Fresh Air Systems - 150 CFM

HRV

Side ports: B150H75NS

35 to 150 CFM @ 0.2 in. w.g.
35 to 140 CFM @ 0.4 in. w.g.

Parts/Motor

HRV Core

Visit 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 150 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 82% at 32°F (36 CFM) and 63% at -13°F (64 CFM)
- Ports size: 5"
- Negative pressure defrost (exhaust 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)
- 6' power cord
- Unit electrical characteristics:
  120 volts, 60 Hz, 2.4 A, 163 W

Controls

AUTOMATIC | SPEED SELECTOR | ADVANCED TOUCHSCREEN | BOOST OVERRIDE

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[1]

Options

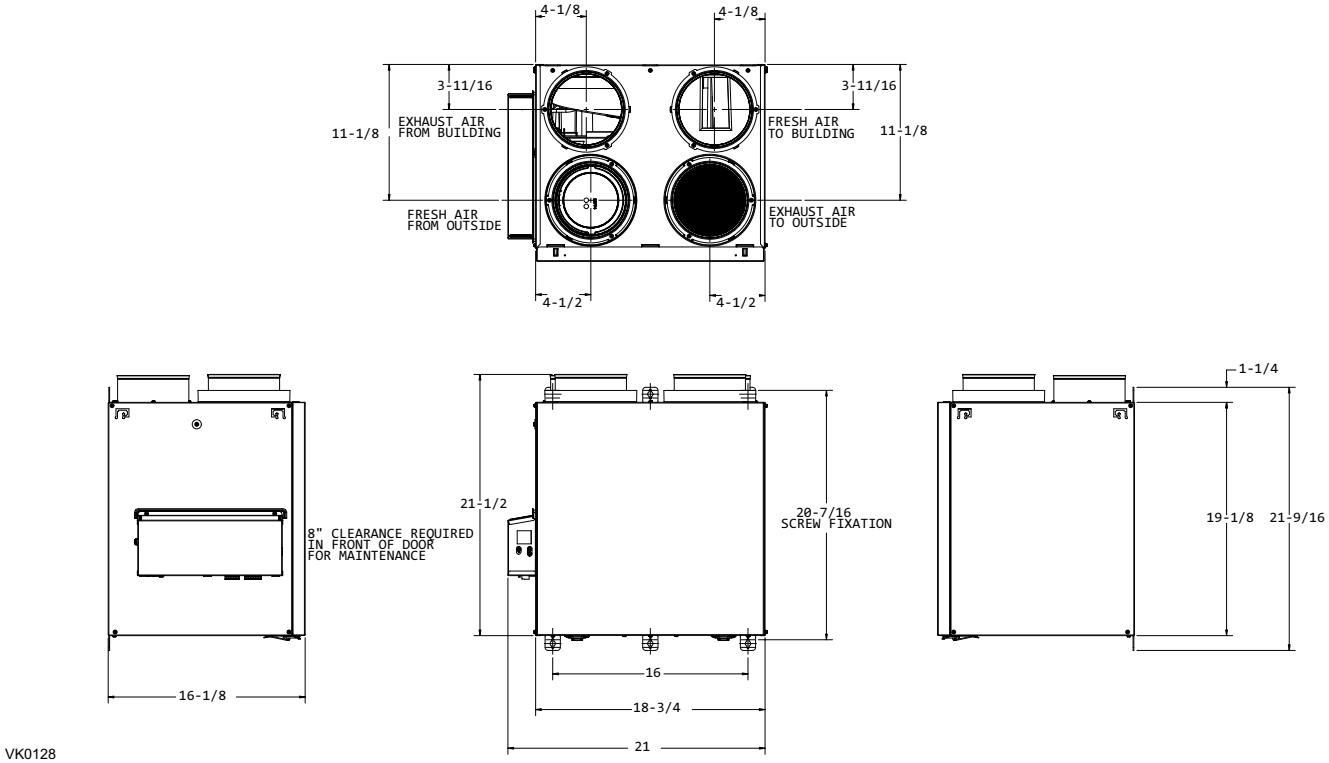
- Compatible with Tandem Terminations (part no. VTYIK1 and V14695) (CFM output must meet application requirements)

[1]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.

PRODUCT SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

5" Ports Dimensions (Top Ports)

