

# **Shop Drawing RERV-D100SA**

(Enthalpy Core)

Electrical

5" dia. plastic collar

### **Features:**

- Power ratings: 115V / 1 / 60 Hz, 0.60 Amp, Standby current is 4W only
- High efficiency energy savings permanently lubricated backward inclined EC motors (thermally protected) for continuous operation
- Washable Enthalpy core suitable up to -25°C (Drainless design)
- Tilted core design for maximum efficiency
- Fully automatic recirculating defrost (below -5°C)
- 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
- 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 (MERV- 4)





5" dia. plastic back

draft damper



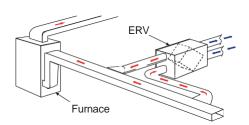
## **Accessories** (Included):

Mounting brackets

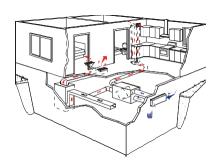
## **Optional:**

- Intermittent Switch (5VDC)
- Push Button Timer Switch (20/40/60 Min, 5VDC)
- 2 sets (Webbing/Brackets/Ladder lock)
- MERV- 8 & 13 filters (upon request)

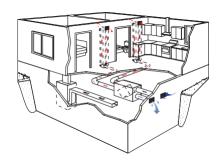
### **Installation Options for house**



Furnace Return Air-duct Connection



Semi Ducted System



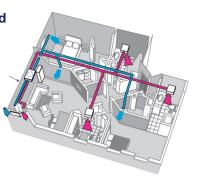
Fully Ducted System



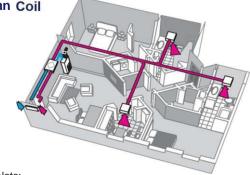
#### Installation Options for High-Rise Condominiums



Motorized spring return backdraft damper (Recommended)



ERV with Fan Coil System



#### **SOUND** \*

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

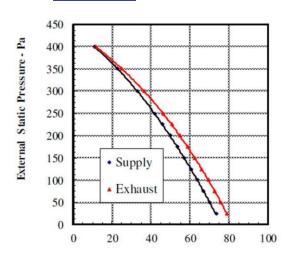
#### Note:

- 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.

#### VENTILATION PERFORMANCE

Exhaust static		Net Supply		(	Power *			
pressure		airflow		Supply		Exhaust		101101
Pa	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								

#### **FAN DATA \***



Gross Airflow - L/s

#### **ENERGY PERFORMANCE**

RERV-D100SA		Supply Temperature		Net Airflow		Average	Sensible Recovery	Adjusted Sensible	Apparent Sensible	Net Moisture Transfer
		°C	°F	L/s	scfm	(Watts)	Efficiency	Efficiency	effectiveness*	
Heating	I	0	32	33	71	39.0	80.0	84.0	85.0	0.71
	Ш	0	32	38	80.7	44.0	79.0	83.0	84.0	0.69
	Ш	0	32	45	96.2	55.0	78.0	82.0	84.0	0.67
	iv	-25	-13	30	65.3	57.0	61.0	63.0	82.0	0.32
Cooling	IV	35	95	32	68.7	35.0	49.0**	51.0**	77.0	0.38

<sup>\*</sup> Sound, fan data, Power of ventilation performance and Apparent sensible effectiveness are not certified by HVI.

<sup>\*\*</sup> Indicates total recovery efficiency not sensible recovery efficiency

Contractor:	RERV-D100SA			
Architect:	Job:	Date	Superse. des	Drawing No.
Engineer:	Date Submitted:	2024/02/13		