



## Fresh Air Systems - 110 CFM

HRV

Top ports: B110H65RT

Side ports: B110H65RS

35 to 112 CFM @ 0.2 in. w.g.

35 to 100 CFM @ 0.4 in. w.g.



Parts/Motor

HRV Core

Visit [Broan-NuTone.com](http://Broan-NuTone.com) for complete warranty text.

The industry's most advanced residential fresh air system, created to offer a universal platform specifically designed and improved to make contractors life easier and more profitable while delivering constant superior air quality.

- Thanks to the Virtuo Air Technology™, the airflow calibration and auto-balancing are achieved quickly and maintained throughout the life of the product
- Select the desired CFM (from 35 to 110 CFM) using the proven integrated LCD screen
- Integrated electronic airflow measurement device with real time LCD
- Integrated diagnostic tool
- Equipped with PMSM ECM motors for energy efficient operation
- Suspended installation (chains included)
- OR
- Wall-mount installation (universal brackets included)
  - installation with 2 brackets
  - installation with 4 brackets

## Unit Description

- SRE of 68% at 32°F and 60% at -13°F (64 CFM)
- Ports size: 5"
- Recirculation defrost
- Corrosion resistant galvanized steel door and cabinet
- One-piece molded insulation shell, no air leakage (expanded polystyrene; UL 94 HF-1 certified)
- Virtuo constant airflow and auto-balancing device (patent pending)
- Motorized dampers (no additional backdraft dampers required)
- Integrated "snap-in" drain system installed in seconds with no additional parts (drain hose included)
- Recirculate air within the dwelling with recirculation mode using a main wall control
- 6' power cord
- Unit electrical characteristics:  
120 volts, 60 Hz, 2.4 A, 90 W

## Controls



There are 4 optional main controls and 2 optional auxiliary controls available. Refer to Wall Control specification sheet for more information.

## Core

- Polypropylene crossflow core, impact resistant
- Dimensions: 12" x 12" x 9" (30.5 cm x 30.5 cm x 23 cm)

## Filters

- MERV 8 grade washable standard filter (included)
- Optional MERV 13 grade filter part no. V24285<sup>1</sup>

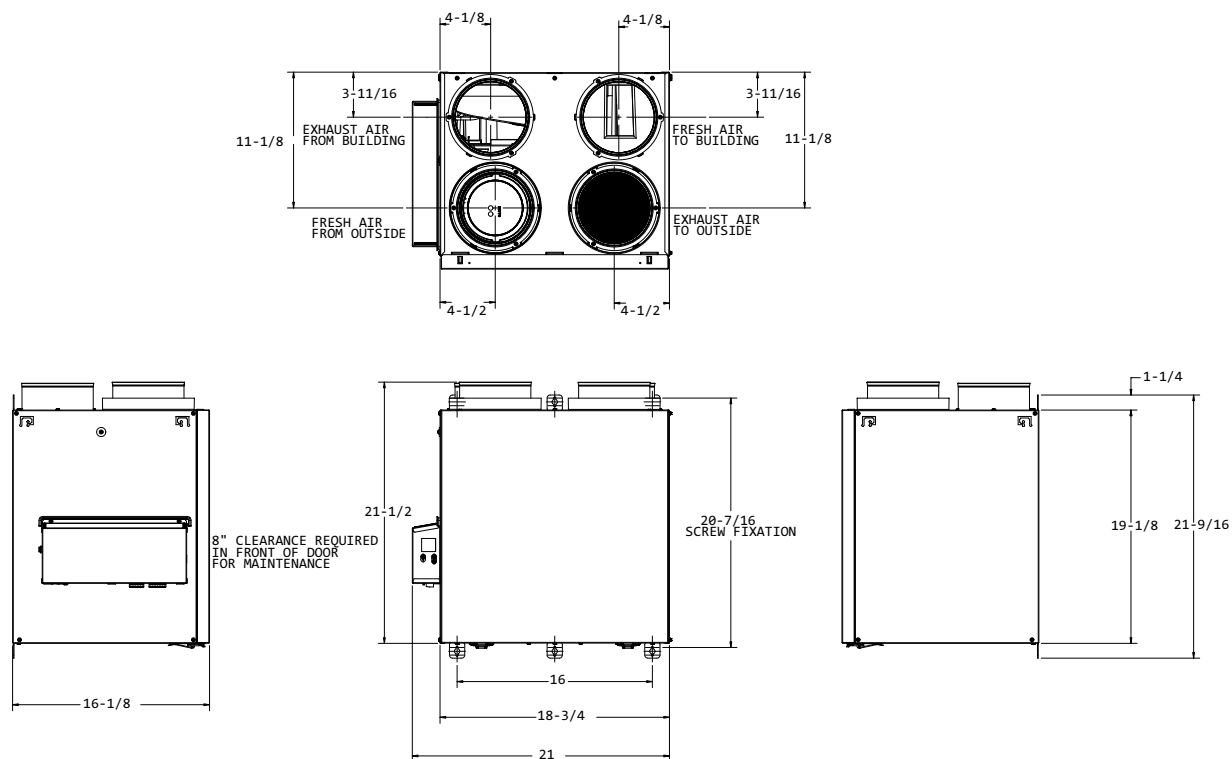
## Options

- Compatible with Tandem terminations (part no. VTYIK1 and V14695) (CFM output must meet application requirements)

