# Fresh Air Systems - 150 CFM

Part no. BLP150E75NS-PC (Plug Connected)

For hardwired applications, refer to BLP150E75NS-HW

35 to 146 CFM @ 0.4 in. w.g.

Parts/Motor/ERV Core

Visit Broan-NuTone.com for complete warranty text.

The industry's most versatile and advanced fresh air system, created to simplify the design, specification and installation process while delivering superior air quality in a compact design.

- Quickest installation in its category saving the installer up to 20 minutes per unit, thanks to the auto-balancing and self-adjusting VIRTUO™ technology*
- Airflow direction can be swapped with the flip of an integrated selection switch**, eliminating the need for specifying different models to accommodate mirrored floor plans and providing simplicity throughout the design and installation processes
- Horizontal and wall mount options provide location flexibility to accommodate various application needs
- Integrated LCD screen provides intuitive CFM selection in 1 CFM increments throughout the airflow range providing real-time CFM and watt usage values
- Equipped with PMSM ECM motors for reliable and energy efficient operation
- Fault indicator display (FID) responding to filter maintenance, airflow, watt usage and system sensors

*US Patent No. 11168916 - Canadian patent pending
**Patent pending

## Unit Attributes

- SRE of 75% at 32°F (0°C) (64 CFM)
- Ports size: 6"
- 2.0 CFM/Watt (64 CFM)
- Defrost operation will automatically activate to manage recovery core frost and maintain unit performance. When outdoor air temperature is < 14°F (-10°C), an external pre-heater must be used.
- 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
- Integrated motorized dampers (no additional backdraft dampers required)
- No condensate drain required
- Unit electrical characteristics:
  Volt:120/1 60 Hz, MCA: 2.4 A, MCOP: 15 A, Watts: 170
- 3' power cord

## Optional Controls

AUTOMATIC | SPEED SELECTOR*** | ADVANCED TOUCHSCREEN | BOOST OVERRIDE

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

***Speed selector control available only in the US.

## Recovery Core

- ERV polypropylene crossflow core and plastic covers, impact resistant, non washable

  Dimensions: 12" x 24" x 8.5" (30.5 cm x 61 cm x 21.6 cm)

## Filtration

- MERV 8 grade washable standard filter (included)
- Optional 2" thick MERV13 grade filter (disposable)

## Exterior Termination Options

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

PRODUCT SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

# Dimensions

9" CLEARANCE REQUIRED FROM DOOR SURFACE FOR MAINTENANCE

DOOR FULLY REMOVABLE AFTER 10° OF ROTATION

## Fan Curves with VIRTUO™

Thanks to VIRTUO™ technology, no need to balance the unit manually. Both PMSM ECM 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 | 75 | 159 | 76 | 161 | 76 | 161 |
| 50 | 0.2 | 73 | 155 | 74 | 157 | 74 | 157 |
| 75 | 0.3 | 71 | 150 | 72 | 153 | 72 | 153 |
| 100 | 0.4 | 69 | 146 | 70 | 148 | 70 | 148 |
| 125 | 0.5 | 67 | 142 | 68 | 144 | 68 | 144 |
| 150 | 0.6 | 65 | 138 | 66 | 140 | 66 | 140 |
| 175 | 0.7 | 63 | 133 | 64 | 136 | 64 | 136 |
| 200 | 0.8 | 61 | 129 | 62 | 131 | 62 | 131 |
| 225 | 0.9 | 58 | 123 | 59 | 125 | 59 | 125 |
| 250 | 1.0 | 56 | 119 | 57 | 121 | 57 | 121 |

## 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 | 30 | 64 | 32 | 75% | 80% | 81% | - | - | 0.55 |
| 0 | 32 | 52 | 110 | 78 | 68% | 73% | 74% | - | - | 0.49 |
| Cooling | | | | | | | | | | |
| 35 | 95 | 30 | 64 | 32 | - | - | 76% | 65% | 67% | 0.63 |
| 35 | 95 | 52 | 110 | 82 | - | - | 68% | 56% | 59% | 0.55 |

*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 ASHRAE standard 62.2
- Can be used to comply with ASHRAE 90.1-2019 requirements
- Can be used to comply with International Energy Conservation Code (IECC) requirements
- 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
- HVI certified

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

# Fresh Air Systems - 150 CFM

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