# Fresh Air Systems - 160 CFM



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<sup>™</sup>, the airflow calibration and auto-balancing are achieved quickly and maintained throughout the life of the product
- Select the desired CFM (from 35 to 160 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

## Controls



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

CAU BE URED TO FORM Y WHITH TTTTLE 224 BIO PART & NULL NOICHTOR DISPLAY REQUIREMENTS

Top ports: Side ports:

### B160H75RT B160H75RS

HRV

35 to 159 CFM @ 0.2 in. w.g. 35 to 150 CFM @ 0.4 in. w.g.







Parts/Motor HRV Core

Visit Broan-NuTone.com for complete warranty text.

# **Unit Description**

- SRE of 75% at 32°F and 65% at -13°F (64 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)
- 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, 163 W

### 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 MERV13 grade filter part no. V24285

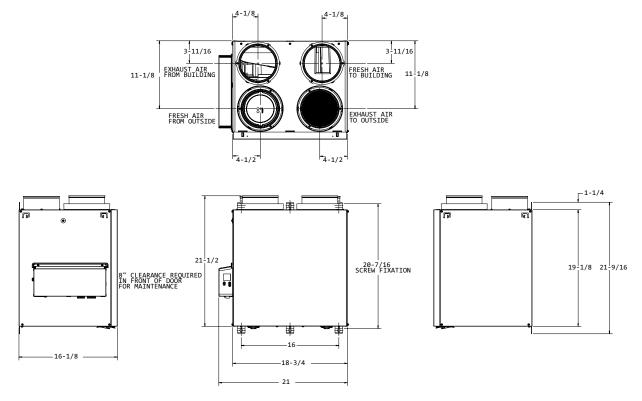
## Options

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

PRODUCT SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

# **6" Ports Dimensions (Top Ports)**

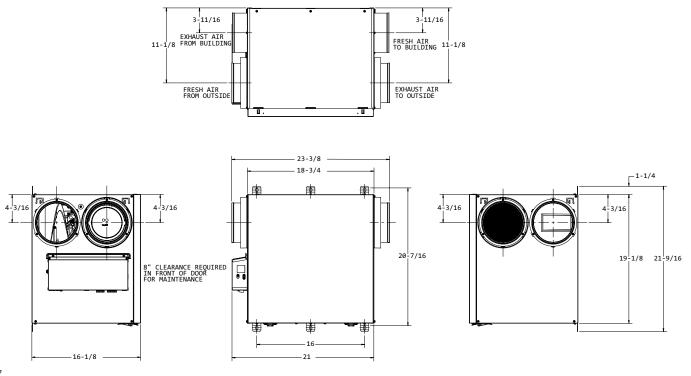
Total assembled weight: approx 35 lbs (15.9 kg) (core included) Shipping weight: approx 42 lbs (19 kg)



VK0128

Dimensions shown in inches

# **6" Ports Dimensions (Side Ports)**



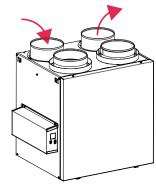
Total assembled weight: approx 35 lbs (15.9 kg) (core included) Shipping weight: approx 42 lbs (19 kg)

VK0127

## **Defrost System**

#### Homeshield<sup>™</sup> Defrosting System

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°С то -15° 23°F то 5°F	С	-15°С то -27 5°F то -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	36	8	25	8	21	10
60 to 90	50	8	32	8	25	10
91 and more 27 8 20 8 17 10						
*Outdoor temperature is read by a thermistor located inside the unit, next to fresh air from outdoor port.						

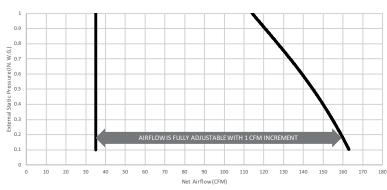
PLUS	Outdoor Temperature*						
	-5°С то -15° 23°F то 5°F	С	-15°С то -27 5°F то -17°F		-27°C and less -17°F and less		
CFM	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES	Air exchange in minutes	DEFROST IN MINUTES	AIR EXCHANGE	DEFROST IN MINUTES	
0 to 59	28	8	21	8	15	10	
60 to 90	38	8	27	8	18	10	
91 and more 20 8 16 8 12 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<sup>™</sup>, 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	77	163	78	165	78	165
50	0.2	75	159	76	161	76	161
75	0.3	73	155	74	157	74	157
100	0.4	71	150	72	153	72	153
125	0.5	68	144	69	146	69	146
150	0.6	66	140	67	142	67	142
175	0.7	63	133	64	136	64	136
200	0.8	60	127	61	129	61	129
225	0.9	57	121	58	123	58	123
250	1.0	54	114	55	117	55	117



# **Energy Performance**

Supply Tempe	RATURE	Net A	IRFLOW	Power Consumed	Sensible Recovery	Adjusted Sensible Recovery Efficiency	Apparent Sensible Effectiveness*
°C	°F	L/S	CFM	WATTS	EFFICIENCY		
HEATI	NG						
0	32	30	64	36	75%	78%	80%
0	32	61	129	100	66%	71%	72%
-25	-13	30	64	41	65%	67%	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

- Complies with ROHS 2015/863 directive
- 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:	



Broan-NuTone LLC, 926 West State Street, Hartford, Wisconsin, USA 53027 Broan-NuTone.com 800-558-1711 1108604C