

# HRV EC DR 150

## Heat Recovery Ventilator

**HRV EC DR 150** is a complete whole house ventilation system designed to bring a continuous supply of fresh air into the house while exhausting an equal amount of stale air.  
Five year warranty.



### Casing

- Steel casing is covered with high-quality multilayer aluminum and zinc alloy to prevent corrosion.
- The casing is equipped with a switch to turn the ventilator off when the service panel is opened.

### Filter

- Washable MERV 6 air filters in exhaust and supply air streams.
- Optional supply: anti grease aluminum filter.

### Fans

- High efficient electronically commutated motors with external motor and impeller with forward curved blades. EC motors are featured with high performance and total speed controllable range. The electric motors and impellers are dynamically balanced.

### Heat Recovery Core

- Polystyrene core ensures efficient heat recovery.



### Defrost System

- Recirculation or only exhaust defrost modes are available.

### Suitable for

- Bathroom / kitchen / apartments / cottages / small offices.

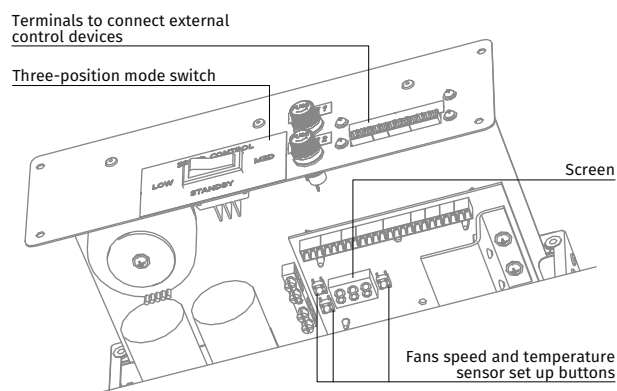
### Constant Flow

- HRV EC DR 150 CF** has an automatic constant air flow control function to keep the air flow in supply and exhaust air ducts constant even in case of variable air resistance.
- This function is provided with the integrated air flow control units. The electronic sensors convert the actual air flow to the analogue signal that is proportional to the air flow in the air duct. These signals are transmitted to the controller that controls the rotation speed of a respective fan in such a way that the actual rotations speed is equal to the set value.

### Manual Balancing

- Manual balancing is a standard balancing system. Fan speed manually adjusted by operating on units controller (built-in control board with independent fan speed adjustment 0 % – 100 %).

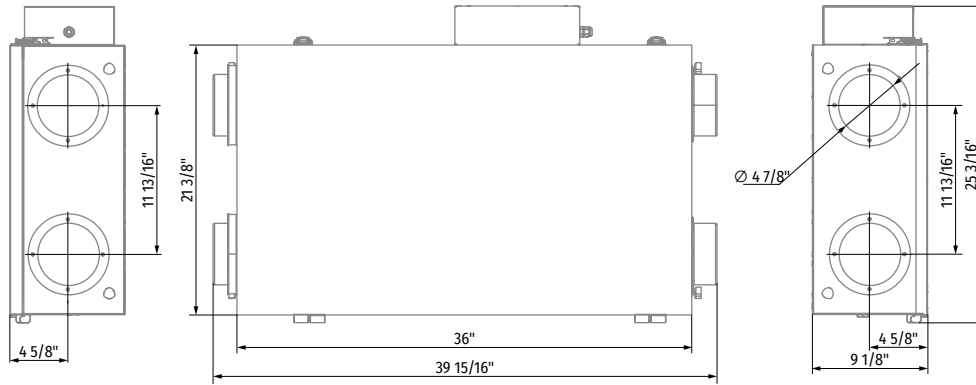
### Control Board



- The unit incorporates an integrated control system with following functions:
  - Operation mode switch.
  - Air flow balancing enabled by supply and exhaust fan independent speed adjustment from 0 to 100 % (percentage is displayed on built-in screen).
  - Automatic recovery core frost protection.
  - External control device connection (up to 5 at the same time).

| MODEL | QUANTITY | COMMENTS | PROJECT       |
|-------|----------|----------|---------------|
|       |          |          | location:     |
|       |          |          | architect:    |
|       |          |          | engineer:     |
|       |          |          | contractor:   |
|       |          |          | submitted by: |

**Dimensions**

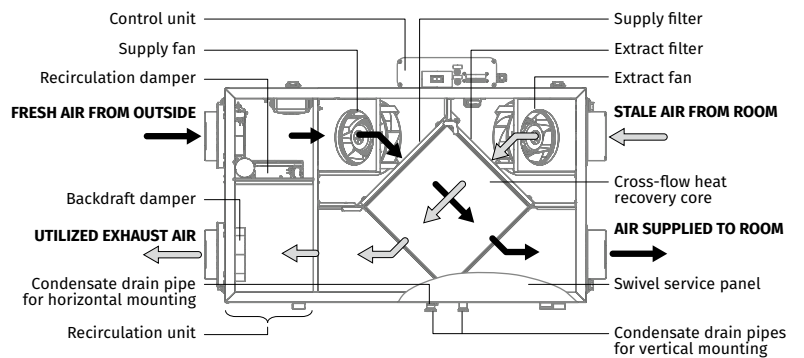
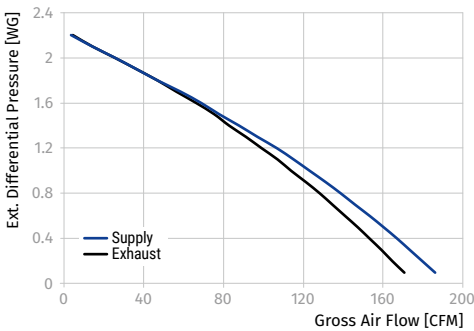


