# **ENGINEERING DATA**

# PH 10.22 ES HRV model

Heat Recovery Ventilator 50 CFM (24 L/s) to 250 CFM (118 L/s)

Item No. 463030 (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<sup>™</sup> Single Person Mounting system
- · Permanent lubrification of PSC motors

#### **APPLICABLE REQUIREMENTS**

- HVI Certified
- CSA C439 Standard Packaged Heat/Energy Recovery Ventilators (HRV/ERV)
- CSA Standard CSA 22.2 Nº.113 Fans and ventilators
- UL Standard 1812. Ducted Heat/Energy Recovery Ventilators (HRV/ERV)
- ENERGY STAR®, SRE, TRE and fan efficancy 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

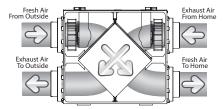
#### **FILTERS**

- Two (2) Fiberbond washable  $11^{11}/_{16}$ "x  $14^{3}/_{10}$ "x  $5/_{10}$ " (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**





# Greentek

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# SPECIFICATIONS PH 10.22 ES HRV

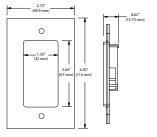
HKV	
Dimensions	29½" x 22½" x 16½" (749.3 mm x 571.5 mm x 419.1 mm)
Duct Connections	Four (4) 6" (152.5 mm) dia. ISF double collar system
Airflow Rates	50 CFM (24 L/s) to 250 CFM (118 L/s)
Motor	Two (2) PSC variable speed backward curved
Voltage	120 VAC @ 60 Hz / 1 Phase
Amperage	1.5 A / 142 watts
Type of heat exchanger	Cross-flow polypropylene
Exchange surface	150 ft² (13.9 m²)
Defrost type	Evacuation
Filters	Two (2) Fiberbond washable
Drain Connection	½" (12.7 mm)
DuoTrol	Integrated Balancing System
Actual Weight	51.5 lbs (23.4 Kg)
Shipping Weight	59 lbs (26.8 Kg)
Certification	HVI, <sub>C</sub> CSA <sub>US</sub> , CSA 22.2 Nº.113 Complies with UL 1812

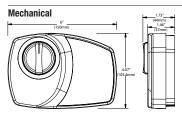
#### **OPTIONAL WALL CONTROLS**

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

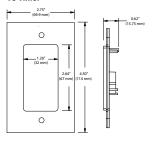
#### **WALL CONTROL DIMENSIONS**

#### EHC1.0 & EHC1.5

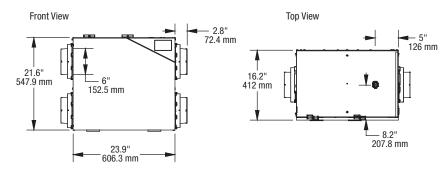




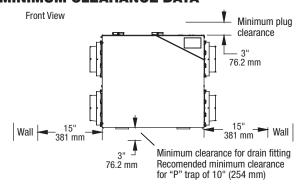
### T3 Timer

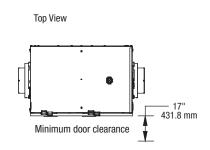


#### **DIMENSIONS DATA**



## **MINIMUM CLEARANCE DATA**





VEN	ITILATI	ON P	ERFO	RMAN	CE			
Exterr	nal Static	Net S	Supply	Gross A	Air Flow	Gross	Air Flow	- <b>=</b> -Supply +□-Exhaust
Pre	essure	Air	Flow	Sup	oply	Exh	aust	300
Pa	in. wg	L/s	CFM	L/s	CFM	L/s	CFM	661 250
25	0.1	111	235	112	237	120	254	0 200
50	0.2	102	216	103	218	111	235	× = 150
75	0.3	93	197	94	199	102	216	
100	0.4	85	180	86	182	92	195	<u> </u>
125	0.5	78	165	79	167	83	176	£ 50
150	0.6	70	148	71	150	75	159	
175	0.7	62	131	63	133	66	140	0.1 0.2 0.3 0.4 0.5 0.6
HVI CERTIFIED	This produ	uct earned the El s Canada and the	NERGY STAR® by e US EPA. It meets	meeting strict energ ENERGY STAR® re	gy efficiency guic quirements only	delines set by Natur when used in Cana	al da.	External Static Pressure in wg (Pa = $n \times 248.36$ )

EN	ENERGY PERFORMANCE						
	Supply Temperature Net Air Flow		Power Consumed	Sensible Recovery	Adjusted Sensible		
	°C	°F	L/s	CFM	Watts	Efficiency (SRE %)	Recovery Efficiency (ASRE %)
5	0	32	31	66	58	75	82
ΙŽΙ	0	32	43	91	70	73	80
I≅I	0	32	60	127	88	69	75
티	-25	-13	31	66	55	60	63

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