

# Energy Recovery Ventilator VE70220

**CLEAN COMFORT™**  
INDOOR AIR ESSENTIALS

## Features

- Three operating modes (Intermittent, Continuous and High)
- 100% variable speed
- ISF™ (Insert, Slide and Fix) 6" (153 mm) dia.collar system
- Advanced proportional supply fan shut-down defrost sequence
- Factory-installed, adjustable hanging strap system
- Dual permanently lubricated PSC motors
- Integrated auxiliary furnace interlock relay
- Ventilator can be balanced by adjusting each motor independently; no balancing dampers required
- Connection terminals for optional wall controls
- Quiet operation

## Energy Recovery Core

- Transfers both sensible and latent heat
- Effective in warm and cold climates
- Water washable

## Optional Accessories

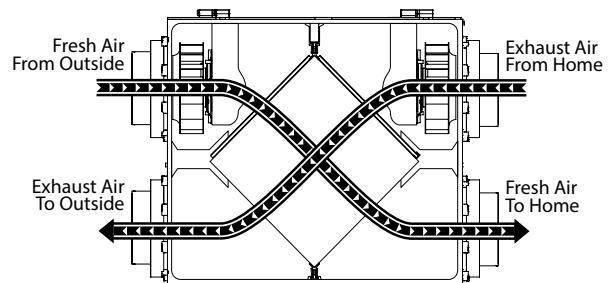
- Matrix 2-in-1 high-performance concentric ventilation hood

## Certifications and Standards

- HVI Certified
- CSA C439 Standard (Packaged Heat/Energy Recovery Ventilators (HRV/ERV))
- CSA Standard CSA 22.2 NO.113-10 (Fans and ventilators)
- UL Standard 1812 2nd Ed. Ducted Heat/Energy Recovery Ventilators (HRV/ERV)



**Airflow (Front View)**



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## Specifications VE70220

### Cabinet

**Dimensions** 29½" x 22½" x 16½"  
(749.3 mm x 571.5 mm x 419.1 mm)

**Construction** 20-gauge galvanized pre-painted steel corrosion-resistant liner: molded expanded Polystyrene (EPS) Rated UL94 HF-1

**Duct Connections** Four, 6" (152.5 mm) dia. ISF double collar system

**Airflow Rates** 70 CFM (33 L/s) to 220 CFM (104 L/s)

**Motors** Two PSC variable-speed backward curved  
Maximum RPM 2695; 3/32 HP, Class F, thermally protected

**Voltage** 120 VAC @ 60 Hz / 1 Phase

**Amperage** 1.5 A / 142 W

**Electronic Components** Circuit output voltage: 5VDC nominal  
RoHS compliant

**Heat Exchanger** dp point cross-flow (Enthalpic Polymer Membrane)  
**Exchange surface Dimensions** 127 ft<sup>2</sup> (11.8 m<sup>2</sup>)  
12"L x 12"W x 15"D (304.8 mm x 304.8 mm x 381 mm)

**Construction** Corrugated cross-flow polypropylene layers  
Recognized UL94 HB and HF-1

**Defrost type** Evacuation; activated automatically at 23°F (-5°C)

**Filters** Two Fiberbond washable 11-11/16"x14-3/4"x5/8" (297 mm x 375 mm x 16 mm)

**Drain Connection** ½" (12.7 mm)

**Actual Weight** 50 lbs (22.7 Kg)

**Shipping Weight** 57½ lbs (26.1 Kg)

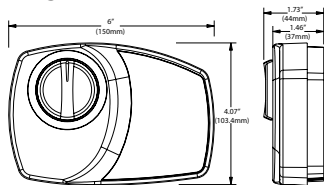
### Optional Wall Controls

**Mechanical** VHP-RD1 or VHP-RD3P

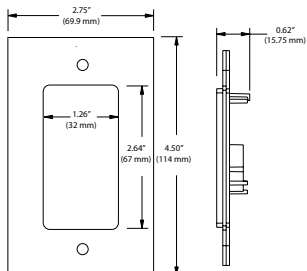
**Timers** VHP-T3 (20, 40, 60 minutes)

### Wall Control Dimensions

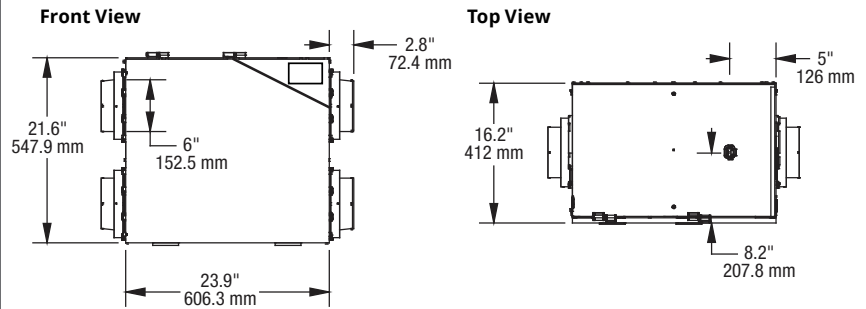
#### VHP-RD1 or VHP-RD3P



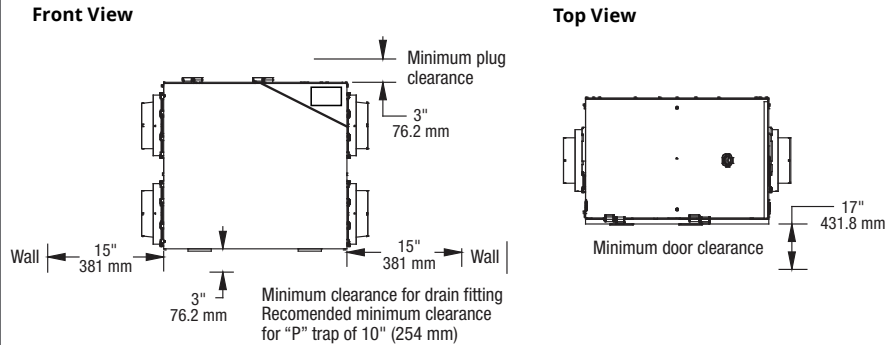
#### VHP-T3 Timer



### Dimensional Data

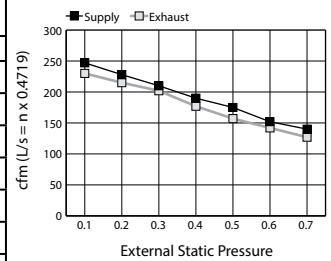


### Minimum Clearance Data



### Ventilation Performance

External Static Pressure	Net Supply Airflow		Gross Airflow Supply		Gross Airflow Exhaust			
	Pa	in. wg	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1		115	244	116	247	108	230
50	0.2		106	225	107	228	101	215
75	0.3		98	208	99	210	95	202
100	0.4		88	188	89	190	83	177
125	0.5		81	173	82	175	74	157
150	0.6		71	150	71	152	67	142
175	0.7		65	139	66	140	60	127



### Energy Performance

Supply Temperature	Net Airflow		Power Consumed (Watts)	Sensible Recovery Efficiency	Latent Recovery Moisture Transfer		
	°C	°F				L/s	CFM
Heating	0	32	37	78	74	71	0.44
	0	32	50	107	80	72	0.41
	0	32	71	150	102	69	0.35
	-15	5	36	75	65	58	0.27

Total Recovery Efficiency

Cooling	35	95	35	75	72	—	—	48
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Our continuing commitment to quality products may mean a change in specifications without notice.

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