## BROAN



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 150 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

SPEED SELECTOR

#### Fresh Air Systems - 150 CFM



Top ports: B160E65RT Side ports: B160E65RS

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

**ERV** 











Parts/Motor/ERV Core

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

#### **Unit Description**

- SRE of 67% at 32°F and 56% 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)
- No drain required
- 6' power cord
- Unit electrical characteristics: 120 volts, 60 Hz, 2.5 A, 163 W
- Sound: 73.2 dBA at 150 CFM @ 0.4 in. w.g. 60.1 dBA at 64 CFM @ 0.2 in. w.g.

#### **Controls**

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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**

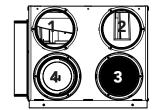
- MERV 8 grade washable standard filter (included)
- Optional MERV13 grade filter part no. V24285

#### **Options**

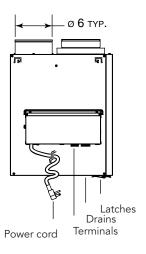
- Complete line of registers and diffusers
- Compatible with the Tandem transition (part no. VTYIK1) (for units producing up to 110 CFM only)

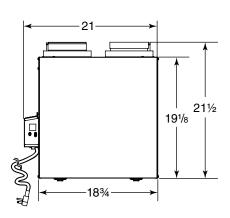
#### **6" Ports Dimensions (Top Ports)**

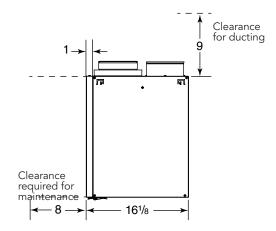
- 1 Exhaust air from building
- 2 Fresh air to building
- 3 Exhaust air to outside
- 4 Fresh air from outside



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







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

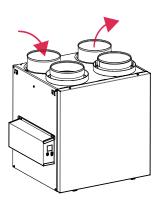
- 1 Exhaust air from building
- 2 Fresh air to building
- 3 Exhaust air to outside
- 4 Fresh air from outside

Total assembled weight: approx 37 lbs (16.8 kg) (core included) 231/2 Shipping weight: approx 44 lbs (20 kg) 2 -Ø **6** TYP. 3 Clearance for ducting 21 191/8 18¾

Clearance required for maintenance 16<sup>1</sup>/<sub>8</sub>

#### **Defrost System**

Homeshield™ 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	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°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	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							

 $^{\star}\textsc{Outdoor}$  temperature is read by a thermistor located inside the unit, next to fresh air from outdoor port.

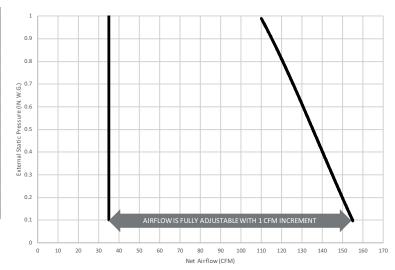
NOTE: There is a 10-minute additional defrost every 5 defrost cycles.

#### **Fan Curves with Virtuo**

Thanks to Virtuo Air Technology<sup>TM</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)	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	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	59	125	60	127	60	127
200	0.8	57	121	58	123	58	123
225	0.9	54	114	55	117	55	117
250	1.0	52	110	53	112	53	112



#### **Energy Performance**

SUPPLY TEMPE	RATURE	Net A	IRFLOW	Power	SENSIBLE	Adjusted Sensible	LATENT RECOVERY /	Apparent	TOTAL	Adjusted Total
°C	°F	L/S	CFM	Consumed Watts	F F F I C I F N C V	RECOVERY EFFICIENCY	Moisture Transfer		RECOVERY EFFICIENCY	RECOVERY EFFICIENCY
HEATIN	NG									
0	32	30	64	32	67	70	0.65	72	-	-
0	32	63	133	112	63	69	0.53	71	-	-
-25	-13	30	64	57	56	58	0.62	72	-	-
35	95	33	70	36	-	-	0.54	60	56	58
35	95	65	138	138	-	-	0.43	51	42	46

 $<sup>^{\</sup>star}$  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
- Complies with ROHS 2015/863 directive
- Compliant with Prop 65
- Can be used to comply with California Title 24 2019
  Part 6 Fault Indicator Display Requirements

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



