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[™], 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

Fresh Air Systems - 150 CFM



Top ports: B150H75NT Side ports: B150H75NS

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







HRV









Parts/Motor

tor HRV Core

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

Unit Description

- SRE of 75% at 32°F and 60% at -13°F (64 CFM)
- Ports size: 5"
- Negative pressure defrost (exhaust defrost)
- Corrosion resistant galvanized steel door and 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
- Sound: 73.2 dBA at 141 CFM @ 0.4 in. w.g. 60.1 dBa at 64 CFM @ 0.2 in. w.g.

Controls

AUTOMATIC







ADVANCED



20-40-60

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

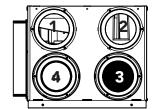
- MERV 8 grade washable standard filter (included)
- Optional MERV13 grade filter part no. V24285

Options

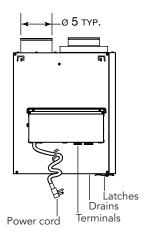
- Complete line of registers and diffusers
- Compatible with the Tandem transition (part no. VTYIK1) (for units producing up to 110 CFM only)

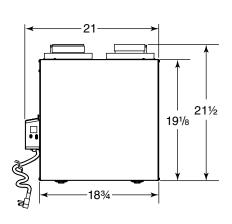
5" Ports Dimensions (Top Ports)

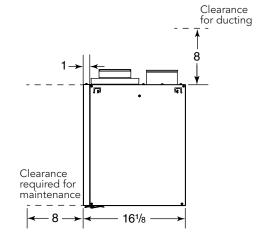
- 1 Exhaust air from building
- 2 Fresh air to building
- 3 Exhaust air to outside
- 4 Fresh air from outside



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



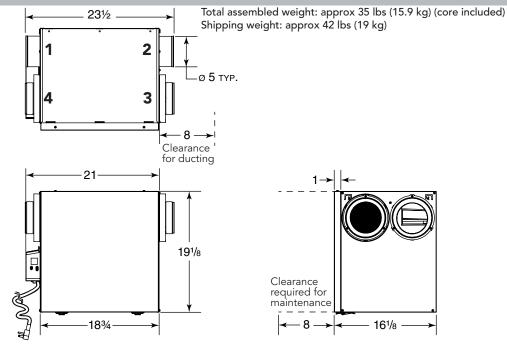




5" Ports Dimensions (Side Ports)

Latches Drains **Terminals**

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



Clearance required for maintenance 161/8

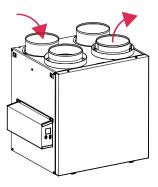
VK0116

Power cord

Defrost System

Defrost by negative pressure (exhaust defrost)

Stale air from building enters in the unit. Air is then exhausted to the outdoors.



| 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 | |
| AIR EXCHANGE IN MINUTES | DEFROST IN MINUTES | AIR EXCHANGE IN MINUTES | DEFROST IN MINUTES | AIR EXCHANGE IN MINUTES | DEFROST IN MINUTES |
| 35 | 10 | 24 | 9 | 16 | 10 |
| 50 | 10 | 32 | 9 | 20 | 10 |
| 24 | 10 | 18 | 9 | 13 | 10 |
| | 23°F TO 5°F AIR EXCHANGE IN MINUTES 35 50 | -5°C TO -15°C 23°F TO 5°F AIR EXCHANGE IN MINUTES 35 10 50 10 | -5°C TO -15°C -15°C TO -27 23°F TO 5°F 5°F 50-17°C AIR EXCHANGE IN MINUTES IN MINUTES IN MINUTES 35 10 24 50 10 32 | -5°C TO -15°C -15°C TO -27°C -23°F TO 5°F -5°F TO -17°F -4 REXCHANGE IN MINUTES IN MINUT | -5°C TO -15°C -15°C TO -27°C -27°C AND LE 23°F TO 5°F 5°F TO -17°F -17°F AND LE 17°F AND LE 11 N MINUTES IN MI |

*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 | 27 | 10 | 21 | 10 | 14 | 10 |
| 60 to 90 | 38 | 10 | 27 | 10 | 17 | 10 |
| 91 and more | 20 | 10 | 16 | 10 | 11 | 10 |

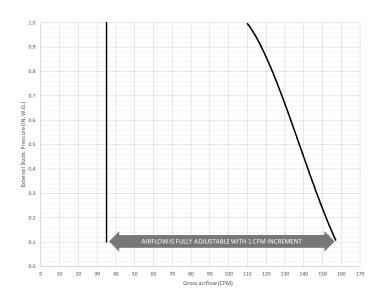
*Outdoor temperature is read by a thermistor located inside the unit, next to fresh air from outdoor port.

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 TEMPE | , RATURE | Net A | RFLOW | Power Consumed | SENSIBLE | Adjusted Sensible Recovery Efficiency | Apparent Sensible | |
|-----------------|-------------|-------|-------|-------------------|------------|--|----------------------|--|
| °C | °F | L/S | CFM | WATTS | EFFICIENCY | | EFFECTIVENESS* | |
| HEATIN | NG | | | | | | | |
| 0 | 32 | 30 | 64 | 36 | 75 | 78 | 80 | |
| 0 | 32 | 62 | 131 | 100 | 66 | 71 | 72 | |
| -25 | -13 | 30 | 64 | 39 | 60 | 61 | 81 | |

^{*}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.
- Can be used to comply with California Title 24 2019 Part 6 Fault Indicator Display Requirements

| Project: | Remarks |
|---------------------|---------|
| Location: | |
| Part no.: | |
| Qty.: | |
| Submitted by: Date: | |

