# SER 1100

## Energy Recovery Ventilator



## STANDARD FEATURES

- Energy recovery core
- Fans with backward curved blades
- Dual service doors & Reversible electrical box
- Push-pull configuration
- External electrical box
- Electrostatic filters
- Removable screw terminal for easy connection
- Full length drain pan
- Outdoor ducts on the same side

## OPTIONS & CONTROLS

- MERV6 rated filters
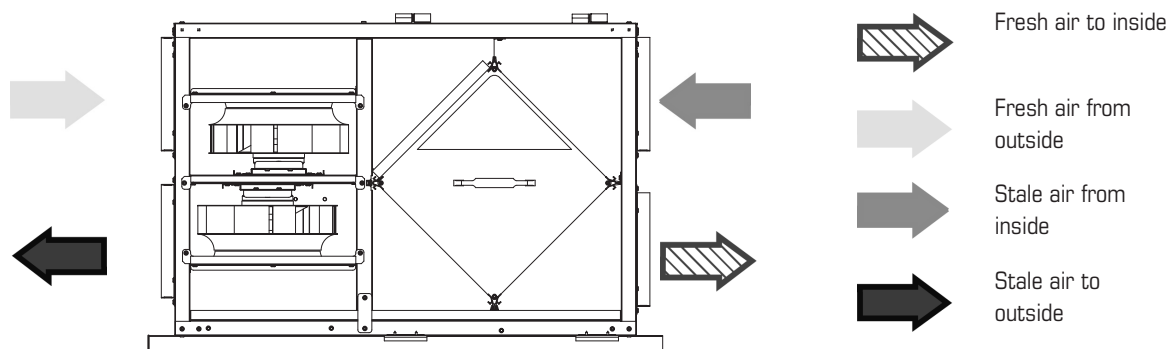- Compatible with all Fantech HRV/ERV controls
- $CO_2$ sensor
- Shut off damper

AHRI CERTIFIED®
www.ahridirectory.org
Air-to-Air ERV
AHRI Standard 1060
Energy Recovery COMPONENT is certified. Actual performance in packaged equipment may vary.

CSA® C US

| Job Name: | |
|---|---|
| Job Location: | |
| Job Reference Number: | |
| Unit Reference Number: | |
| Engineer: | |
| Distributor: | |
| Contractor: | |

| For Reference: | For Approval: | For Construction: |
|---|---|---|
| Submitted by: | | Date: |
| Address: | | |
| | | |
| | | |
| Tel: | Fax: | Email: |
| Notes: | | |

Fantech reserves the right to make technical changes.
For updated documentation please refer to **www.fantech.net**

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## Descriptions

Cabinet:
22 gauge G90 galvanized steel sheet coated with baked powder paint, insulated with 1 in. (25 mm) fiberglass with FSK facing for condensation control.

Blowers:
Four (4) maintenance-free Ebm-Papst™ backward inclined motorized impellers with permanently lubricated sealed ball bearings and (TOP) thermal overload protected.

Energy recovery core*:
Three (3) cores made from water vapor transport durable polymer membrane that is highly permeable to humidity. The ERV core is freeze tolerant and water washable. During winter, the core transfers heat and moisture from the outgoing air to the incoming fresh air and during summer the core transfers heat and moisture from the incoming air to the outgoing air to essentially reduce the latent load.

Filters:
The exhaust and fresh air streams are protected by MERV1 washable filters constructed to meet UL 900. Optional MERV6 filters are direct replacement to the MERV1. Use of MERV6 filters will add an additional system pressure of 0.64 in.wg (160 Pa) at 1100 cfm (519 l/s). Additional MERV Rated filters available upon request.

Controls:
External three (3) position (Low / Standby / High) rocker switch that will offer continuous ventilation. Compatible with all Fantech HRV/ERV controls.

Frost control:
A preset frost control sequence is initiated if the outdoor temperature falls below the set point of 23°F (-5°C). During the initial stage, the supply blower shuts down & the exhaust blower switches into high speed to eliminate frost build-up in the core. The unit then returns to normal operation for the final stage of the frost control sequence at which time the sequence is repeated if the outdoor air temperatures is still below the set point.

Serviceability:
Cores, filters and drain pan can be accessed easily from both sides of the ERV from hinged access panels. Cores conveniently slide out with only 15" (380 mm) clearance. Blowers can be accessed from both side of the ERV from fastened access panels. Blowers are easily removed by taking off the access panel and sliding the motor plates out of the ERV. A quick connect allows for fast inspection of blowers.

