0	2.0	2.4	3.2	3.6

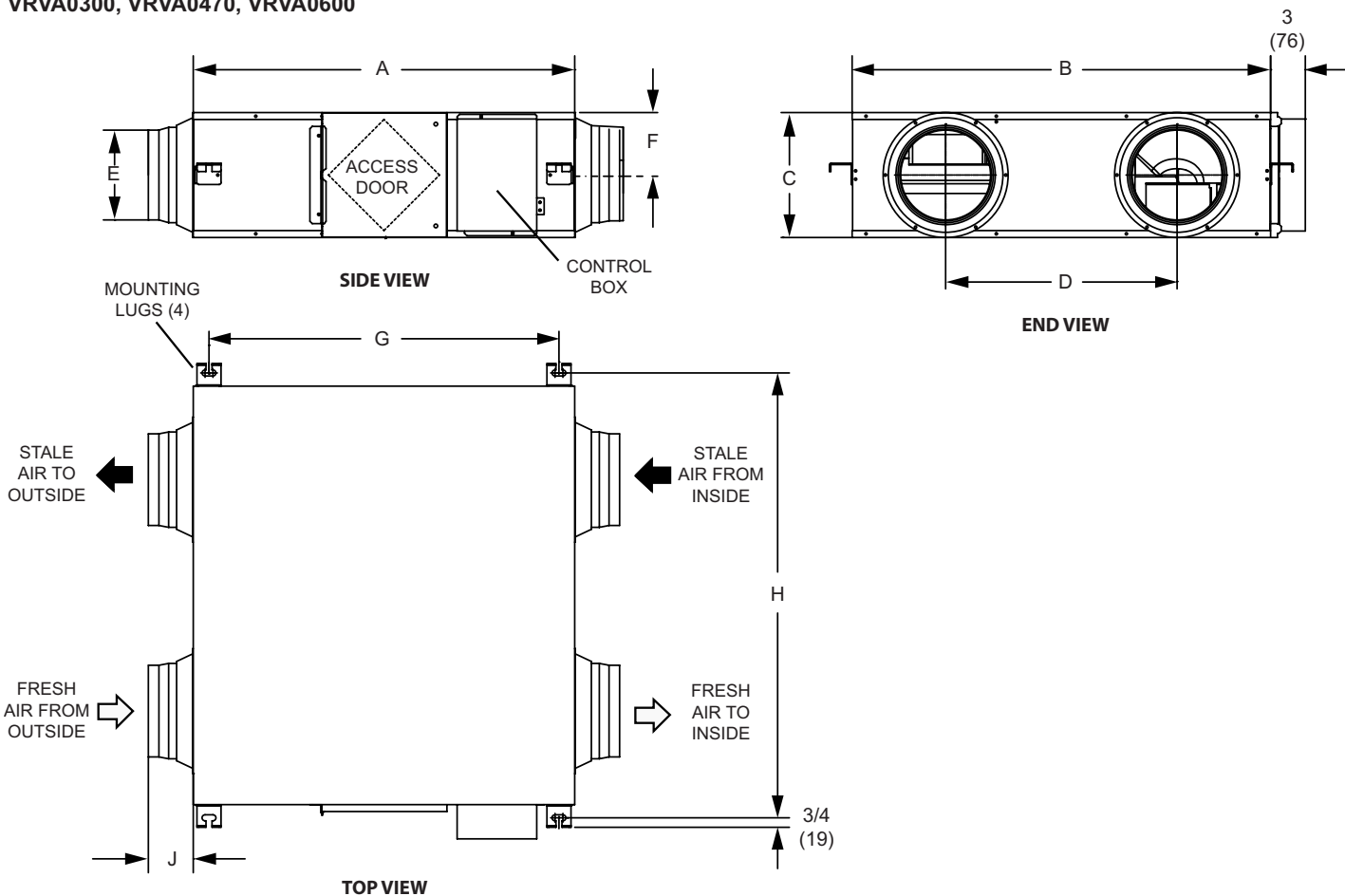
NOTES:

VRVA0300, VRVA0470, and VRVA0600 have 3-stage, adjustable fans that function at high, medium, and low speeds.
VRVA0900 and VRVA1200 have a single-stage fan.

