



VB0332

## Fresh Air Systems - 130 CFM



### ERV

Top ports: B150E75NT  
Side ports: B150E75NS

35 to 136 CFM @ 0.2 in. w.g.  
35 to 127 CFM @ 0.4 in. w.g.



Parts/Motor/ERV Core

Visit Broan-NuTone.com for complete warranty text.

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 136 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

### AUTOMATIC



VC0184

### SPEED SELECTOR



VC0187

### ADVANCED TOUCHSCREEN



VC0189

### BOOST OVERRIDE



VC0188

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

## Unit Description

- SRE of 75% at 32°F and 52% at -13°F (66 CFM)
- Ports size: 5"
- Negative pressure defrost (exhaust 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
- 6' power cord
- Unit electrical characteristics:  
120 volts, 60 Hz, 2.4 A, 163 W

## Core

- Polypropylene crossflow core with polymeric membrane and aluminum covers, 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<sup>1</sup>

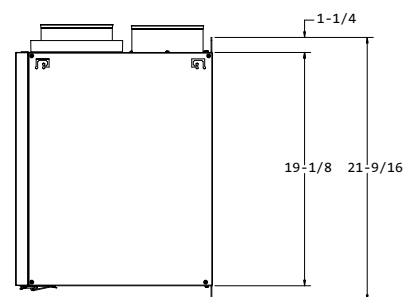
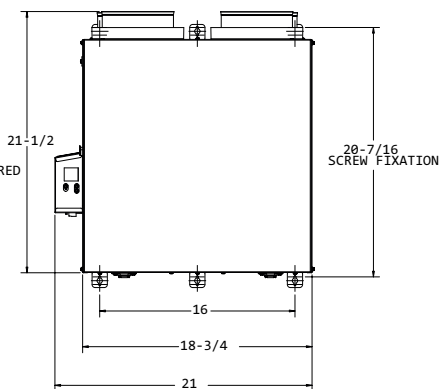
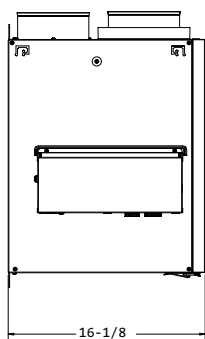
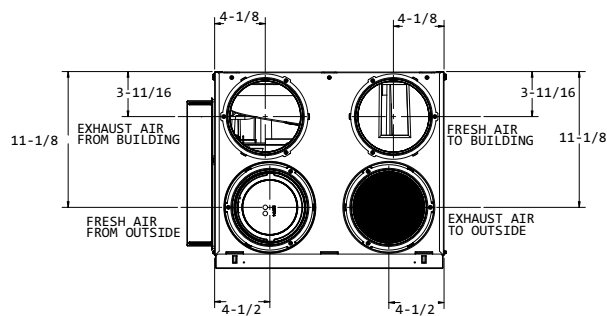
## Options

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

<sup>1</sup>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.

