

# ENGINEERING DATA



## Model FC80HRV

Heat Recovery Ventilator

30 CFM (14 L/s) to 100 CFM (47 L/s)

Part No. 60510004095



### FEATURES

- 3 operating modes (Intermittent, Continuous & High)
- 100% variable speed
- ISF™ 5" (127 mm) oval collar system
- Proportional defrost sequence
- Single person mounting system via wall bracket
- Permanent lubrication of PSC motors

### APPLICABLE REQUIREMENTS

- HVI Certified
- CSA C439 Standard - Packaged Heat/Energy Recovery Ventilators (HRV/ERV)
- CSA Standard CSA 22.2 N<sup>o</sup>.113-10 - Fans and ventilators
- UL Standard 1812 2<sup>nd</sup> Ed. Ducted Heat/Energy Recovery Ventilators (HRV/ERV)

### OPTIONAL ACCESSORIES

- MERV 8 Inline 6" (152.5 mm) filter box
- Matrix 2 in 1 high performance concentric ventilation hood
- R-2 Style high performance supply & exhaust ventilation hoods

### CABINET

- 20 gauge galvanized pre-painted steel corrosion resistant
- Cabinet liner: Molded Expanded Polystyrene (EPS) Rated UL94 HF-1

### ELECTRONIC COMPONENTS

- Electrical Input Voltage: 120 VAC/60Hz / 1-Phase.
- Electrical Input Current: 0.85 Amps Max
- Circuit output voltage: 5VDC nominal
- Integrated auxiliary furnace interlock relay
- RoHs compliant

### MOTORS

- Two permanent sealed, lubricated variable speed PSC Motors. (Maintenance free)
- Maximum RPM 3135 / Horsepower; 1/11 HP. Class F, thermally protected
- CSA 22.2 #113-10, clause 8.3.5  
– Backup protection – totally enclosed motor

### POLYPROPYLENE HRV CORE

- Dimensions 10" x 10" x 9" depth (254 mm x 254 mm x 228.6 mm)
- Corrugated cross-flow polypropylene layers, rated UL94 HB & HF-1
- Cross-flow that transfers sensible heat
- Endure harsh temperatures; effective in cold climates
- Water washable

### DUOTROL™ BALANCING SYSTEM

- The system is balanced by adjusting each motor independently
- No balancing dampers required
- Connection terminals for optional wall controls
- Quiet and energy efficient

### DEFROST

- Advanced Proportional supply fan shut down defrost sequence
- Defrost type: Evacuation  
Activated automatically at -5°C (23°F)

### DUCT CONNECTIONS

- Insert Slide & Fix (ISF™), removable collars system
- Four (4) 5" (127 mm) oval double collar
- Intergrated balancing pressure taps

### MOUNTING

- Wall mount bracket included

### FILTERS

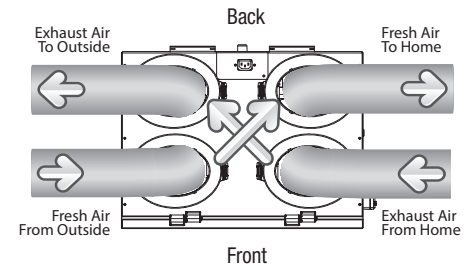
- Two (2) Fiberbond washable - 9" x 10" x ½" (228.6 mm x 254 mm x 15.9 mm)
- UL Class 2

### WARRANTY

- 5 year limited warranty
- Visit [fieldcontrols.com/warranty](http://fieldcontrols.com/warranty) for complete warranty statement

### AIRFLOW

Top View



### Field Controls

2630 Airport Road  
Kinston, NC 28504

Customer Service: 252 522-3031  
Fax: 1 (800) 367-7942

Visit us at: [www.fieldcontrols.com](http://www.fieldcontrols.com)



Field Controls LLC reserves the right to modify a product, without prior notice, whether in design, color or specifications, in order to offer at all times a quality product that is highly competitive. Please consult your national and local building codes to find out whether the installation of electrical products requires the services of a certified technician or electrician. Field Controls and Healthy Home System™ are registered Trademarks used under license by Field Controls LLC. All rights reserved.