Air data is based on tested and measured high-speed output.

DIMENSIONS - INCHES (MM)

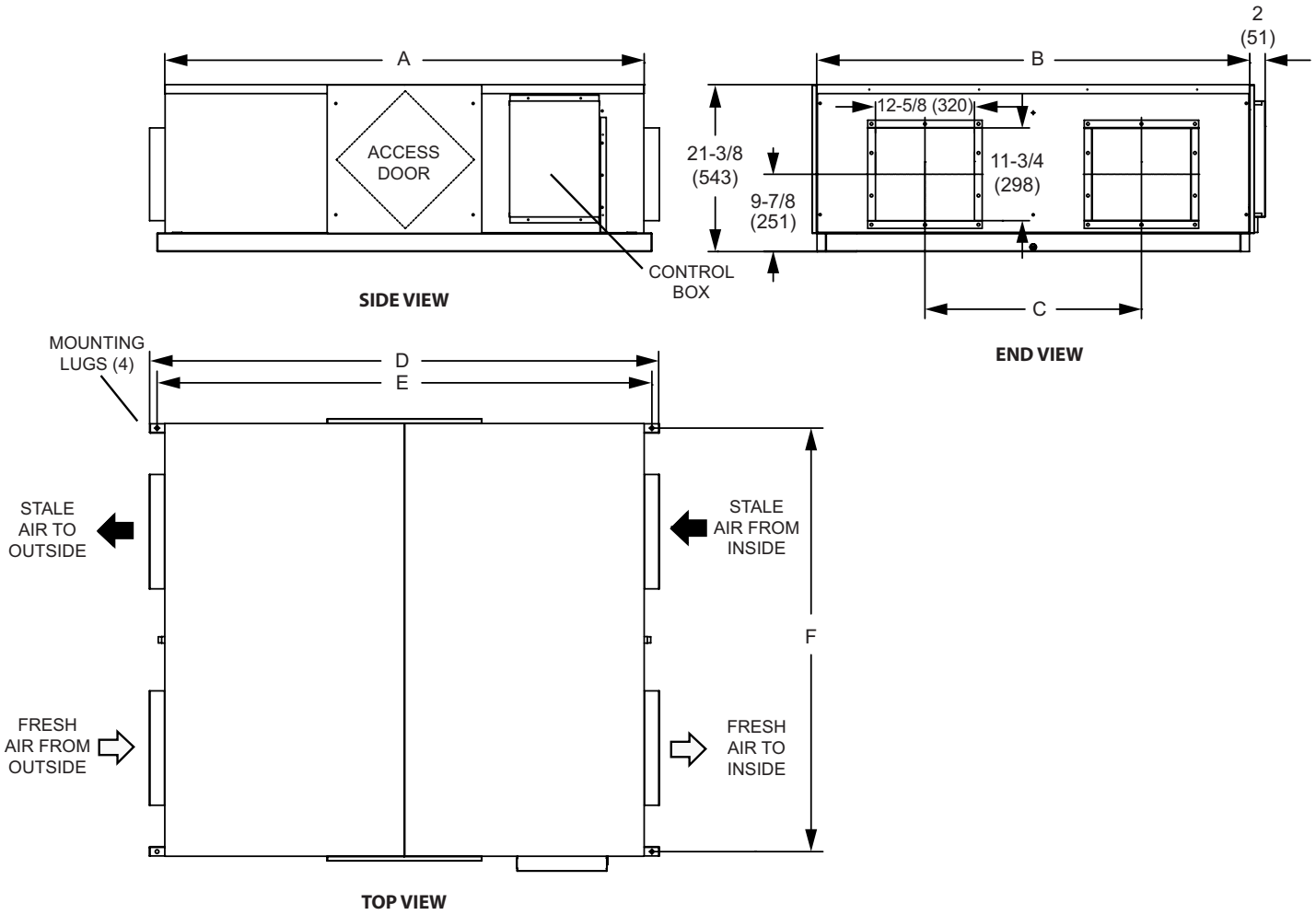
VRVA0300, VRVA0470, VRVA0600



Size	A		B		C		D		E		F		G		H		J	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
0300S	32-1/2	824	35-5/8	904	10-5/8	270	19-5/8	500	7-5/8	194	4-3/8	111	29-5/8	754	37-3/4	960	4-1/4	107
0470S	44	1116	34-3/4	884	15-1/4	388	16-7/8	428	9-1/2	242	6-3/4	170	41-1/8	1045	37	940	3-3/8	85
0600S	44	1116	44-5/8	1134	15-1/4	388	26-5/8	678	9-1/2	242	6-3/4	170	41-1/8	1045	46-7/8	1190	3-3/8	85

