Fresh Air Systems - 150 CFM

	ERV
Top ports:	B160E65RT
Side ports:	B160E65RS

35 to 150 CFM @ 0.2 in. w.g.
35 to 142 CFM @ 0.4 in. w.g.

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

Parts/Motor/ERV Core

Visit www.broan-nutone.com for complete warranty text.

Unit Description

- SRE of 76% at 32°F (36 CFM) and SRE of 71% at 32°F and 56 % at -13°F (66 CFM)
- Ports size: 6"
- 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)
- No drain required
- 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, 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, non washable
- 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

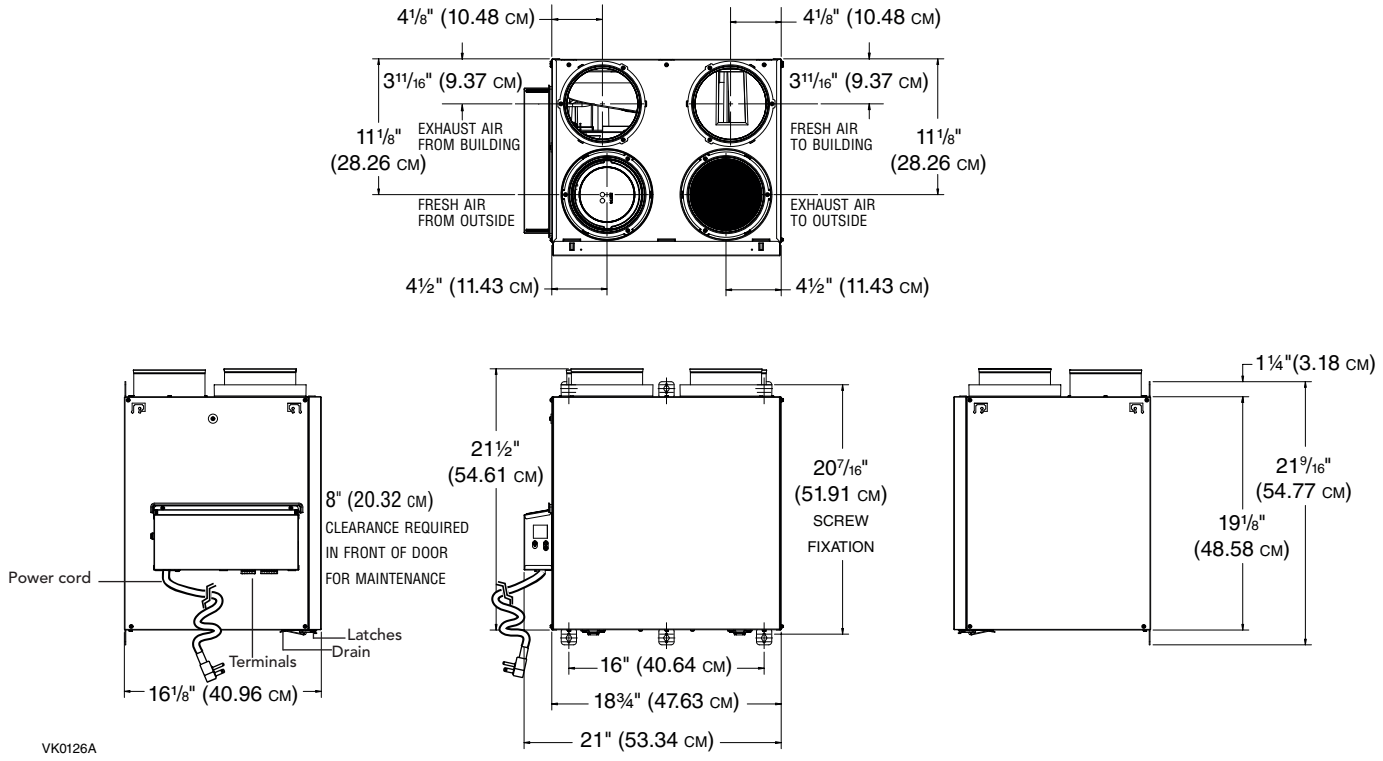
- Compatible with Tandem terminations (part no. VTYIK1 and V14695) (CFM output must meet application requirements)

[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.