<sup>1</sup>Airflow performances associated with MERV 13 optional filter are not HVI certified. However, from tests performed by the manufacturer, such performances are not affected by the use of this filter.

## 5" Ports Dimensions (Top Ports)

Total assembled weight: approx 35 lbs (15.9 kg) (core included)  
Shipping weight: approx 42 lbs (19 kg)

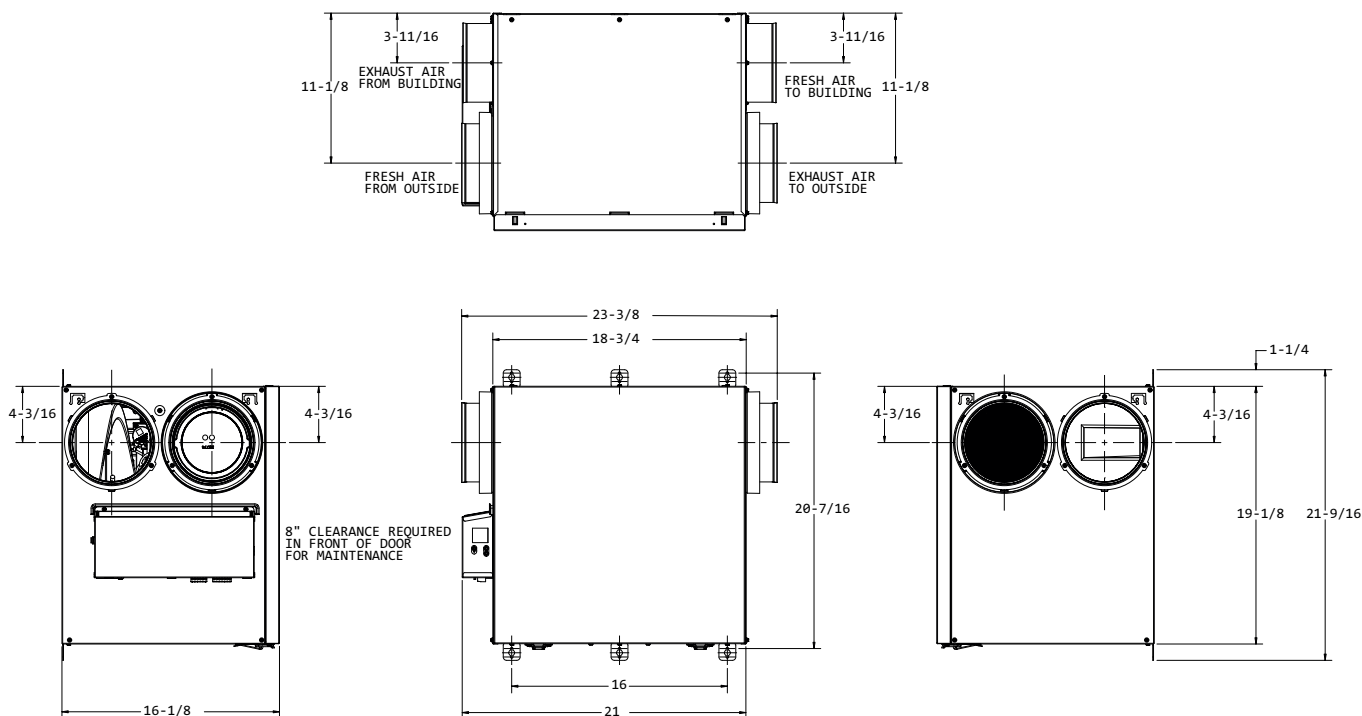


VK0128

Dimensions shown in inches

## 5" Ports Dimensions (Side Ports)

Total assembled weight: approx 35 lbs (15.9 kg) (core included)  
Shipping weight: approx 42 lbs (19 kg)



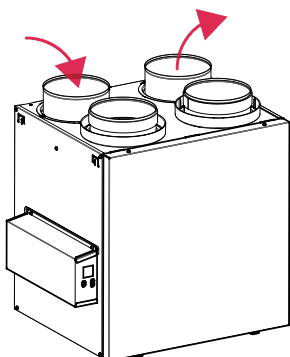
VK0127

Dimensions shown in inches

## Defrost System

### Homeshield™ Defrosting System

Defrost is activated at a temperature of 23°F and lower as specified within the table. No negative pressure is created by air exhausted to the outdoors since the air is recirculated into the house, helping to prevent any backdraft.