# ENGINEERING DATA FC80HRV

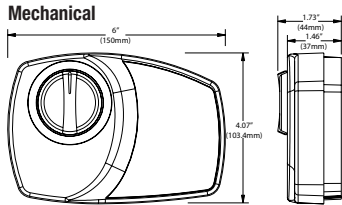
## SPECIFICATIONS FC80HRV

<b>Dimensions</b>	22" x 19 <sup>13</sup> / <sub>16</sub> " x 14 <sup>19</sup> / <sub>32</sub> " (558.8 mm x 502.9 mm x 370.8 mm)
<b>Duct Connections</b>	Four (4) 5" (127 mm) oval ISF double collar system
<b>Airflow Rates</b>	30 CFM (14 L/s) to 100 CFM (47 L/s)
<b>Motor</b>	Two (2) PSC variable speed backward curved
<b>Voltage</b>	120 VAC @ 60 Hz / 1 Phase
<b>Amperage</b>	0.85 A / 66 watts
<b>Type of heat exchanger</b>	Cross-flow Polypropylene
<b>Exchange surface</b>	63.5 ft <sup>2</sup> (5.9 m <sup>2</sup> )
<b>Defrost type</b>	Evacuation
<b>Filters</b>	Two (2) Fiberbond washable
<b>Drain Connection</b>	½" (12.7 mm)
<b>DuoTrol</b>	Integrated Balancing System
<b>Actual Weight</b>	33.5 lbs (15.2 Kg)
<b>Shipping Weight</b>	41 lbs (18.6 Kg)
<b>Certification</b>	HVI, cCSAUs, CSA 22.2 N <sup>o</sup> .113 Complies with UL 1812

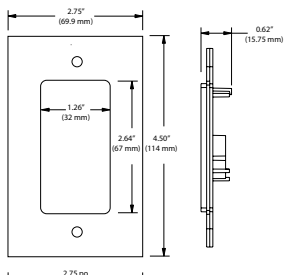
## OPTIONAL WALL CONTROLS

<b>Mechanical</b>	RD1 Part # 60510010030 RD4P Part # 60510010031
<b>Timers</b>	T3 Part # 60510010050 (20, 40, 60 minutes)

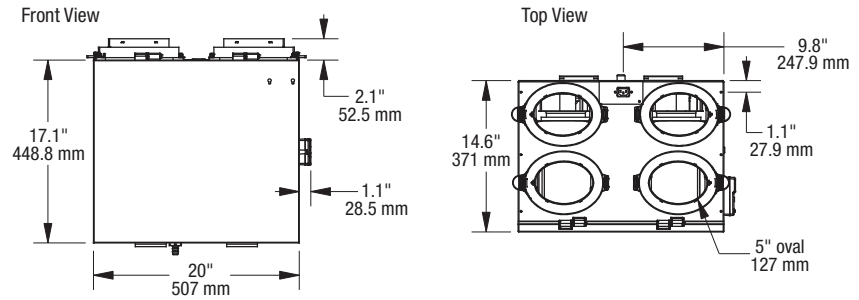
## WALL CONTROL DIMENSIONS



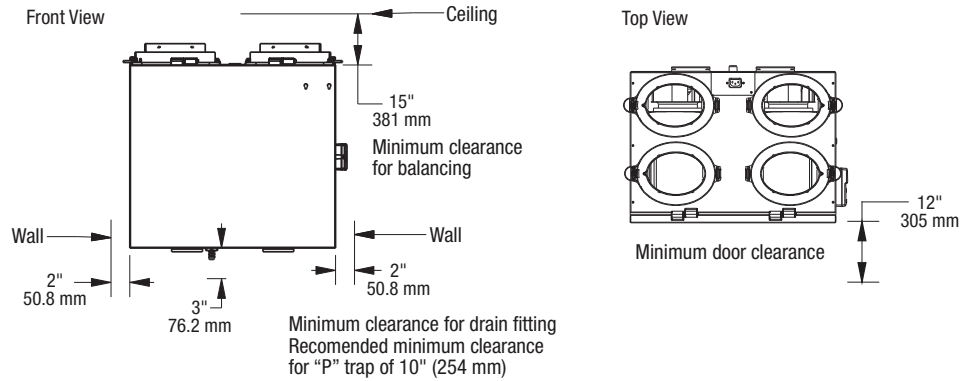
## T3 Timer



## DIMENSIONS DATA

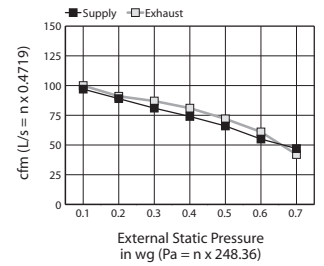


## MINIMUM CLEARANCE DATA



## VENTILATION PERFORMANCE

External Static Pressure	Net Supply Air Flow		Gross Air Flow Supply		Gross Air Flow Exhaust		
	Pa	in. wg	L/s	CFM	L/s	CFM	L/s
25	0.1	47	99	48	100	48	102
50	0.2	44	93	45	94	43	92
75	0.3	39	83	40	84	38	80
100	0.4	35	75	35	75	36	78
125	0.5	30	65	30	66	32	68
150	0.6	27	56	27	57	25	52
175	0.7	22	46	22	47	19	41



## ENERGY PERFORMANCE

	Supply Temperature		Net Air Flow		Power Consumed	Sensible Recovery Efficiency	Apparent Sensible Effectiveness
	°C	°F	L/s	CFM	Watts		
<b>HEATING</b>	0	32	19	40	28	64	72
	0	32	30	65	40	59	66
	-25	-13	18	37	30	55	73

Quoted by:	Date:
Project:	Remarks:
Quantity:	
Model:	
Site:	
Architect:	
Engineer:	
Contractor:	