

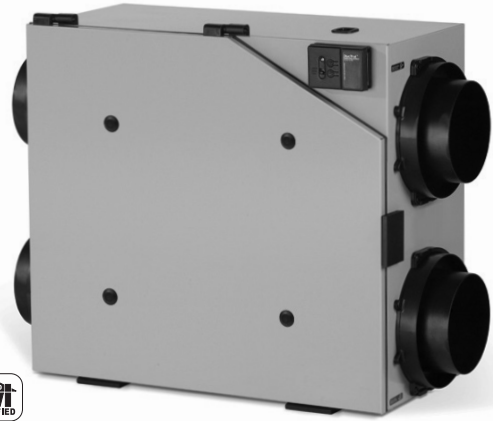
# ENGINEERING DATA

## PH 10.22 ES HRV model

Heat Recovery Ventilator

50 CFM (24 L/s) to 250 CFM (118 L/s)

Item No. 102392 (PH 10.22 ES Greentek)



### FEATURES

- 3 operating modes (Intermittent, Continuous & High)
- 100% variable speed
- Integrated door pressure balancing taps
- ISF™ 6" (152.5 mm) dia. collar system
- Proportional defrost sequence
- SPM™ Single Person Mounting system
- 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° 113 - Fans and ventilators
- UL Standard 1812. Ducted Heat/Energy Recovery Ventilators (HRV/ERV)
- ENERGY STAR®, SRE, TRE and fan efficacy minimum requirements

### OPTIONAL ACCESSORIES

- MERV 8 Inline 6" (152.5 mm) filter box
- 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: 1.5 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 2695 / Horsepower; 3/32 HP. Class F, thermally protected
- CSA 22.2 #113-10, clause 8.3.5 – Backup protection – totally enclosed motor

### POLYPROPYLENE HRV CORE

- Dimensions 12"x 12"x 15" depth (304.8 mm x 304.8 mm x 381 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) 6" (152.5 mm) dia. round double collar.

### MOUNTING

- Adjustable mounting strap system

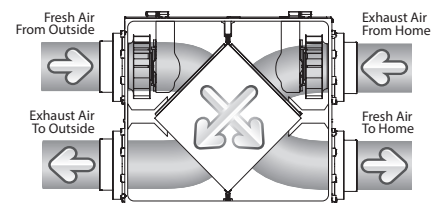
### FILTERS

- Two (2) Fiberbond washable - 11<sup>11</sup>/<sub>16</sub>"x 14<sup>3</sup>/<sub>4</sub>"x <sup>5</sup>/<sub>8</sub>" (297 mm x 375 mm x 15.9 mm)
- UL Class 2

### WARRANTY

- 10 year limited warranty on motors
- 5 year limited warranty on parts
- Lifetime limited warranty on Heat Recovery Core

### AIRFLOW



### Imperial Air Technologies

480 Ferdinand Blvd.,  
Dieppe, NB Canada E1A 6V9

Toll free: 1 888 724-5211  
Fax: 1 (506) 388-4633

Visit us at: [www.greentek.ca](http://www.greentek.ca) / [www.imperialgroup.ca](http://www.imperialgroup.ca)

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# ENGINEERING DATA PH 10.22 ES HRV

## SPECIFICATIONS PH 10.22 ES HRV

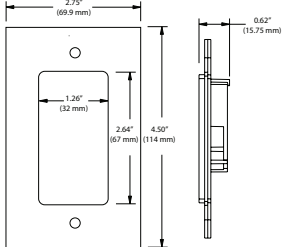
<b>Dimensions</b>	29½" x 22½" x 16½" (749.3 mm x 571.5 mm x 419.1 mm)
<b>Duct Connections</b>	Four (4) 6" (152.5 mm) dia. ISF double collar system
<b>Airflow Rates</b>	50 CFM (24 L/s) to 250 CFM (118 L/s)
<b>Motor</b>	Two (2) PSC variable speed backward curved
<b>Voltage</b>	120 VAC @ 60 Hz / 1 Phase
<b>Amperage</b>	1.5 A / 142 watts
<b>Type of heat exchanger</b>	Cross-flow polypropylene
<b>Exchange surface</b>	150 ft <sup>2</sup> (13.9 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>	51.5 lbs (23.4 Kg)
<b>Shipping Weight</b>	59 lbs (26.8 Kg)
<b>Certification</b>	HVI, cCSA US, CSA 22.2 N <sup>o</sup> .113 Complies with UL 1812

