

Deluxe ECM Series

Shop Drawing RHRV-D100PECM

ONLY HRV IN THE MARKET PLACE WITH A BUILT-IN TRUE AUTOMATIC ELECTRONIC AIR-BALANCING AND CONSTANT FLOW TECHNOLOGY NO FIELD BALANCING NECESSARY

HRV Deluxe Series (Polypropylene Core)

Features:

- Power ratings: 120V / 1 / 60 Hz, 0.70 Amp.
- High efficiency energy savings permanently lubricated ECM motors (Thermally protected) for continuous operation
- Washable Polypropylene core (up to -40°C) and Filters
- Tilted core design for maximum efficiency
- Fully automatic defrost (below -5°C)
 - Recirculating (Standard) and Non-recirculating (Optional)
- · Adjustable 4-Normal (Low Speed) and 4-High Speed operation
- · Ideal for horizontal and vertical installation
- Air flow: 45 95 CFM (normal operation), maximum 150 CFM
- For homes and suites up to 2000 sq. ft.
- Meets all standards and building codes requirements
- Unique electronic control board allows the unit to return to the last memory mode when power restores after failure
- Furnace / Fan-coil / Heat Pump Interlock
- Dual Protection: If for any reason HRV fan failure is detected, the outside fresh-air supply will be closed and interlocking relay contact will be opened. Fan Coil/Furnace low speed will be stopped and at normal operation no air will enter into the system
- App. weight 50 lbs.
- · 2 years warranty on parts

Accessories (Included):

- Wall control c/w back-light
- Mounting brackets
- · Drain plugs

Optional:

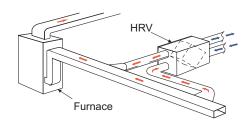
- Intermittent Switch (5VDC)
- · Multiple wall controls
- Timer switches 5VDC (Wall mount)
- 2 sets (Webbing/Brackets/Ladder lock)
- Pipe and "T"connector



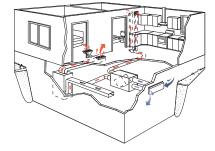




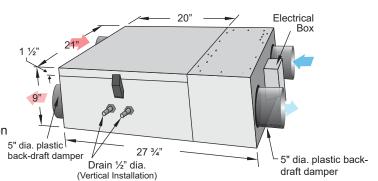
Installation Options for house



Furnace Return Air-duct Connection

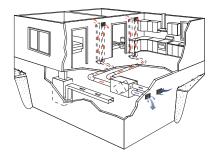


Semi Ducted System



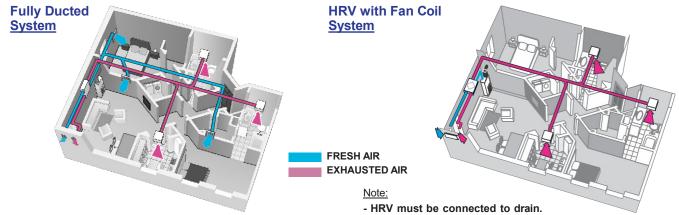
Wall Control:

- Programmable LCD display c/w back light (New)
- Pushbutton design
- Easy to mount and operate
- Capable to connect multiple timer switches
- Self powered (no battery required)
- OFF/Normal/High/Recirculation/ Energy Saving mode
- Humidity and Error indicators
- · Two defrost method selection:
 - Recirculating & Non-recirculating
- Humidity settings (up to 80% RH)
- Multiple Wall Controls option
- Manual / Automatic balancing Selection



Fully Ducted System

Installation Options for High-Rise Condominium



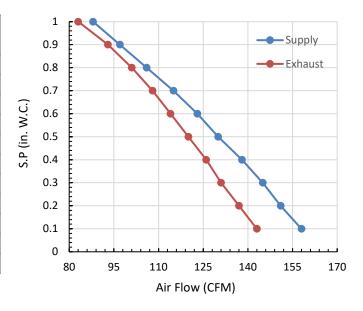
SOUND

30 (L/s) @0.2 1.0 Sones (IN. W.G.) S.P. (@50Pa)

- ERV does not required any drain. However, we recommend to connect ERV to drain in areas where extreme cold weather conditions are expected.

VENTILATION PERFORMANCE

Exhaust static		Net Supply		(Power				
pressure		air flow		Supply		Exhaust		rowei	
Pa	in. W.C.	L/s Scfm		L/s	Scfm	L/s	scfm	Watts	
25	0.1	71	150	74	158	68	143	92	
50	0.2	68	144	71	151	65	137	93	
75	0.3	65	138	68	145	62	131	94	
100	0.4	62	131	65	138	59	126	94	
125	0.5	59	124	62	130	57	120	94	
150	0.6	55	117	58	123	54	114	94	
175	0.7	51	109	54	115	51	108	93	
200	0.8	48	101	50	106	48	101	92	
225	0.9	44	92	46	97	44	93	90	
250	1.0	39	83	41	88	39	83	88	



ENERGY PERFORMANCE

RHR\ D100P		Supply Temperature		Net Airflow		Supply/ Exhaust	Average	Sensible Recovery	Adjusted Sensible	Apparent Sensible	Net Moisture Transfer
	20	°C	°F	L/s	scfm	Flow Ratio	(Watts)	Efficiency	Efficiency	effectiveness	(%)
Heating	- 1	0	32	22	47	1.02	26	82	86	91	00
	П	0	32	30	64	1.00	36	79	73	86	00
	III	0	32	36	77	1.01	40	78	82	85	00
	IV	0	32	44	93	1.00	52	75	78	81	00
	V	-25	-13	30	64	0.91*	47	72	75	86	08

^{*} The Supply / Exhaust Flow Ratio at 22°C prior to the start of the 72 Hour Cold Weather Test

Contractor:	RHRV-D100PECM			
Architect:	Job:	D.ate	Superse.des	Drawing No.
Engineer:	Date Submitted:	2022/03/21		