



## BROAN ERV180

Part no. ERV180S

80 to 186 CFM (0.4 in. w.g.)



VB0267

### ERV180: PERFECT FOR NEW RESIDENTIAL CONSTRUCTIONS

Contractors and builders need cost-effective, reliable and code-compliant mechanical ventilation systems for new home construction. The Broan ERV180 offers superior value at an entry-level price. The ERV180 represents over 15 years of continuous improvement to deliver contractors the durability and reliability they have come to expect from Broan.

Key features:

- Removable crossflow polymerized paper ERV core
- Maintenance free, totally enclosed, sealed bearings motor
- Pressure taps, balancing dampers and straps for insulated ducts for quick, effective installation
- Can be installed upside down
- Compatible with the VT7W digital wall control

### REPAIRS AND MAINTENANCE

Broan ERV180 modular design makes it possible to remove all mechanical parts in less than 5 minutes. The low power consumption motor is permanently lubricated. Finally, the electronic circuit board eliminates electromechanical parts, reducing repair time to a minimum.

### WARRANTY

The ERV180 is protected by a 5-year warranty on parts, including the energy recovery core, with the original proof of purchase.

## ENERGY RECOVERY VENTILATOR

### Controls

- This unit is very simple to operate: press on its push button, located on the electrical compartment, to activate it. Press once for low speed, once again for high speed, and once more to stop it.
- For more convenience, this unit can also be controlled by an optional main control. For a complete list of optional main and auxiliary controls available, refer to the **Wall Control Compatibility Chart** on last pages of wall controls specification sheet.
- For more details about controls, refer to the **Main and auxiliary wall controls** user guide.

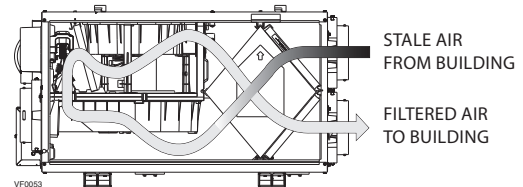
### Options

- Complete line of registers and diffusers

### Defrosting System

The ERV180 uses an efficient defrosting method. No negative pressure is created by air exhausted to the outside, as the air is recirculated into the house, helping to prevent any backdraft.

| OUTDOOR TEMPERATURE |                | DEFROST CYCLE (IN MINUTES) |
|---------------------|----------------|----------------------------|
| °C                  | °F             | DEFROST / OPERATION        |
| WARMER THAN -5      | WARMER THAN 23 | NO DEFROST                 |
| -5 TO -15           | 23 TO 5        | 10 / 60                    |
| -15 TO -27          | 5 TO -17       | 10 / 30                    |
| -27 AND LESS        | -17 AND LESS   | 10 / 20                    |



### Energy Recovery Core

Dimensions: 15.4" x 10.6" x 10.6" (39.1 cm x 26.9 cm x 26.9 cm)

Exchange surface: 107 ft.<sup>2</sup> (9.94 m<sup>2</sup>)

Weight: 14.2 lb. (6.44 kg)