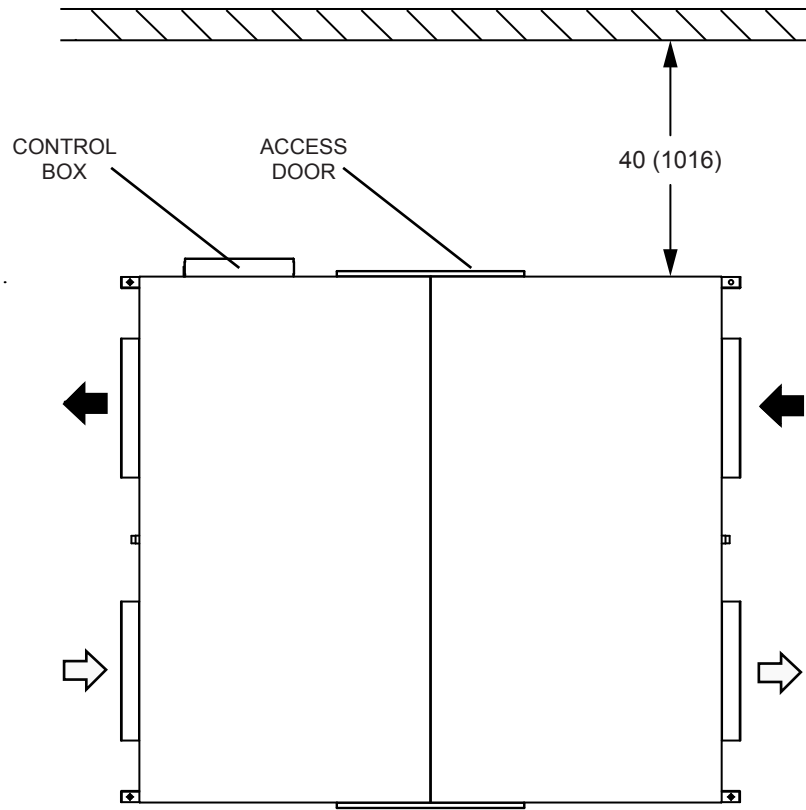
DIMENSIONS - INCHES (MM)

VRVA0900, VRVA1200



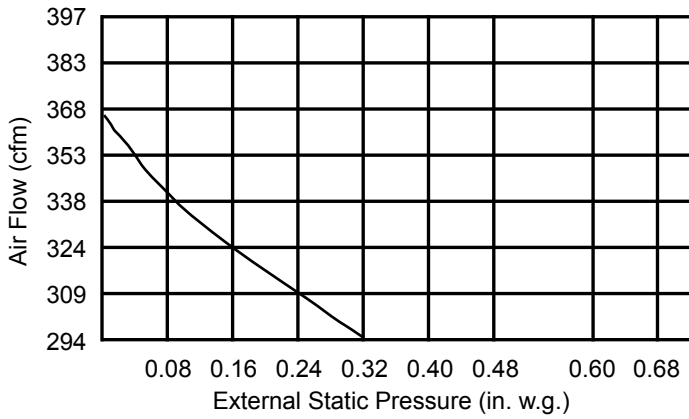
Size	A		B		C		D		E		F	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
0900S	59-1/8	1502	47-3/8	1203	23-1/2	597	61	1549	63	1600	46-1/8	1172
1200S	61	1549	55	1397	27-12	699	63	1600	65	1651	54	1372

INSTALLATION CLEARANCES - INCHES (MM)

