



## THE PHRVR100 HRV: Powerful things can come in a small package!

PHRVR100 is a compact HRV specially designed for small residential and multi-residential applications such as condominiums and apartment buildings that require up to 100 CFM of continuous principal ventilation. With its flexible and compact top port design incorporating the 5" oval collars with integrated airflow measurement and wall bracket, it can be installed in small spaces such as 24" closets or above the hot water heater.

#### **FEATURES**

- 5" (125mm) oval duct connections with integrated airflow measurement
- 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 wall bracket
- Aluminum heat recovery core
- Multiple speed operation
- Internal recirculation defrost

#### **OPTIONAL CONTROLS:**

Speed control for Normal and Reduced speed standard on unit. Other operating modes available from optional controls below.

• Dehumidistat 1 – Dehumidistat

RTS20 – 20 minute timer over-ride
 RTS5 – 20/40/60 minute timer
 EDF1R – Triple function wall control
 DIR-TS – Multi-function control
 DIR-DG – Multi-function Dehumidistat

# PHRVR100

## **Heat Recovery Ventilator**

**MOTORS:** Two (2) German-manufactured, factory-balanced EBM 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 (7) year warranty.

**HEAT RECOVERY CORE:** Aluminum heat recovery core covered by a limited lifetime warranty. Core dimensions are  $8.5^{\circ}$  x  $8.5^{\circ}$  (216 x 216 mm) with a 12" (305 mm) depth. Our heat exchangers are designed and manufactured to withstand extreme temperature variations.

**FROST PREVENTION SYSTEM:** The PHRVR100 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:** All serviceable internal components, including core, filters, motors and electronic board are easily accessible and can be fully removed in under 5 minutes for complete service. A 12" (305 mm) clearance from the front of the unit is recommended to fully remove the core and other internal components.

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

**CASE:** 24 gauge galvanized steel. Baked power-coated paint for a superior adhesion and resistance.

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

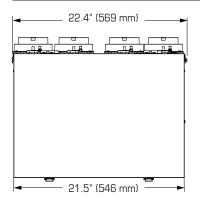
**FILTERS:** Two (2) washable electrostatic panel type air filters, 8.5" (216mm) x 12.5" (318 mm) x 0.125" (3mm).

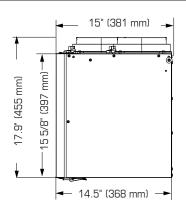
**DRAIN:** 1/2" (13mm) OD (outside diameter) drain spout provided, entire bottom of unit covered by drain pan.

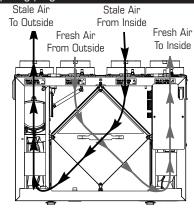
**WARRANTY:** Limited lifetime on aluminum core, 7 year on motors, and 5 year on parts.

| FOR MORE IN | IFORMATION | CONTACT: |  |  |
|-------------|------------|----------|--|--|
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|             |            |          |  |  |
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## Dimensions & Airflow - All units feature three foot plug-in power cord with 3-prong plug.



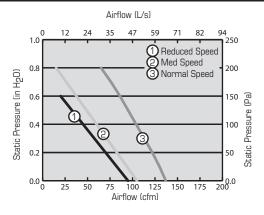




• 12" (305mm) of clearance in the front is recommended for removal of core

## **Ventilation Performance**

|          | STATIC | NET S    | NORMAL<br>SUPPLY | GROSS AIR FLOW |     |         |     |
|----------|--------|----------|------------------|----------------|-----|---------|-----|
| PRESSURE |        | AIR FLOW |                  | SUPPLY         |     | EXHAUST |     |
| Pa       | in wg  | L/s      | cfm              | L/s            | cfm | L/s     | cfm |
| 25       | 0.1    | 62       | 130              | 64             | 135 | 63      | 134 |
| 50       | 0.2    | 58       | 122              | 60             | 127 | 58      | 122 |
| 75       | 0.3    | 53       | 113              | 55             | 118 | 53      | 112 |
| 100      | 0.4    | 49       | 104              | 51             | 108 | 48      | 102 |
| 125      | 0.5    | 45       | 95               | 47             | 99  | 44      | 93  |
| 150      | 0.6    | 40       | 86               | 42             | 89  | 40      | 84  |
| 175      | 0.7    | 36       | 76               | 37             | 73  | 35      | 75  |
| 200      | 0.8    | 31       | 65               | 32             | 68  | 30      | 63  |
| 175      | 0.7    | 36       | 76               | 37             | 73  | 35      |     |



- \*\* Balancing Range : 70 cfm (33 L/s) to 110 cfm (53 L/s)
  - If a balanced flow outside the above range is required, please revisit our product offerings to ensure a properly sized unit is selected

| Energy Performance |                       |     |                |     |                   |                      |                            |                             |  |
|--------------------|-----------------------|-----|----------------|-----|-------------------|----------------------|----------------------------|-----------------------------|--|
|                    | SUPPLY<br>TEMPERATURE |     | NET<br>AIRFLOW |     | POWER<br>CONSUMED | SENSIBLE<br>RECOVERY | APPARENT<br>SENSIBLE       | LATENT<br>RECOVERY/MOISTURE |  |
|                    | °C                    | °F  | L/s            | cfm | WATTS             | EFFICIENCY           | EFFECTIVENESS <sup>1</sup> | TRANSFER                    |  |
| Heating            | 0                     | 32  | 30             | 63  | 64                | 61                   | 71                         | -                           |  |
|                    | 0                     | 32  | 37             | 78  | 90                | 60                   | 70                         | -                           |  |
|                    | 0                     | 32  | 47             | 100 | 96                | 59                   | 68                         | -                           |  |
|                    | -25                   | -13 | 31             | 66  | 77                | 58                   | 80                         | -                           |  |

<sup>&</sup>lt;sup>1</sup> Not an HVI certified value

### Specifications

- Model: PHRVR100
- Total assembled weight: 39 lbs (17.7 kg)
- Mounting: Wall bracket included as standard
- Motors: ebm motors with backward curved blades
- Supply & Exhaust ducts: 5" (125mm) oval
- Insulated with high density polystyrene foam.
- Core: Aluminum
- 8.5" (216mm) x 8.5" (216mm) x 12" (305mm)
- Filters: 2 washable electrostatic filters 8.5" (216mm) x 12.5" (318mm) x 0.125" (3mm)
- Cabinet: 24 ga. steel w/powder coat finish
- Electrical requirements:

Frequency Amps 60Hz 120V 1.4A 3' plug-in power cord w/ 3-prong plug

## **Contacts**

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

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