

# SER 2004

## Energy Recovery Ventilator

Product #: 40086



Fantech's larger residential, full-featured ERV for large house projects, the SER 2004 is designed for higher static pressure and higher airflow applications. The SER 2004 unit brings a continuous supply of fresh air into a home while exhausting an equal amount of contaminated air. The enthalpic core at the center of the unit transfers heat and moisture from the incoming air to the outgoing air that was cooled and dried by the building's air conditioner.

### Features

- Simple yet sophisticated design makes these units the most reliable ERV on the market
- Enthalpy core
- Fans with backward curved RadiCAL blade
- No balancing required
- Weighs 60 lbs (27Kg)

### Optional controls

- ECO-Touch™ (#44929) – Programmable Touch Screen Wall Control
- EDF7 (#44883) – Electronic multi-function dehumidistat
- EDF1 (#40375) – Multi-function control
- RTS3 (#40376) – 20/40/60 minute over-ride
- RTS2 (#40164) – 20 minute over-ride
- MDEH1 (#40172) – Dehumidistat

### Specifications

- Duct size – 6" (152 mm)
- Voltage/Phase – 120/1
- Power rated – 150 W @ high speed
- Amp – 1.9 A
- Average airflow – 190 cfm (90 L/s)  
@ 0.4" P<sub>s</sub> (100Pa)

### Fans

Two (2) factory-balanced fans with backward curved blades. Motors come with permanently lubricated, sealed ball-bearings to guarantee long life and maintenance-free operation.

### Energy Recovery Core

AHRI certified core made from water vapor transport durable polymer membrane that is highly permeable to humidity. The ERV core is freeze tolerant and water washable. Core dimensions are 12" x 12" (305 x 305 mm) with a 14.25" (362 mm) depth.

### Defrost

A preset defrost sequence is activated at an outdoor air temperature of 23°F (-5°C) and lower. During the defrost sequence, the supply blower shuts down & the exhaust blower switches into high speed to maximize the effectiveness of the defrost strategy. The unit then returns to normal operation, and continues cycle.

### Serviceability

Core, filters, fans, drain pan and electrical panel can be accessed easily from the access panel. Core conveniently slides out with only 17" (432 mm) clearance.

### Case

22 gauge galvanized steel. Baked powder coated paint.

### Insulation

Cabinet is fully insulated with 1" (25 mm) high density expanded polystyrene.

### Filters

Two (2) washable electrostatic panel type air filters 11.5" (292mm) x 15" (380mm) x 0.125" (3mm).

### Controls

External three (3) position (Low/Stand By/Medium) rocker switch that will offer continuous ventilation. In addition Fantech offers a variety of external controls. External dry contacts provided.

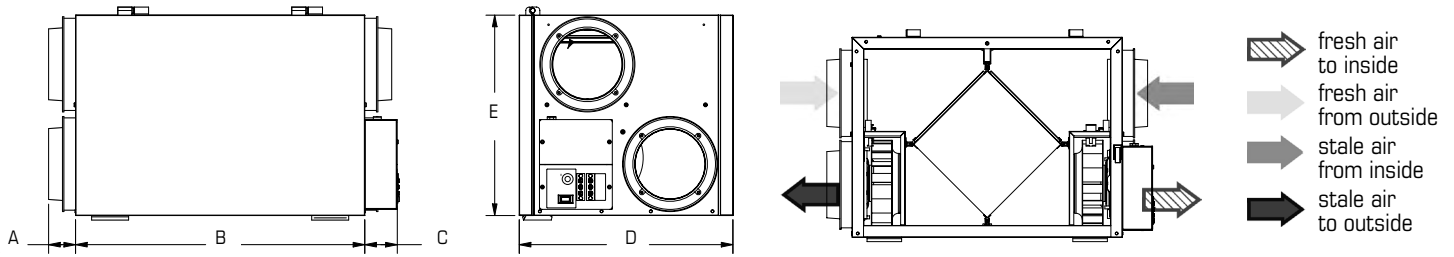
### Warranty

5 years on energy recovery core, 7 year on motors, and 5 year on parts.