Mounting:
Unit may be suspended by using threaded rod, not supplied, or placed on a platform. Unit shall be adaptable for easy service of electrical components.

Warranty:
Fantech ERV's have a warranty that is limited to 3 years on all parts from the date of purchase, including parts replaced during this time period. If there is no proof of purchase available, the date associated with the serial number will be used for the beginning of the warranty period
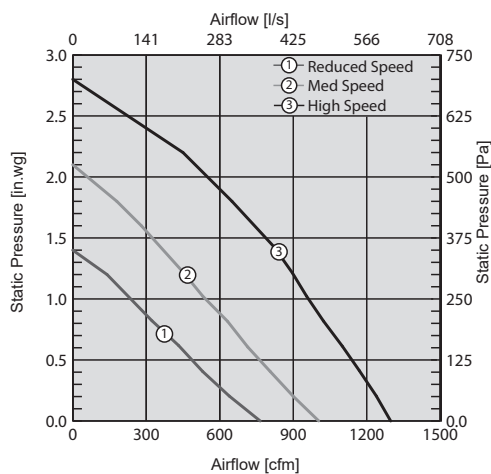


Fresh air to inside

Fresh air from outside

Stale air from inside

Stale air to outside

*AHRI certifies the published performance ratings of the COMPONENT used in this product in accordance with AHRI 1060. AHRI Certified Reference Number: 202342544, model number EXR-290-380-250-CS-O. Note that only the COMPONENT is AHRI 1060 certified and not the product itself.

## Specifications

- Volts: 120V
- Phase: Single
- Amperage: 11.17 Amps Total
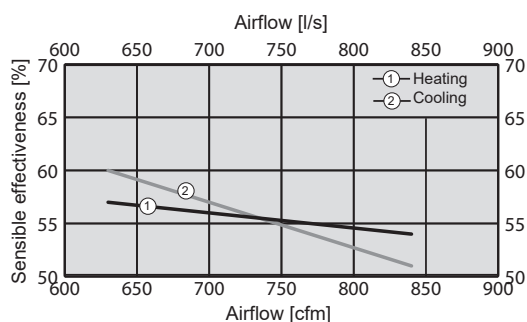- Blowers (x4): 115V, 60Hz, 2.9 Amps

- Weight: 210 Lbs (95 Kg)
- Shipping Weight: 280 Lbs (127 Kg)
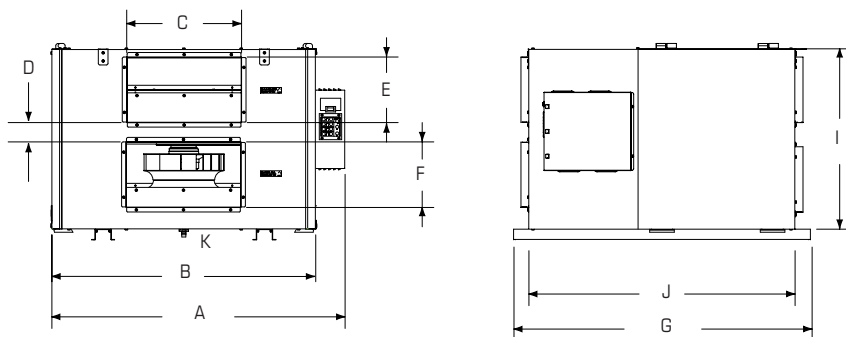- Shipping Dim.: 38 x 53 x 27" (965 x 1346 x 686mm)

## Ventilation Performance



## Energy Performance

| | Supply temperature | | Net airflow | | Net Effectiveness | | |
|---|---|---|---|---|---|---|---|
| | | | | | Sensible | Latent | Total |
| | °F | °C | cfm | L/s | % | % | % |
| Heating | 35 | 1.7 | 840 | 396 | 54 | 35 | 50 |
| | 35 | 1.7 | 630 | 297 | 57 | 40 | 54 |
| Cooling | 95 | 35 | 840 | 396 | 51 | 32 | 49 |
| | 95 | 35 | 630 | 297 | 60 | 37 | 53 |



## Dimensions



| Model | A | | B | | C | | D | | E | | F | | G | | I | | J | | K | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm |
| SER 1100 | 51 2/5 | 1306 | 47 1/5 | 1199 | 20 | 508 | 2 2/5 | 61 | 8 | 203 | 8 | 203 | 36 1/3 | 923 | 22 | 559 | 32 1/2 | 826 | 1/2 | 13 |

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