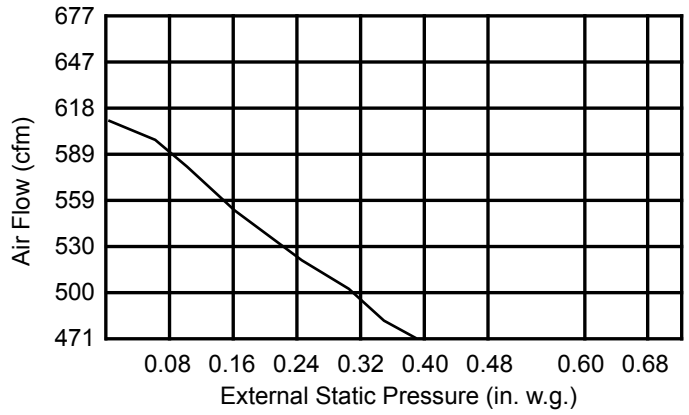


BLOWER DATA

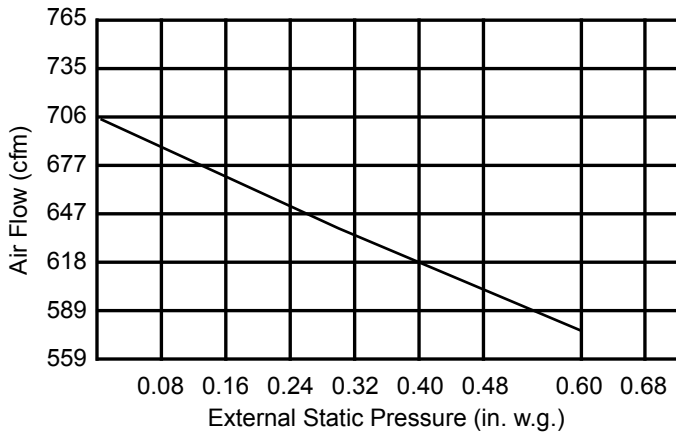
VRVA0300S



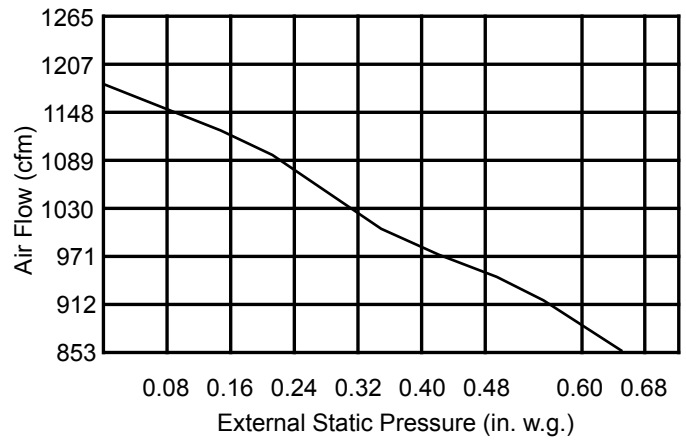
VRVA0470S



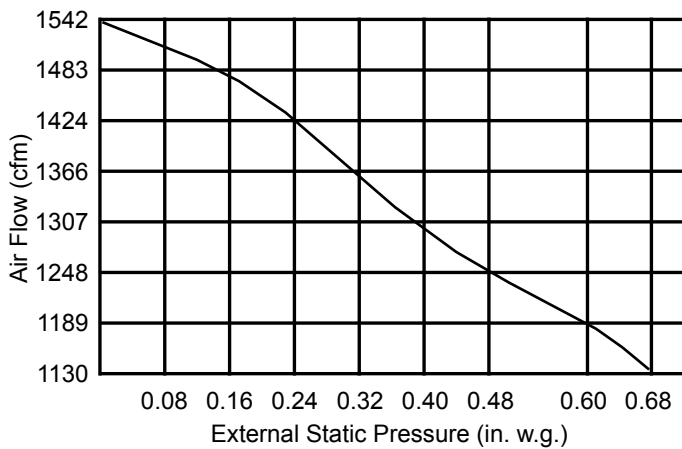
VRVA0600S



VRVA0900S



VRVA1200S





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