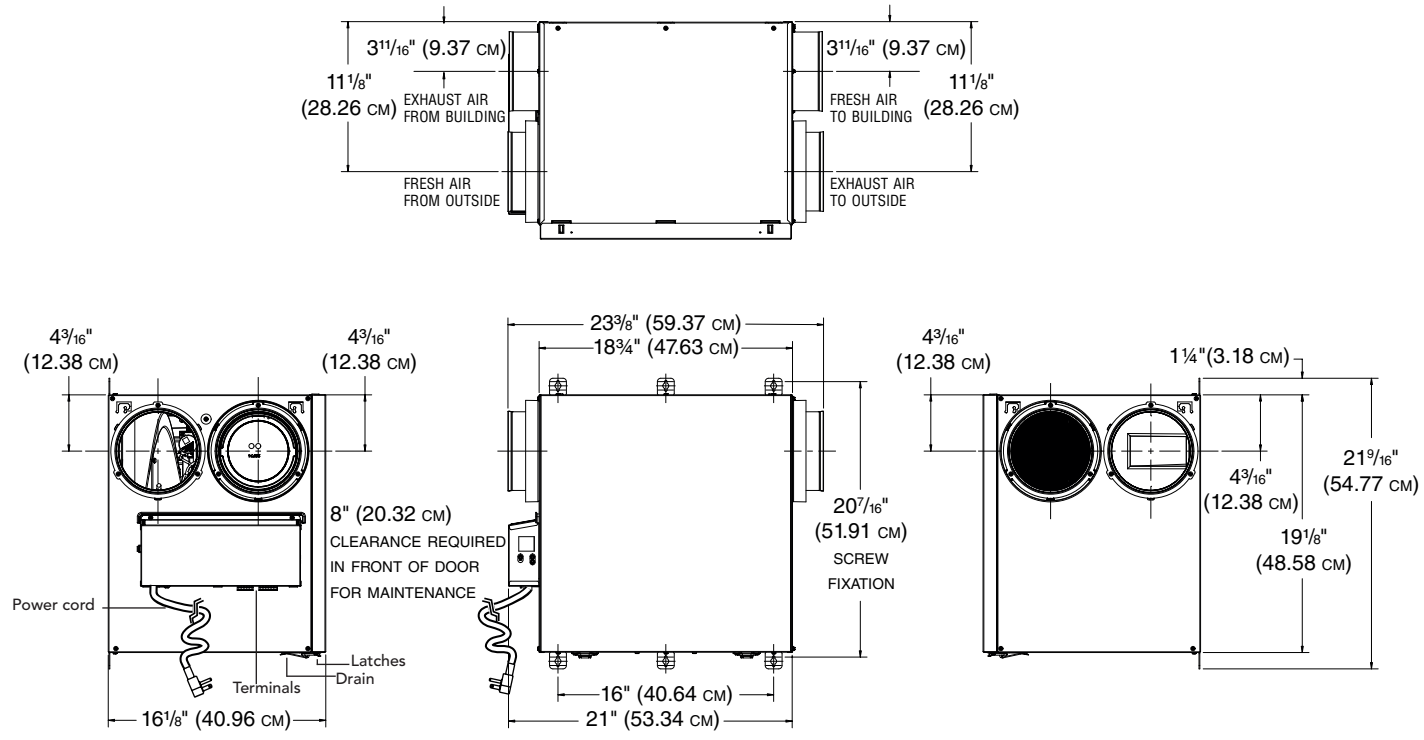
6" Ports Dimensions (Top Ports)

Total assembled weight: approx 37 lbs (16.8 kg) (core included)
Shipping weight: approx 44 lbs (20 kg)



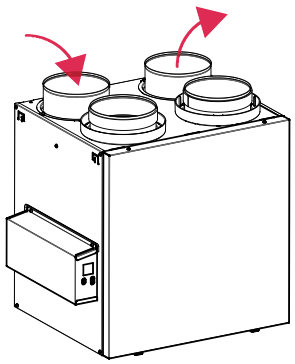
6" Ports Dimensions (Side Ports)

Total assembled weight: approx 37 lbs (16.8 kg) (core included)
Shipping weight: approx 44 lbs (20 kg)



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	25	6	14	5	13	7
60 to 104	25	6	15	5	14	7
105 and more	15	6	10	5	19	7
*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	25	7	14	7	12	8
60 to 104	25	7	15	7	13	8
105 and more	15	7	10	7	9	8
*Outdoor temperature is read by a thermistor located inside the unit, next to fresh air from outdoor port.						

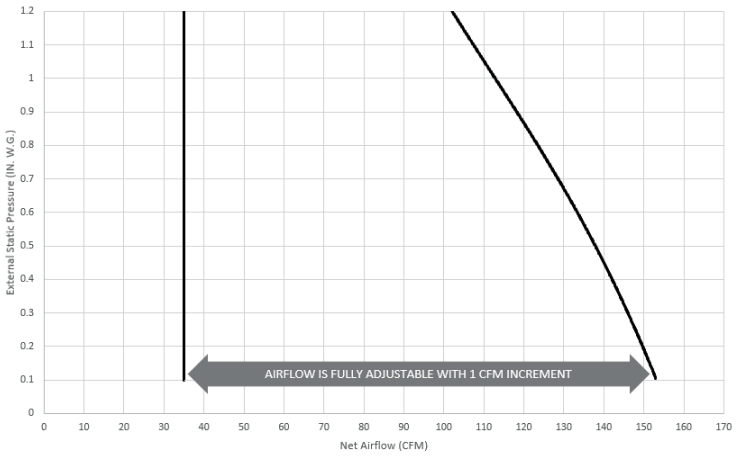
NOTE: There is a 10-minute additional defrost every 5 defrost cycles.

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	72	153	73	155	73	155
50	0.2	71	150	72	153	72	153
75	0.3	69	146	70	148	70	148
100	0.4	67	142	68	144	68	144
125	0.5	65	138	66	140	66	140
150	0.6	63	133	64	136	64	136
175	0.7	61	129	62	131	62	131
200	0.8	58	123	59	125	59	125
225	0.9	56	119	57	121	57	121
250	1.0	53	112	54	114	54	114
275	1.1	51	108	52	110	52	110
300	1.2	48	102	49	104	49	104



Fan curve not certified by HVI.

Energy Performance

Supply Temperature		Net Airflow		Power Consumed Watts	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency	Apparent Sensible Effectiveness*	Latent Recovery / Moisture Transfer
°C	°F	L/s	cfm					
Heating								
0	32	18	38	15	76%	78%	81%	0.65
0	32	31	66	25	71%	73%	75%	0.57
0	32	65	138	122	62%	68%	69%	0.48
-25	-13	31	66	61	56%	58%	74%	0.51
35	95	19	40	16	-	-	75%	0.67
35	95	31	66	26	-	-	69%	0.60
35	95	64	136	125	-	-	54%	0.51

* 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:	