# Fresh Air Systems - 160 CFM



Introducing 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 very first integrated LCD screen. The airflow is then set up automatically
- Integrated electronic airflow measurement device with real time LCD
- Integrated diagnostic tool
- Equipped with PMSM ECM motors for a very low power consumption
- 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.

USED TO COMPLY WITH 224 2019 PART 6

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 www.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 mode
- Recirculation defrost
- Painted door, corrosion resistant galvanized body
- 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, 2.5 A, 163 W
- 73.2 dBA at 150 CFM @ 0.4 in. w.g.
- 60.1 dBA at 64 CFM @ 0.2 in. w.g.

#### 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

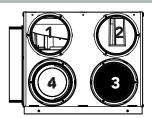
### Options

- Complete line of registers and diffusers
- Compatible with the Tandem transition (part no. VTYIK1) (for units producing up to 110 CFM only)

PRODUCT SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

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

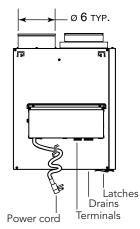
- 1 Exhaust air from building
- 2 Fresh air to building
- 3 Exhaust air to outside
- 4 Fresh air from outside

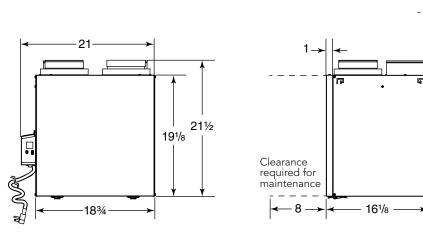


Total assembled weight: approx 35 lbs (15.9 kg) (core included) Shipping weight: approx 42 lbs (19 kg)

Clearance for ducting

q

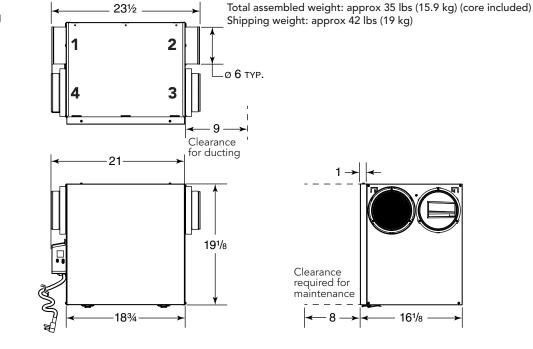




## **6" Ports Dimensions (Side Ports)**

| Latches | Drains Terminals

- 1 Exhaust air from building
- 2 Fresh air to building
- 3 Exhaust air to outside
- 4 Fresh air from outside

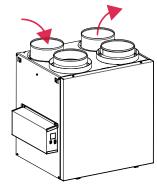


Power cord

## **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°С 23°F то 5°F		-15°С то -27°С 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.						

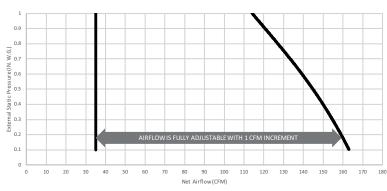
PLUS	Outdoor Temperature*					
	-5°С то -15°С 23°F то 5°F		-15°С то -27°С 5°F то -17°F		-27°C and less -17°F and less	
CFM	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES	Air exchange in minutes	DEFROST IN MINUTES	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES
0 to 59	28	8	21	8	15	10
60 to 90	38	8	27	8	18	10
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	NET AIRFLOW POWER		Sensible	Adjusted Sensible	Apparent Sensible
°C	°F	L/S	CFM	WATTS	EFFICIENCY	Recovery Efficiency	EFFECTIVENESS*
HEATIN	NG						
0	32	30	64	36	75	78	80
0	32	62	131	100	66	71	72
-25	-13	30	64	37	65	67	80

\*Data not certified by HVI.

# **Requirements and Standards**

- UL 1812 compliant (safety)
- Could be installed in compliance with CSA F326
- Performance tested as per CSA C439 Standard
- Compliant with Prop 65

• This product earned the ENERGY STAR® by meeting strict energy efficiency guidelines set by Natural Resources Canada and the US EPA. This product meets ENERGY STAR requirements only when used in Canada.

Project:		Remarks
Location:		
Part no.:		
Qty.:		
Submitted by:	Date:	
BRGAN	Broa	n-NuTone LLC, 926 West State Street, Hartford, WI 53027 1-800-558-1711