



## PHRVR120-HE

### Heat Recovery Ventilator with Recirculation

Product #: 463900



The PHRVR120-HE is ideal for high-rise apartment applications, condominiums, single and multi family homes. With a completely new design the PHRVR120-HE features a Counterflow core, round metal collars and a high efficiency rating!

#### Features

- Electronic balancing system
- Silent and economical
- Integrated door balancing ports
- 5" (125mm) round metal duct connections with rubberized duct seals
- Top port design fits in tight spaces
- Includes wall mounting
- Counterflow heat recovery core
- Multiple speed operation
- Recirculating defrost sequence
- Weight: 41.4 lbs (18.8 kg) including core

#### Optional Controls

- |                  |                                       |
|------------------|---------------------------------------|
| • STS2.0         | – Touch screen multi-function control |
| • DIR-DG         | – Multi-function Dehumidistat         |
| • EDF1R          | – Triple function wall control        |
| • Dehumidistat 1 | – Dehumidistat                        |
| • RTS5           | – 20/40/60 minute timer               |

#### Optional Supply Air Filter

- |         |                                       |
|---------|---------------------------------------|
| • MERV8 | – Pleated Air Filter (Item N° 428525) |
|---------|---------------------------------------|

#### Electrical Requirements

- |              |                         |
|--------------|-------------------------|
| • Voltage    | – 120V/60Hz/1 Phase     |
| • Amp        | – 1.2 A                 |
| • Power cord | – Ac 3'/3-prong plug-in |

#### Specifications

- |              |  |
|--------------|--|
| • Model      | – PHRVR120-HE                              |
| • Weight     | – 41.4 lbs (18.8 kg)                       |
| • Mounting   | – Wall Bracket (included)                  |
| • Motors     | – Backward curved impeller                 |
| • Duct dia.  | – Metal 5" (125mm) round                   |
| • Insulation | – High Density polystyrene foam            |
| • Core       | – Polystyrene counter-flow type            |
| • Filters    | – Two (2) washable electrostatic filters   |
| • Cabinet    | – ASTM A653, G90, 22 ga. galvanized steel. |

#### Motors

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

#### Heat Recovery Core

Counterflow heat recovery exchanger built from thermoformed polymer plates covered by a limited lifetime warranty. Core dimensions are 14.4" x 14.4" (366 x 366 mm) with a 10" (255 mm) depth. Our heat exchangers are designed and manufactured to withstand extreme temperature variations.

#### Defrost Sequence

The unit 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 electronic panel can be accessed easily from the access panel. Core conveniently slides out with only 12" (305 mm) clearance.

#### Duct Connections

5" (125mm) round metal duct connections with rubberized seal.

#### Cabinet

22 gauge galvanized steel corrosion resistant with pre-painted access door

#### Insulation

Cabinet is fully insulated with 3/4" (20 mm) high density expanded polystyrene.

#### Filters

Two (2) washable electrostatic panel type air filters 7.87" (200mm) x 9.84" (250mm) x 0.125" (3mm).

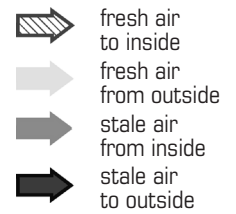
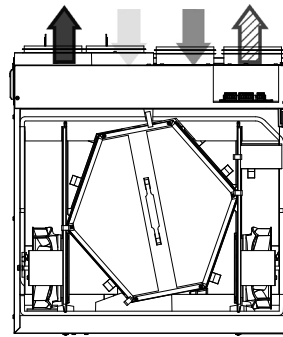
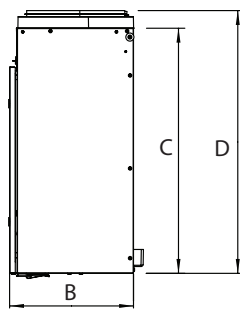
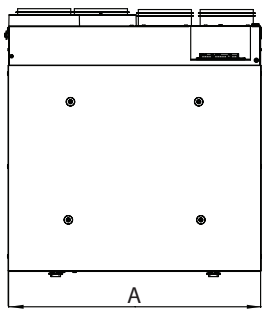
#### Balancing and commissioning

Balancing must be completed using the STS2.0 Programmable Touch Screen Wall Control

#### Warranty

Limited lifetime on counterflow exchanger, 7 years on motors, and 5 years on parts.

## Dimensions & Airflow



Model	A		B		C		D	
	in	mm	in	mm	in	mm	in	mm
PHRVR120-HE	23 1/4	590	11 1/2	291	22 5/8	575	24 1/4	616

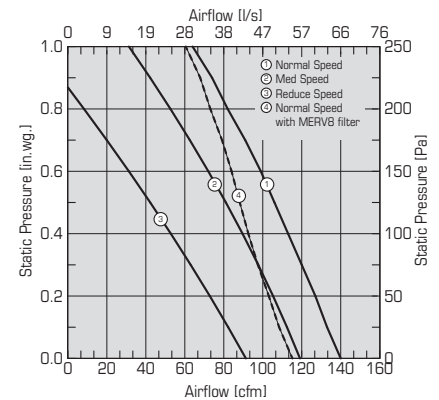
Clearance of 12" (305mm) in front of the unit is recommended for removal of core.

## 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	133 (63)	127 (60)	121 (57)	112 (53)	106 (50)	100 (47)	91 (43)	83 (39)
Net supply airflow with MERV8 filter	108 (51)	103 (49)	98 (46)	93 (44)	88 (42)	84 (40)	79 (37)	73 (34)
Gross supply airflow	138 (65)	131 (62)	125 (59)	119 (56)	110 (52)	102 (48)	95 (45)	85 (40)
Gross exhaust airflow	144 (68)	140 (66)	131 (62)	125 (59)	117 (55)	108 (51)	100 (47)	89 (42)

\*\* - Balancing Range : 40 cfm (19 L/s) to 140 cfm (66 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

Heating	Supply temperature		Net airflow		Consumed power	Sensible recovery efficiency	Adjusted Sensible recovery efficiency	Apparent sensible effectiveness <sup>1</sup>	Latent recovery/moisture transfer
	°F	°C	cfm	L/s	W	%	%	%	-
	32	0	70	33	68	81	88	90	0.00
	32	0	100	47	88	78	84	85	0.00
	32	0	114	54	118	76	83	85	0.00
	-13	-25	68	32	82	63	67	89	0.15

<sup>1</sup> - Not a HVI certified value

- Energy performance results were obtained without the MERV-8 filter installed

## 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. This data was obtained without the use of the MERV8 supply filter.
- 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.

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

