

# SHR 450

## Light Commercial Heat Recovery Ventilators



### STANDARD FEATURES

- Premium aluminum cell
- 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

- MERV 6–13 rated filters
- Compatible with all Fantech HRV controls
- CO2 sensor
- Shut off damper

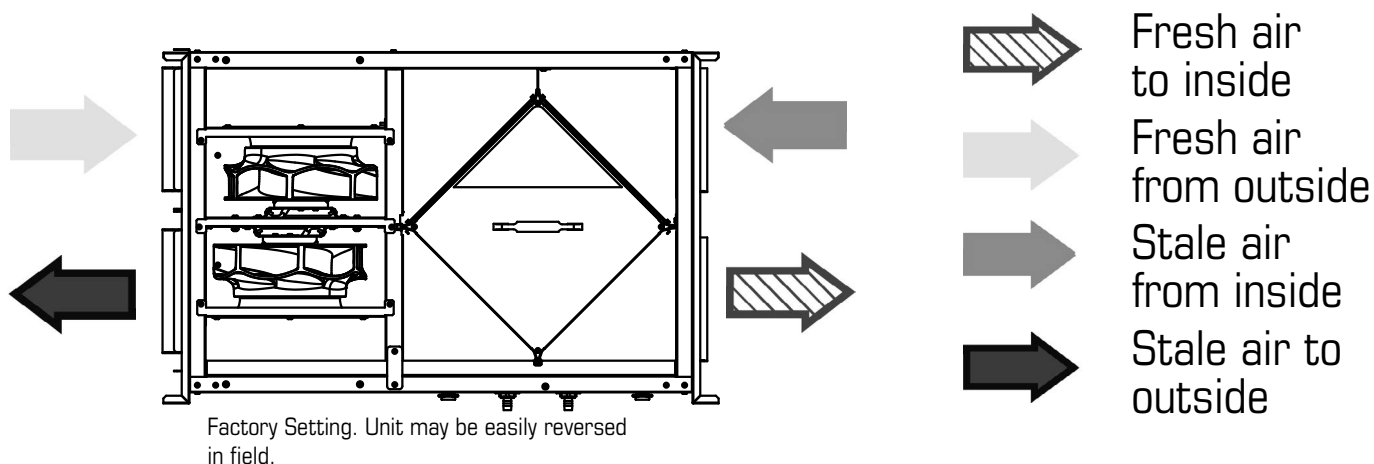
|                        |               |                   |  |
|------------------------|---------------|-------------------|--|
| Job Name:              |               |                   |  |
| Job Location:          |               |                   |  |
| Job Reference Number:  |               |                   |  |
| Unit Reference Number: |               |                   |  |
| Engineer:              |               |                   |  |
| Distributor:           |               |                   |  |
| Contractor:            |               |                   |  |
| For Reference:         | For Approval: | For Construction: |  |
| Submitted by:          |               | Date:             |  |
| Address:               |               |                   |  |
|                        |               |                   |  |
|                        |               |                   |  |
| Tel:                   | Fax:          | Email:            |  |
| Notes:                 |               |                   |  |

**United States** 10048 Industrial Blvd. • Lenexa, KS 66215 • 1.800.747.1762 • [www.fantech.net](http://www.fantech.net)  
**Canada** 50 Kanaflikt Way • Bouctouche, NB E4S 3M5 • 1.800.565.3548 • [www.fantech.net](http://www.fantech.net)

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 a systemair company

| Descriptions        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cabinet             | 22 gauge galvanized steel. Baked powder coated paint. Insulated with 1 in. (25 mm) fiberglass with FSK facing for condensation control.                                                                                                                                                                                                                                                                                                                          |
| Fans                | Two (2) factory balanced fans with backward curved blades. Motors come with permanently lubricated sealed ball bearings and (TOP) thermal overload protected.                                                                                                                                                                                                                                                                                                    |
| Heat recovery core* | Two (2) heat exchangers engineered with a turbulence inducing geometry in order to maximize heat transfer while allowing an effective evacuation of condensate. The plates are hemmed and sealed to ensure no cross-contamination of airstreams. The aluminum core had a plastic handle for easy removal. Core dimensions are 11.4" x 11.4" (290 x 290 mm) with a 11.4" (290 mm) depth.                                                                          |
| Filters             | The exhaust and fresh air streams are protected by MERV 3 washable filters constructed to meet UL 900. Optional MERV 6, MERV 8, or MERV 13 filters are direct replacement to the MERV 3. Use of MERV 6 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 (MIN) / Standby (AUTO) / High (MAX)) rocker switch that will offer continuous ventilation. Compatible with all Fantech HRV controls.                                                                                                                                                                                                                                                                                            |
| Defrost             | 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 HRV from hinged access panels. Cores conveniently slide out with only 15" (380 mm) clearance. Blowers can be accessed from both side of the HRV from fastened access panels. Blowers are easily removed by taking off the access panel and sliding the motor plates out of the HRV. 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            | The heat recovery ventilator is warranted to be free from defect in material, workmanship and all parts for a period of 3 years from the purchase date. The heat recovery core is warranted to be free from defects in material and workmanship for a lifetime period under circumstances of normal use.                                                                                                                                                         |



