

# VHR100R ES

## Heat Recovery Ventilator

Product #: 463234



A great mid-range heat recovery ventilator, the VHR100R ES is ideal for high-rise apartment applications, condominiums, single and multi-family homes. With its compact top port design featuring 5 inch oval collars and the included EZ-Mount™ wall bracket, the VHR100R ES can be installed in spaces as small as 24 inches, such as a closet or maintenance room.

The VHR100R ES is equipped with an automatic recirculation defrost mechanism so that even if you live in the coldest climates you can use your HRV all year long.

### Features

- Removable screw terminal for easy connection
- Lightweight: only 39 lbs (17.7 kg) including core
- Super compact size
- Top port design fits in tight spaces
- Includes EZ-Mount wall bracket
- Aluminum heat recovery core
- Multiple speed operation
- Internal recirculation defrost

### Optional Controls

- Eco-Touch™ (#44929) – Programmable Touch Screen Wall Control
- EDF7 (#44883) – Electronic multi-function dehumidistat
- RTS2 (#40164) – 20 minute timer over-ride
- RTS5 (#44794) – 20/40/60 minute timer
- MDEH1 (#40172) – Dehumidistat

### Specifications

- Duct size – 5" (125mm) oval
- Voltage/Phase – 120/1
- Power rated – 168 W
- Amp – 1.4 A
- Average airflow – 104 cfm (49 L/s)  
@ 0.4" Ps (100Pa)

### Motors

Two (2) factory-balanced motors with backward curved blades. Motors come with permanently lubricated, sealed ball-bearings to guarantee long life and maintenance-free operation. Covered by a seven year warranty.

### Heat Recovery Core

Aluminum heat recovery core covered by a limited lifetime warranty. Core dimensions are 8.5" x 8.5" (216 x 216 mm) with a 12" (305 mm) depth. Our heat exchangers are designed and manufactured to withstand extreme temperature variations.

### Winterguard™ Defrost

The VHR100R ES incorporates a unique and quiet internal recirculation defrost that does not depressurize the home during the defrost cycle. A preset defrost sequence is activated when the outdoor temperature falls below 23° F (-5° C) and automatically adjusts itself based on operating conditions. The fan speed is also adjusted automatically to provide a smooth and quiet transition between Ventilation & Defrost mode.

### Serviceability

Core, filters, fans and drain pan can be easily accessed through latched door. Core conveniently slides out on our new easy glide core guides. 14" (356 mm) of clearance is recommended for removal of core.

### Duct Connections

5" (125mm) Oval plastic duct connections with integrated balancing damper and airflow measurement ports.

### Case

24 gauge galvanized pre-painted steel corrosion resistant

### Insulation

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

### Filters

Two (2) washable electrostatic panel type air filters 8.5" (216mm) x 12.5" (318 mm) x 0.125" (3mm).

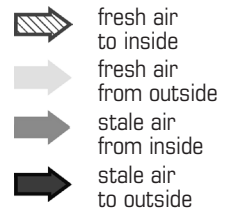
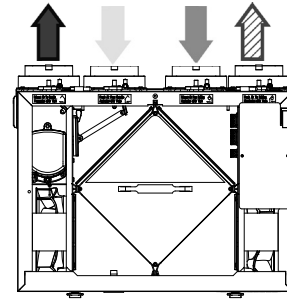
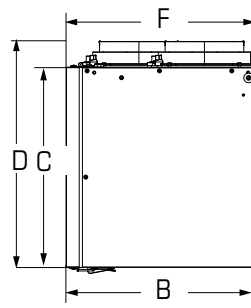
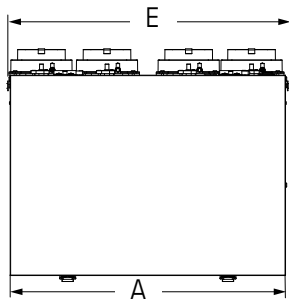
### Drain

1/2" (13mm) OD (outside diameter) drain spout provided, entire bottom of unit covered by drain pan.

### Warranty

Limited lifetime on aluminum core, 7 year on motors, and 5 year on parts.

## Dimensions & Airflow



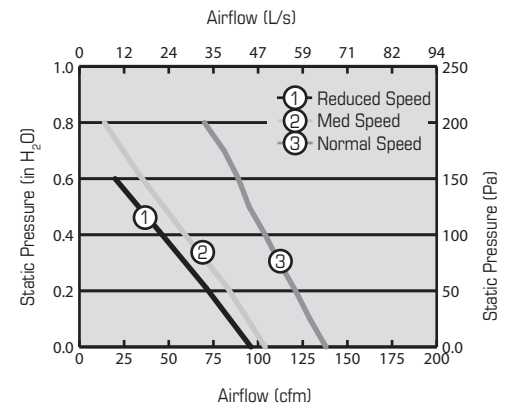
| Model      | A      |     | B      |     | C      |     | D      |     | E      |     | F  |     |
|------------|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|----|-----|
|            | in     | mm  | in     | mm  | in     | mm  | in     | mm  | in     | mm  | in | mm  |
| VHR100R ES | 21 1/2 | 546 | 14 1/2 | 368 | 15 5/8 | 397 | 17 7/8 | 454 | 22 1/2 | 572 | 15 | 381 |

Dimensional information is in inches. Clearance of 14" (356mm) 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)          | 0.1 (25)  | 0.2 (50)  | 0.3 (75)  | 0.4 (100) | 0.5 (125) | 0.6 (150) | 0.7 (175) | 0.8 (200) |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                       | cfm (L/s) | cfm (L/s) | cfm (L/s) | cfm (L/s) | cfm (L/s) | cfm (L/s) | cfm (L/s) | cfm (L/s) |
| Net supply airflow    | 129 (61)  | 121 (57)  | 112 (53)  | 104 (49)  | 95 (45)   | 89 (42)   | 81 (38)   | 70 (33)   |
| Gross supply airflow  | 131 (62)  | 123 (58)  | 114 (54)  | 106 (50)  | 97 (46)   | 89 (42)   | 81 (38)   | 72 (34)   |
| Gross exhaust airflow | 131 (62)  | 123 (58)  | 114 (54)  | 106 (50)  | 97 (46)   | 89 (42)   | 81 (38)   | 70 (30)   |

Only the data of the normal speed are HVI certified.



## Energy performance

| Heating | Supply temperature |     | Net airflow |     | Consumed power | Sensible recovery efficiency | Apparent sensible effectiveness | Latent recovery/moisture transfer |
|---------|--------------------|-----|-------------|-----|----------------|------------------------------|---------------------------------|-----------------------------------|
|         | °F                 | °C  | cfm         | L/s | W              | %                            | %                               | -                                 |
|         | 32                 | 0   | 64          | 30  | 50             | 65                           | 69                              | 0.02                              |
|         | 32                 | 0   | 81          | 38  | 65             | 63                           | 68                              | -0.01                             |
|         | 32                 | 0   | 102         | 48  | 100            | 60                           | 66                              | 0.00                              |
|         | -13                | -25 | 66          | 31  | 65             | 62                           | 65                              | 0.04                              |

## 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
- HVI certified and ENERGY STAR® qualified\*

\* This product earned the ENERGY STAR® by meeting strict efficiency guidelines set by Natural Resources Canada and the US EPA. It meets ENERGY STAR® requirements only when used in Canada.

## Contacts

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

## Distributed by:

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