## 5" Ports Dimensions (Top Ports)

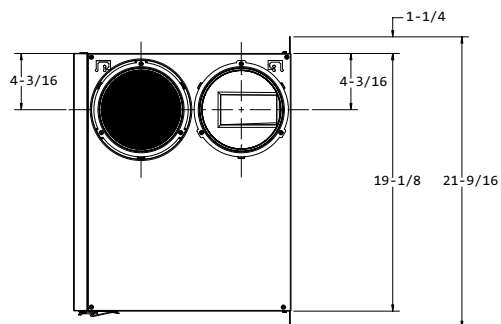
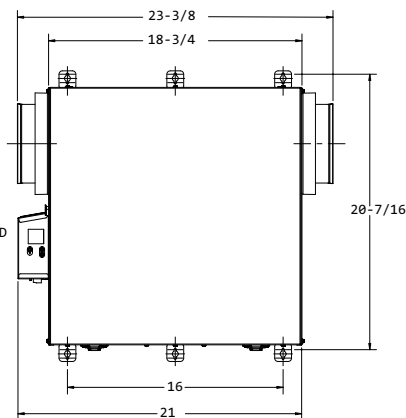
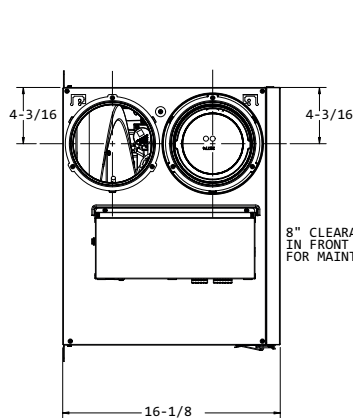
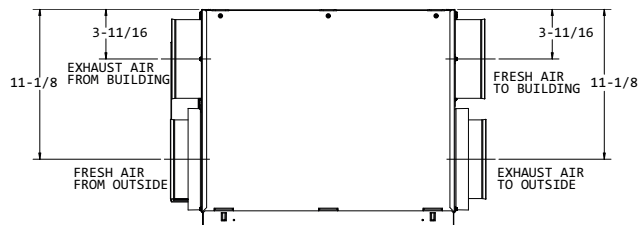
Total assembled weight: approx 37 lbs (16.8 kg) (core included)  
Shipping weight: approx 44 lbs (20 kg)



VK0128

## 5" Ports Dimensions (Side Ports)

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

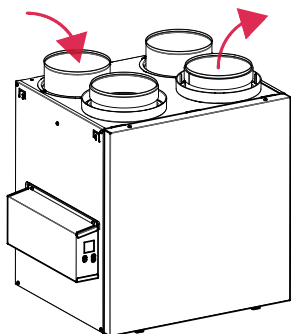


VK0127

## Defrost System

### Defrost by negative pressure (exhaust defrost)

Defrost is activated at a temperature of 23°F and lower as specified within the table. During the defrost sequence, the supply blower shuts down and the exhaust blower continues to operate. The unit then returns to normal operation and continues the cycle.



| DISCRETION<br>(Factory setting) | OUTDOOR TEMPERATURE*         |                       |                                |                       |                                  |                       |
|---------------------------------|------------------------------|-----------------------|--------------------------------|-----------------------|----------------------------------|-----------------------|
|                                 | -5°C TO -15°C<br>23°F TO 5°F |                       | -15°C TO -27°C<br>5°F TO -17°F |                       | -27°C AND LESS<br>-17°F AND LESS |                       |
| CFM                             | AIR EXCHANGE<br>IN MINUTES   | DEFROST<br>IN MINUTES | AIR EXCHANGE<br>IN MINUTES     | DEFROST<br>IN MINUTES | AIR EXCHANGE<br>IN MINUTES       | DEFROST<br>IN MINUTES |
| 0 to 59                         | 25                           | 6                     | 16                             | 5                     | 13                               | 7                     |
| 60 to 104                       | 25                           | 6                     | 17                             | 5                     | 14                               | 7                     |
| 105 and more                    | 15                           | 6                     | 11                             | 5                     | 10                               | 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<br>23°F TO 5°F |                       | -15°C TO -27°C<br>5°F TO -17°F |                       | -27°C AND LESS<br>-17°F AND LESS |                       |
| CFM          | AIR EXCHANGE<br>IN MINUTES   | DEFROST<br>IN MINUTES | AIR EXCHANGE<br>IN MINUTES     | DEFROST<br>IN MINUTES | AIR EXCHANGE<br>IN MINUTES       | DEFROST<br>IN MINUTES |
| 0 to 59      | 25                           | 7                     | 15                             | 7                     | 12                               | 8                     |
| 60 to 104    | 25                           | 7                     | 16                             | 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.