**Technical Data**

| External Static Pressure |       | Net Supply Air Flow |     | Gross Air Flow |            |             |             | Power |
|--------------------------|-------|---------------------|-----|----------------|------------|-------------|-------------|-------|
| Pa                       | in WG | l/s                 | CFM | Supply l/s     | Supply CFM | Exhaust l/s | Exhaust CFM |       |
| 25                       | 0.1   | 85                  | 181 | 88             | 186        | 81          | 171         | 186   |
| 50                       | 0.2   | 82                  | 175 | 85             | 180        | 78          | 165         | 186   |
| 75                       | 0.3   | 80                  | 169 | 82             | 174        | 75          | 159         | 186   |
| 100                      | 0.4   | 77                  | 162 | 79             | 167        | 72          | 153         | 185   |
| 125                      | 0.5   | 74                  | 156 | 76             | 161        | 70          | 147         | 185   |
| 150                      | 0.6   | 70                  | 149 | 73             | 154        | 67          | 141         | 184   |
| 175                      | 0.7   | 67                  | 142 | 69             | 146        | 64          | 135         | 184   |
| 200                      | 0.8   | 64                  | 135 | 66             | 139        | 61          | 128         | 184   |
| 225                      | 0.9   | 55                  | 117 | 62             | 131        | 57          | 121         | 183   |
| 250                      | 1     | 52                  | 110 | 58             | 123        | 54          | 114         | 182   |
| 275                      | 1.1   | 49                  | 104 | 54             | 115        | 51          | 107         | 181   |

| External Static Pressure |       | Net Supply Air Flow |     | Gross Air Flow |            |             |             | Power |
|--------------------------|-------|---------------------|-----|----------------|------------|-------------|-------------|-------|
| Pa                       | in WG | l/s                 | CFM | Supply l/s     | Supply CFM | Exhaust l/s | Exhaust CFM |       |
| 300                      | 1.2   | 45                  | 96  | 50             | 107        | 47          | 99          | 181   |
| 325                      | 1.3   | 42                  | 88  | 46             | 97         | 43          | 91          | 180   |
| 350                      | 1.4   | 38                  | 80  | 41             | 88         | 39          | 83          | 178   |
| 375                      | 1.5   | 34                  | 73  | 37             | 78         | 36          | 75          | 176   |
| 400                      | 1.6   | 30                  | 64  | 32             | 69         | 31          | 66          | 174   |
| 425                      | 1.7   | 26                  | 54  | 28             | 58         | 27          | 56          | 172   |
| 450                      | 1.8   | 21                  | 45  | 22             | 47         | 22          | 47          | 169   |
| 475                      | 1.9   | 16                  | 35  | 17             | 36         | 17          | 36          | 166   |
| 500                      | 2     | 12                  | 24  | 12             | 25         | 12          | 25          | 163   |
| 525                      | 2.1   | 6                   | 14  | 7              | 14         | 7           | 14          | 159   |
| 550                      | 2.2   | 2                   | 4   | 2              | 3          | 2           | 4           | 156   |

Note: fan curve performed on high speed



**Energy Performance**

|                             |     | Supply Temperature |     | Net Air Flow |     | Average Power [Watts] | Sensible Recovery Efficiency | Apparent Sensible Effectiveness | Net Moisture Transfer |
|-----------------------------|-----|--------------------|-----|--------------|-----|-----------------------|------------------------------|---------------------------------|-----------------------|
|                             |     | °C                 | °F  | l/s          | CFM |                       |                              |                                 |                       |
| Heating                     | I   | 0                  | 32  | 31           | 66  | 26                    | 69                           | 78                              | 0.04                  |
|                             | II  | 0                  | 32  | 46           | 97  | 42                    | 67                           | 74                              | 0.05                  |
|                             | III | 0                  | 32  | 50           | 107 | 52                    | 65                           | 73                              | 0.05                  |
|                             | IV  |                    |     |              |     |                       |                              |                                 |                       |
|                             | V   | -25                | -13 |              |     |                       |                              |                                 |                       |
| **Total Recovery Efficiency |     |                    |     |              |     |                       |                              |                                 |                       |
| Cooling                     | VI  | 35                 | 95  | 31           | 66  | 25.8                  | 40.2**                       | 64                              | 0.04                  |

\*\* Indicates total recovery efficiency, not sensible recovery efficiency 250 Pa = 1 in of water: 0.472 l/s = 1 CFM

| Model        | Volts        | Max. Watts | Max. Amps |
|--------------|--------------|------------|-----------|
| HRV ECDR 150 | 120 V, 60 Hz | 186        | 2.5       |