

# **Deluxe ECM Series**

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

### **ERV Deluxe Series** (Enthalpy Core)

Box

Shop Drawing

**RERV-D100ECM** 

### Features:

- Power ratings: 115V / 1 / 60 Hz, 0.60 Amp, Standby current is 9W only
- · High efficiency energy savings permanently lubricated ECM motors (Thermally protected) for continuous operation
- Washable Dpoint Enthalpy core suitable up to -25°C (Drainless design)
- Tilted core design for maximum efficiency
- Fully automatic defrost (below -5°C)
- · Adjustable 4-Normal (Low Speed) and 4-High Speed operation
- · Ideal for horizontal and vertical installation
- Air flow: 45 160 CFM (normal operation)
- For homes and suites up to 2000 sq. ft.
- Meets all LEED 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 ERV 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 55 lbs.
- 2 years warranty on parts
- Washable filters

### Accessories (Included):

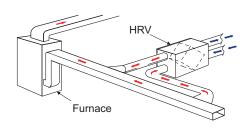
- Wall control
- Mounting brackets

### **Optional:**

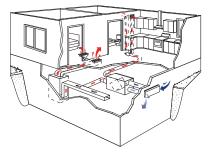
Multiple wall controls Timer switches 5VDC (Wall mount) 2 sets (Webbing/Brackets/Ladder lock) Pipe and "T"connector Drain plugs



### Installation Options for house



Furnace Return Air-duct Connection



Semi Ducted System

Fully Ducted System

20 Electrical



21"

- Programmable LCD display
- · Pushbutton design
- · Easy to mount and operate
- Capable to connect multiple timer switches

27 3/3

5" dia. plastic back

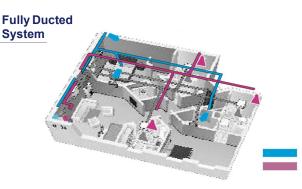
draft damper

- 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

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## **RERV-D100ECM**

### Installation Options for High-Rise Condominiums

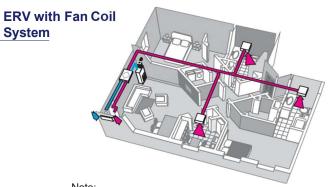


#### <u>SOUND</u>

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

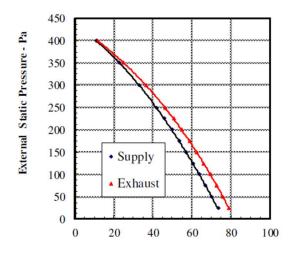
#### VENTILATION PERFORMANCE

Exhaust static		Net Supply		(	Power			
pre	pressure airflow		low	Supply		Exhaust		Tower
Ра	in. W.C.	L/s	scfm	L/s	scfm	L/s	scfm	Watts
25	0.1	72.0	154.0	73.0	155.0	79.0	167.0	103.0
50	0.2	69.0	147.0	70.0	148.0	75.0	160.0	103.0
75	0.3	66.0	140.0	66.0	141.0	72.0	153.0	103.0
100	0.4	63.0	133.0	63.0	134.0	69.0	147.0	103.0
125	0.5	59.0	126.0	60.0	127.0	66.0	139.0	103.0
150	0.6	56.0	119.0	57.0	120.0	62.0	132.0	103.0
175	0.7	53.0	112.0	53.0	113.0	58.0	124.0	102.0
200	0.8	49.0	104.0	49.0	105.0	54.0	116.0	100.0
225	0.9	45.0	96.0	45.0	97.0	50.0	107.0	99.0
250	1.0	41.0	87.0	41.0	88.0	46.0	97.0	96.0
300	1.2	32.0	69.0	32.0	69.0	36.0	76.0	91.0
350	1.4	22.0	47.0	22.0	48.0	24.0	52.0	83.0
400	1.6	10.0	23.0	10.0	23.0	11.0	24.0	73.0
NOTE: FAN CURVE PERFORMED AT HIGHEST SPEED								



#### Note:

 HRV must be connected to the drain.
ERV does not require any drain. However, we recommend connecting ERV to drain in areas where extreme cold weather conditions are expected.



Gross Airflow - L/s

### ENERGY PERFORMANCE

RERV- D100ECM		Supply Temperature		Net Airflow		Supply/ Exhaust	Average power	Sensible Recovery	Adjusted Sensible	Apparent Sensible	Net Moisture Transfer
	°C	۴F	L/s	scfm	Flow Ratio	(Watts)	Efficiency	Efficiency	effectiveness		
ള	Ι	0	32	33.5	71	1.00	39.0	80.0	84.0	85.0	0.71
Heating	Ш	0	32	38.1	80.7	1.00	44.0	79.0	83.0	84.0	0.69
Ξ	III	0	32	45.4	96.2	0.99	55.0	78.0	82.0	84.0	0.67
	iv	-25	-13	30.8	65.3	0.92*	57.0	61.0	63.0	82.0	0.37
Cooling	IV	35	95	32.4	68.7	0.99	35.0	66.0	73.0	77.0	0.38

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

Contractor:	RERV-D100ECM				
Architect:	Job:		Date	Superse. des	Drawing No.
Engineer:	Date Submitted:		2024/01/29		

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