DISCRETION (Factory setting)	OUTDOOR TEMPERATURE*					
	-5°C TO -15°C 23°F TO 5°F		-15°C TO -27°C 5°F TO -17°F		-27°C AND LESS -17°F AND LESS	
CFM	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES
0 to 59	32	7	25	7	20	10
60 to 104	50	7	35	7	25	10
105 and more	22	7	18	7	16	10

\*Outdoor temperature is read by a thermistor located inside the unit, next to fresh air from outdoor port.

**NOTE:** There is a 10-minute additional defrost every 5 defrost cycles.

Plus	OUTDOOR TEMPERATURE*					
	-5°C TO -15°C 23°F TO 5°F		-15°C TO -27°C 5°F TO -17°F		-27°C AND LESS -17°F AND LESS	
CFM	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES
0 to 59	28	7	20	7	16	10
60 to 104	45	7	28	7	20	10
105 and more	18	7	14	7	12	10

\*Outdoor temperature is read by a thermistor located inside the unit, next to fresh air from outdoor port.

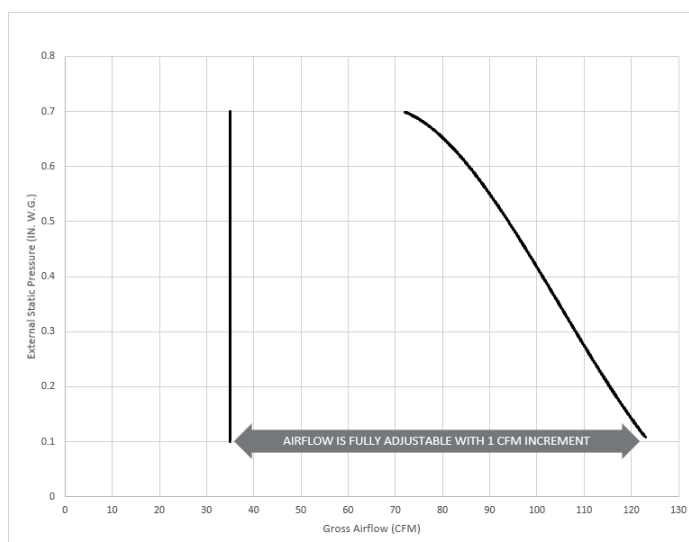
**NOTE:** There is a 10-minute additional defrost every 5 defrost cycles.

## Fan Curves with Virtuo

Thanks to Virtuo Air Technology™, no need to balance the unit manually. Both PMSM motors are controlled by an artificial intelligence performing 120 readings per minute then processing this information to maintain the requested airflow.

For typical installation, Virtuo will ensure a balanced ventilation at every selected speed regardless of the weather conditions, the type of connection, the variable speed furnace/AHU, the stack effect, the filter clogging and so on. This results in peace of mind for installers and users knowing that the unit will always remain balanced and that it will maintain its maximum heat/energy recovery efficiency.

STATIC PRESSURE (Pa)	STATIC PRESSURE (IN. W.G.)	NET SUPPLY AIRFLOW (L/s)	NET SUPPLY AIRFLOW (CFM)	GROSS AIRFLOW SUPPLY (L/s)	GROSS AIRFLOW SUPPLY (CFM)	GROSS AIRFLOW EXHAUST (L/s)	GROSS AIRFLOW EXHAUST (CFM)
25	0.1	56	119	58	123	58	123
50	0.2	53	112	55	117	55	117
75	0.3	49	104	50	106	50	106
100	0.4	47	100	48	102	48	102
125	0.5	44	93	45	95	45	95
150	0.6	39	83	40	85	40	85
175	0.7	33	70	34	72	34	72



## Energy Performance

SUPPLY TEMPERATURE		NET AIRFLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	ADJUSTED SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS*
°C	°F	L/S	CFM				
HEATING							
0	32	30	64	26	68%	71%	72%
0	32	52	110	69	58%	62%	64%
-25	-13	30	64	33	60%	62%	72%

\*Data not certified by HVI.

## Requirements and Standards

- UL 1812 compliant (safety)
- Performance tested in accordance with CSA C439 Standard
- Compliant with Prop 65
- Can be used to comply with California Title 24 2019 Part 6 Fault Indicator Display Requirements
- Can be used to earn WA energy code credits

Project:	Remarks
Location:	
Part no.:	
Qty.:	
Submitted by:	
Date:	