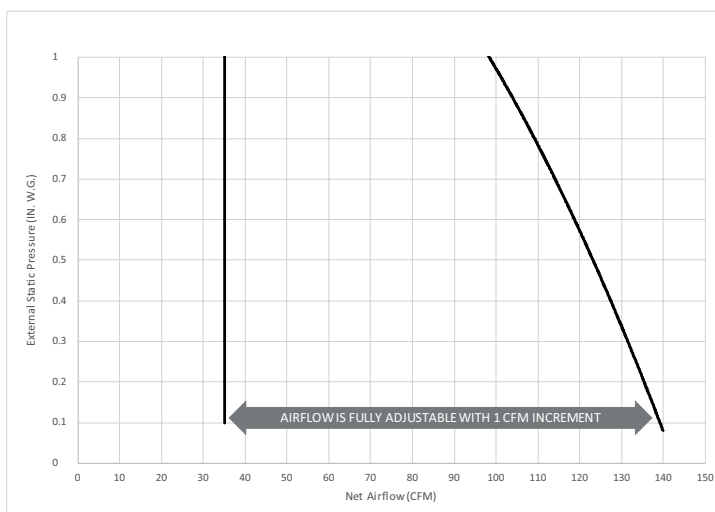
**NOTE:** There is a 10-minute additional defrost every 5 defrost cycles.

## 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                        | 65                       | 138                      | 67                         | 142                        | 67                          | 142                         |
| 50                   | 0.2                        | 64                       | 136                      | 66                         | 140                        | 66                          | 140                         |
| 75                   | 0.3                        | 62                       | 131                      | 64                         | 136                        | 64                          | 136                         |
| 100                  | 0.4                        | 60                       | 127                      | 62                         | 131                        | 62                          | 131                         |
| 125                  | 0.5                        | 58                       | 123                      | 60                         | 127                        | 60                          | 127                         |
| 150                  | 0.6                        | 56                       | 119                      | 57                         | 121                        | 57                          | 121                         |
| 175                  | 0.7                        | 54                       | 114                      | 55                         | 117                        | 55                          | 117                         |
| 200                  | 0.8                        | 51                       | 108                      | 52                         | 110                        | 52                          | 110                         |
| 225                  | 0.9                        | 49                       | 104                      | 50                         | 106                        | 50                          | 106                         |
| 250                  | 1.0                        | 46                       | 97                       | 47                         | 100                        | 47                          | 100                         |



## Energy Performance

| SUPPLY TEMPERATURE |     | NET AIRFLOW |     | POWER CONSUMED WATTS | SENSIBLE RECOVERY EFFICIENCY | ADJUSTED SENSIBLE RECOVERY EFFICIENCY | APPARENT SENSIBLE EFFECTIVENESS* | TOTAL RECOVERY EFFICIENCY | ADJUSTED TOTAL RECOVERY EFFICIENCY | LATENT RECOVERY / MOISTURE TRANSFER |
|--------------------|-----|-------------|-----|----------------------|------------------------------|---------------------------------------|----------------------------------|---------------------------|------------------------------------|-------------------------------------|
| °C                 | °F  | L/s         | CFM |                      |                              |                                       |                                  |                           |                                    |                                     |
| HEATING            |     |             |     |                      |                              |                                       |                                  |                           |                                    |                                     |
| 0                  | 32  | 31          | 66  | 35                   | 75%                          | 79%                                   | 80%                              | -                         | -                                  | 0.67                                |
| 0                  | 32  | 59          | 125 | 110                  | 69%                          | 75%                                   | 76%                              | -                         | -                                  | 0.59                                |
| 35                 | 95  | 31          | 66  | 41                   | -                            | -                                     | 73%                              | 66%                       | 69%                                | 0.69                                |
| 35                 | 95  | 59          | 125 | 120                  | -                            | -                                     | 63%                              | 56%                       | 60%                                | 0.60                                |
| -25                | -13 | 31          | 66  | 34                   | 52%                          | 54%                                   | 80%                              | -                         | -                                  | 0.45                                |

\* 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:         |         |