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## Dimensions & Airflow



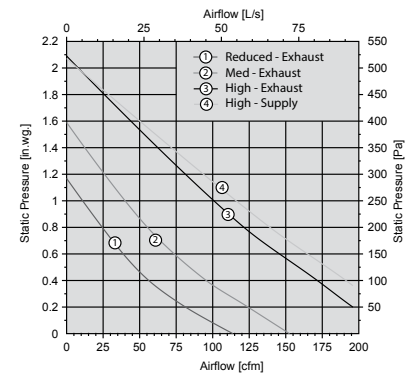
| Model   | A     |    | B      |     | C     |    | D      |     | E      |     |
|---------|-------|----|--------|-----|-------|----|--------|-----|--------|-----|
|         | in    | mm | in     | mm  | in    | mm | in     | mm  | in     | mm  |
| SER2004 | 2 1/4 | 57 | 27 7/8 | 708 | 2 5/8 | 67 | 17 3/8 | 441 | 20 1/8 | 521 |

Clearance of 17" (432 mm) in front of the unit is recommended for removal of core. All units feature three foot plug-in power cord with 3-prong plug.

## Ventilation Performance

| in. wg. (Pa)          | 0.2 (50)  | 0.4 (100) | 0.6 (150) | 0.8 (200) | 1.0 (250) |
|-----------------------|-----------|-----------|-----------|-----------|-----------|
|                       | cfm (L/s) | cfm (L/s) | cfm (L/s) | cfm (L/s) | cfm (L/s) |
| Net supply airflow    | 205 (97)  | 180 (85)  | 156 (74)  | 133 (63)  | 110 (52)  |
| Gross supply airflow  | 216 (102) | 190 (90)  | 164 (77)  | 140 (66)  | 116 (55)  |
| Gross exhaust airflow | 196 (93)  | 170 (80)  | 146 (69)  | 122 (58)  | 100 (47)  |

These measurements are for HIGH speed only



## Energy performance

|         | Speed  | Supply temperature |     | Net airflow |     | Consumed Power<br>W | Net effectiveness |        |       |
|---------|--------|--------------------|-----|-------------|-----|---------------------|-------------------|--------|-------|
|         |        | °F                 | °C  | cfm         | L/s |                     | Sensible          | Latent | Total |
|         |        |                    |     |             |     |                     | %                 | %      | %     |
| Heating | Low    | 35                 | 1.7 | 100         | 47  | 146                 | 74                | 59     | 69    |
|         | Medium | 35                 | 1.7 | 150         | 71  | 200                 | 70                | 52     | 63    |
|         | High   | 35                 | 1.7 | 200         | 94  | 253                 | 66                | 46     | 59    |
| Cooling | Low    | 95                 | 35  | 100         | 47  | 146                 | 74                | 55     | 63    |
|         | Medium | 95                 | 35  | 150         | 71  | 200                 | 70                | 48     | 56    |
|         | High   | 95                 | 35  | 200         | 94  | 253                 | 66                | 42     | 52    |

## Requirements and standards

- Complies with the UL 1812 requirements regulating the construction and installation of Heat Recovery Ventilators
- Complies with the CSA C22.2 no. 113 Standard applicable to ventilators
- Complies with the CSA F326 requirements regulating the installation of Heat Recovery Ventilators
- Technical data was obtained from published results of test relating to CSA C439 Standards
- Energy Recovery Core is ISO 846 certified for mold and bacteria resistance and AHRI certified (certificate #8931529)
- Technical data was obtained from published results of test relating to AHRI 1060 Standards

## Contacts

|                  |             |
|------------------|-------------|
| Submitted by:    | Date:       |
| Quantity: Model: | Project #:  |
| Comments:        |             |
| Location:        |             |
| Architect:       |             |
| Engineer:        | Contractor: |

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