ENGINEERING DATA

PE 10.22 ERV model

Energy Recovery Ventilator 70 CFM (33 L/s) to 220 CFM (104 L/s)

Item No. 100087 (PE 10.22 Greentek) Item No. 100847 (PE 10.22 Imperial)



FEATURES

- 3 operating modes (Intermittent, Continuous & High)
- 100% variable speed
- ISF™ 6" (152.5 mm) dia. collar system
- · Proportional defrost sequence
- SPM[™] Single Person Mounting system
- · Permanent lubrification 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)

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

dpoint ERV CORE

- Dimensions 12"x 12"x 15" depth (304.8 mm x 304.8 mm x 381 mm)
- Corrugated aluminum layers combined with advanced polymer membrane, Recognized UL94 HB
- Cross-flow that transfers both sensible & latent heat
- Endure harsh temperatures; effective in warm and cold climates
- Water washable
- Meets ASHRAE 90.1

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

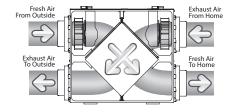
FILTERS

- Two (2) Fiberbond washable 1111/16"x 143/4"x 5/6" (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
- 5 year limited warranty on Energy 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 / www.imperialgroup.ca











ENGINEERING DATA PE 10.22 ERV

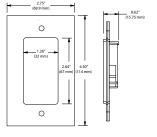
SPECIFICATIONS	PE 10.22 ERV					
Dimensions	29½" x 22½" x 16½" (749.3 mm x 571.5 mm x 419.1 mm)					
Duct Connections	Four (4) 6" (152.5 mm) dia. ISF double collar system					
Airflow Rates	70 CFM (33 L/s) to 220 CFM (104 L/s)					
Motor	Two (2) PSC variable speed backward curved					
Voltage	120 VAC @ 60 Hz / 1 Phase					
Amperage	1.5 A / 142 watts					
Type of heat exchanger	dpoint cross-flow (Enthalpic Polymer Membrane)					
Exchange surface	127 ft² (11.8 m²)					
Defrost type	Evacuation					
Filters	Two (2) Fiberbond washable					
Drain Connection	½" (12.7 mm)					
DuoTrol	Integrated Balancing System					
Actual Weight	50 lbs (22.7 Kg)					
Shipping Weight	57.5 lbs (26.1 Kg)					
Certification	HVI, _C CSA _{US} , CSA 22.2 Nº.113 Complies with UL 1812					

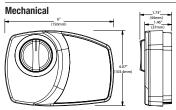
OPTIONAL WALL CONTROLS

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

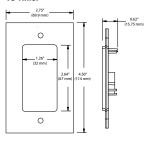
WALL CONTROL DIMENSIONS

EHC1.0 & EHC1.5

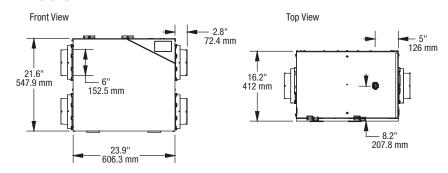




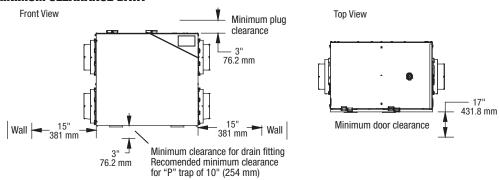
T3 Timer



DIMENSIONS DATA



MINIMUM CLEARANCE DATA



External Static Pressure		et Supply Air Flow		Air Flow pply	Gross Air Flow Exhaust			300	F Supply	-D-Exhaus	t		
Pa in. w	g L/s	CFM	L/s	CFM	L/s	CFM	. (612	250					
25 0.1 50 0.2	115 106	244 225	116 107	247 228	108 101	230 215	n x 0.4719)	200					
50 0.2 75 0.3	98	208	99	210	95	202	II	150					
100 0.4 125 0.5		188 173	89 82	190 175	83 74	177 157	cfm (L/s	50					
150 0.6	71	150	71	152	67	142	O	, ₂₀ [
175 0.7	65	139	66	140	60	127		0	0.1 0.2	0.3	0.4 0	.5 0.	6 0

EN	ENERGY PERFORMANCE								
	Supply Temperature		Net A	ir Flow	Power Consumed	Sensible Recovery	Adjusted Sensible	Latent Recovery	
	°C	°F	L/s	CFM	Watts	Efficiency (SRE %)	Recovery Efficiency (ASRE %)	Moisture Transfer	
5	0	32	37	78	74	71	77	0.44	
HEATING	0	32	50	107	80	72	77	0.41	
ΨĘΑ	0	32	71	150	102	69	74	0.35	
-	-15	5	36	75	65	58	61	0.27	
5 NG		Total recovery Efficiency							
COOLING	35	95	35	75	72	_	48		

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