## OPTIONAL WALL CONTROLS

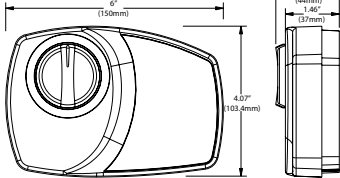
<b>Digital</b>	EHC1.0TC and EHC1.5DC
<b>Mechanical</b>	RD-1, RD-2, RD-3P and RD-4P
<b>Timers</b>	T3 (20, 40, 60 minutes)

## WALL CONTROL DIMENSIONS

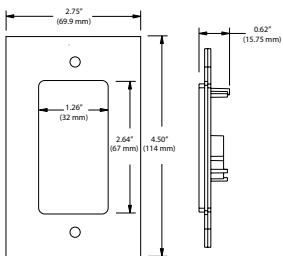
### EHC1.0 & EHC1.5



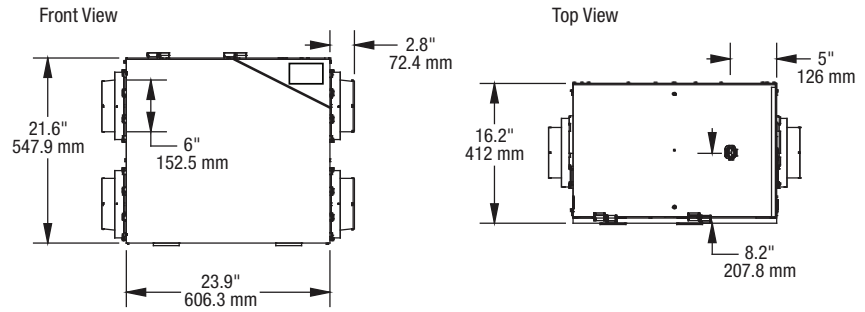
### Mechanical



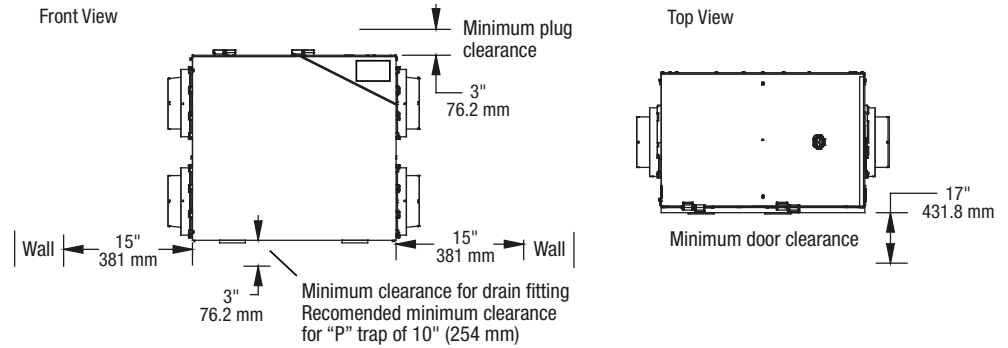
### T3 Timer



## DIMENSIONS DATA

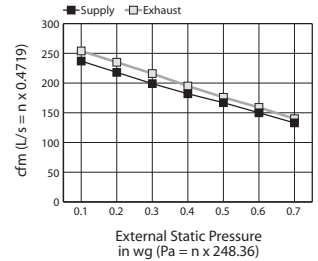


## MINIMUM CLEARANCE DATA



## 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	CFM
25	0.1		111	235	112	237	120	254
50	0.2		102	216	103	218	111	235
75	0.3		93	197	94	199	102	216
100	0.4		85	180	86	182	92	195
125	0.5		78	165	79	167	83	176
150	0.6		70	148	71	150	75	159
175	0.7		62	131	63	133	66	140



This product earned the ENERGY STAR® by meeting strict energy efficiency guidelines set by Natural Resources Canada and the US EPA. It meets ENERGY STAR® requirements only when used in Canada.

## ENERGY PERFORMANCE

	Supply Temperature		Net Air Flow		Power Consumed	Sensible Recovery	Adjusted Sensible
	°C	°F	L/s	CFM	Watts	Efficiency (SRE %)	Recovery Efficiency (ASRE %)
<b>HEATING</b>	0	32	31	66	58	75	82
	0	32	43	91	70	73	80
	0	32	60	127	88	69	75
	-25	-13	31	66	55	60	63

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