Material: Polymerized paper

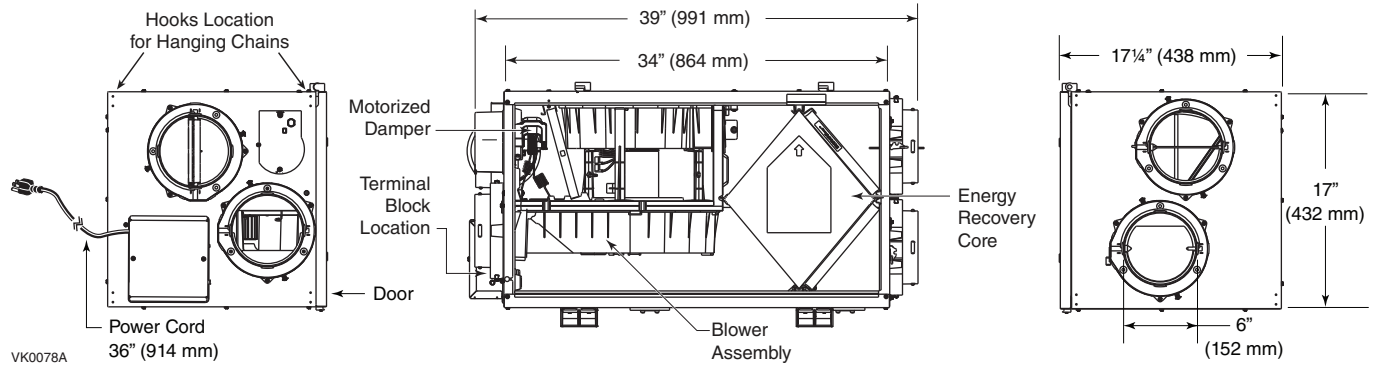
Type: Crossflow core

Warranty: 5 years

### Requirements and Standards

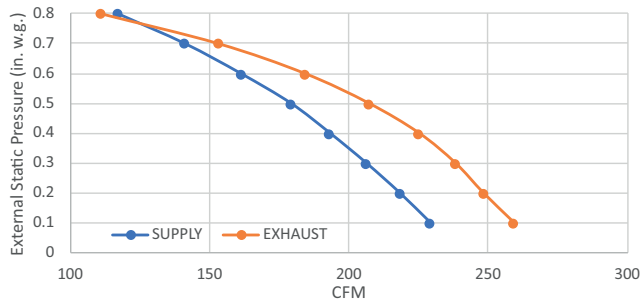
- Complies with the UL 1812 requirements regulating the installation of Energy Recovery Ventilators
- Complies with the CSA C22.2 no. 113 Standard applicable to ventilators
- Complies with CSA F326 requirements regulating the installation of Energy Recovery Ventilators
- HVI certified
- Technical data was obtained from published results of tests relating to CSA C439 Standards

## DIMENSIONS: ERV180



## VENTILATION PERFORMANCE

| EXT. STATIC PRESSURE |          | NET SUPPLY AIR FLOW |     |                   | GROSS AIR FLOW |     |                   |         |     |                   |
|----------------------|----------|---------------------|-----|-------------------|----------------|-----|-------------------|---------|-----|-------------------|
| PA                   | IN. W.G. | L/S                 | CFM | M <sup>3</sup> /H | SUPPLY         |     |                   | EXHAUST |     |                   |
|                      |          |                     |     |                   | L/S            | CFM | M <sup>3</sup> /H | L/S     | CFM | M <sup>3</sup> /H |
| 25                   | 0.1      | 105                 | 221 | 374               | 108            | 229 | 389               | 122     | 259 | 439               |
| 50                   | 0.2      | 99                  | 210 | 356               | 103            | 218 | 371               | 117     | 248 | 421               |
| 75                   | 0.3      | 93                  | 199 | 338               | 97             | 206 | 349               | 112     | 238 | 403               |
| 100                  | 0.4      | 86                  | 186 | 317               | 91             | 193 | 328               | 106     | 225 | 382               |
| 125                  | 0.5      | 76                  | 172 | 292               | 84             | 179 | 302               | 98      | 207 | 353               |
| 150                  | 0.6      | 70                  | 156 | 263               | 76             | 161 | 274               | 87      | 184 | 313               |
| 175                  | 0.7      | 60                  | 136 | 230               | 67             | 141 | 241               | 72      | 153 | 259               |
| 200                  | 0.8      | 50                  | 113 | 191               | 55             | 117 | 198               | 53      | 111 | 191               |



## ENERGY PERFORMANCE

| SUPPLY TEMPERATURE |     | NET AIR FLOW |     |                   | POWER CONSUMED WATTS | SENSIBLE RECOVERY EFFICIENCY | ADJUSTED SENSIBLE RECOVERY EFFICIENCY | APPARENT SENSIBLE EFFECTIVENESS* | LATENT/RECOVERY MOISTURE TRANSFER |
|--------------------|-----|--------------|-----|-------------------|----------------------|------------------------------|---------------------------------------|----------------------------------|-----------------------------------|
| °C                 | °F  | L/s          | CFM | M <sup>3</sup> /H |                      |                              |                                       |                                  |                                   |
| HEATING            |     |              |     |                   |                      |                              |                                       |                                  |                                   |
| 0                  | 32  | 38           | 80  | 137               | 80                   | 48                           | 56                                    | 73                               | 0.51                              |
| 0                  | 32  | 53           | 112 | 191               | 139                  | 45                           | 55                                    | 70                               | 0.46                              |
| 0                  | 32  | 77           | 163 | 277               | 167                  | 50                           | 59                                    | 70                               | 0.42                              |
| -25                | -13 | 33           | 69  | 119               | 105                  | 36                           | 42                                    | 74                               | 0.51                              |
| COOLING            |     |              |     |                   |                      | TOTAL RECOVERY EFFICIENCY    | ADJUSTED TOTAL RECOVERY EFFICIENCY    |                                  |                                   |
| 35                 | 95  | 39           | 83  | 140               | 78                   |                              | 42                                    | 47                               |                                   |

\*Data not certified by HVI.

NOTE: All specifications are subject to change without notice.

## SPECIFICATIONS AND RATINGS

- Model: ERV180
- Part Number: ERV180S
- Total Assembled Weight: (Including polymerized paper core): 76 lb. (35 kg)
- 6" Round Ports
- Filters: 15 ppi washable reticulated foam  
15.375" x 7.125" x 0.75"  
(39 cm x 18 cm x 1.9 cm)
- Housing: Pre-painted steel
- Insulation: Expanded polystyrene
- Mounting: Suspension by chains and springs
- Supply and exhaust blower motor:  
1 PSC motor  
- Protection Type: Thermally protected  
- Insulation Class: B
- Speed Control on unit: Low and High speeds. Other modes available with optional main wall controls.
- Energy Recovery Core:  
- Exchange Surface Area: 107 ft.<sup>2</sup> (9.94 m<sup>2</sup>)  
- Type: Crossflow  
- Material: Polymerized paper
- Unit Electrical Characteristics:  
120 volts, 60 Hz, 2.1 amps, 200 watts

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