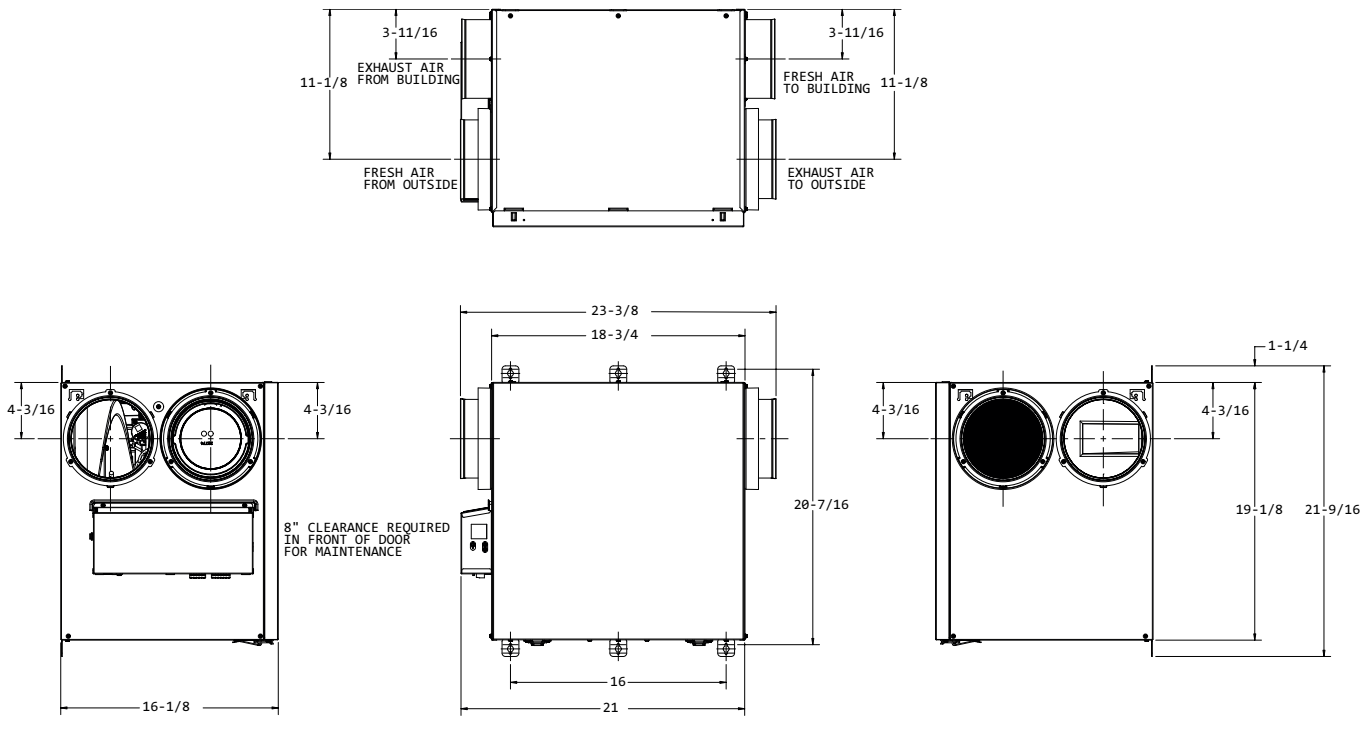
Total assembled weight: approx 35 lbs (15.9 kg) (core included)
Shipping weight: approx 42 lbs (19 kg)



Dimensions shown in inches

5" Ports Dimensions (Side Ports)

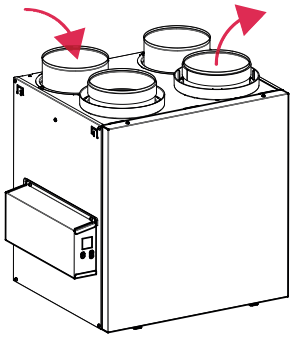
Total assembled weight: approx 35 lbs (15.9 kg) (core included)
Shipping weight: approx 42 lbs (19 kg)



Dimensions shown in inches

Defrost System

Defrost by negative pressure (exhaust defrost)
Defrost is activated at a temperature of 23°F and lower as specified within the table. During the defrost sequence, the supply blower shuts down and the exhaust blower continues to operate. The unit then returns to normal operation and continues the cycle.



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	35	10	24	9	16	10
60 to 90	50	10	32	9	20	10
91 and more	24	10	18	9	13	10
*Outdoor temperature is read by a thermistor located inside the unit, next to fresh air from outdoor port.						

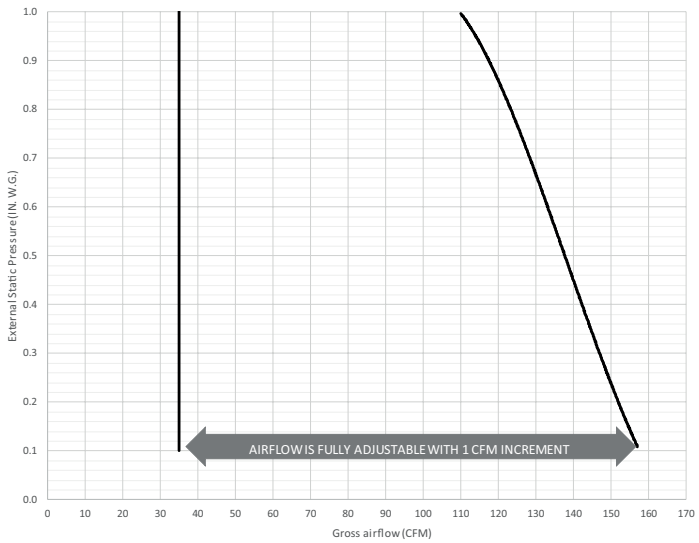
Plus	Outdoor Temperature*					
	-5°C to -15°C 23°F to 5°F		-15°C to -27°C 5°F to -17°F		-27°C and less -17°F and less	
CFM	Air exchange in minutes	Defrost in minutes	Air exchange in minutes	Defrost in minutes	Air exchange in minutes	Defrost in minutes
0 to 59	27	10	21	10	14	10
60 to 90	38	10	27	10	17	10
91 and more	20	10	16	10	11	10
*Outdoor temperature is read by a thermistor located inside the unit, next to fresh air from outdoor port.						

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)	1.0Static 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	73	155	74	157	74	157
50	0.2	71	150	72	153	72	153
75	0.3	68	144	69	146	69	146
100	0.4	66	140	67	142	67	142
125	0.5	64	136	65	138	65	138
150	0.6	62	131	63	133	63	133
175	0.7	60	127	61	129	61	129
200	0.8	57	121	58	123	58	123
225	0.9	54	114	55	117	55	117
250	1.0	51	108	52	110	52	110



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	17	36	18	82%	85%	88%
0	32	22	47	22	79%	82%	85%
0	32	30	64	28	77%	80%	82%
0	32	61	129	100	66%	71%	72%
-25	-13	30	64	43	63%	64%	80%

*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:	