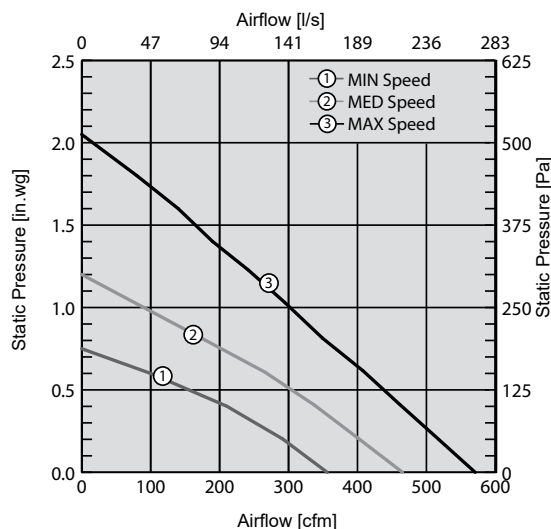
\* AHRI certifies the published performance ratings of the COMPONENT used in this product in accordance with AHRI 1060. AHRI Certified Reference Number: 10514479, model number TE-HRC 305S. Note that only the COMPONENT is AHRI 1060 certified and not the product itself.

## Specifications

- Volts: 120V
- Phase: Single
- Amperage: 3.92 Amps Total
- Blowers (x2): 115V, 60Hz, 1.96 Amps

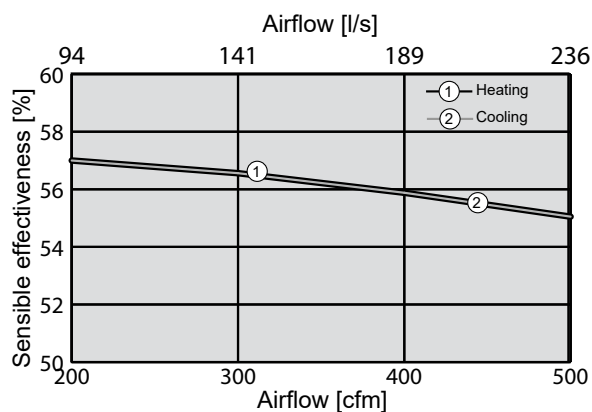
- Weight: 146 Lbs (66 Kg)
- Shipping Weight: 255 Lbs (116 Kg)
- Shipping Dim.: 38 x 38 x 27" (965 x 965 x 686mm)

## Ventilation Performance

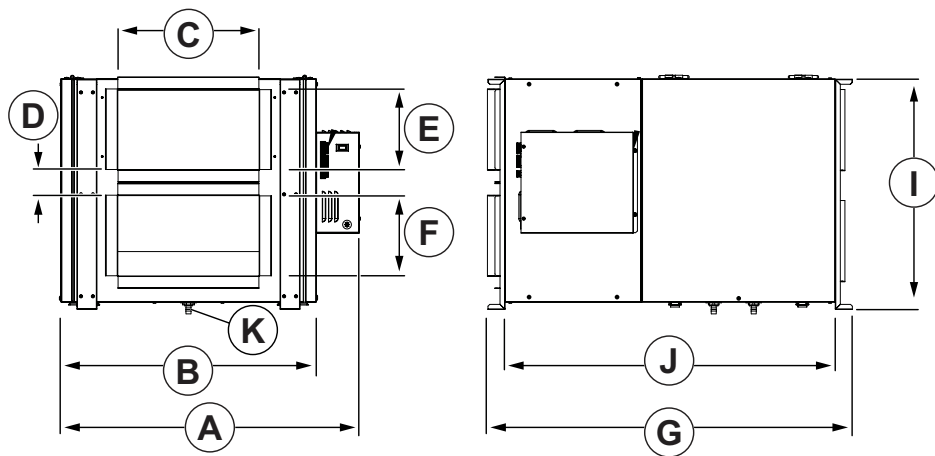


## Energy Performance

|         | Supply temperature |     | Net airflow |     | Net Effectiveness |         |
|---------|--------------------|-----|-------------|-----|-------------------|---------|
|         | °F                 | °C  | cfm         | L/s | Sensible %        | Total % |
| Heating | 35                 | 1.7 | 300         | 142 | 62                | 41      |
|         | 35                 | 1.7 | 225         | 106 | 64                | 42      |
| Cooling | 95                 | 35  | 300         | 142 | 50                | 19      |
|         | 95                 | 35  | 225         | 106 | 51                | 19      |



## Dimensions



| 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 |
| 29 7/16 | 747 | 25 3/16 | 639 | 14 | 355 | 2 1/2 | 64 | 8  | 203 | 8  | 203 | 35 7/8 | 911 | 22 3/4 | 577 | 32 1/2 | 826 | 1 1/2 | 13 |

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