# FIT® 120E Series

## Energy Recovery Ventilator (ERV)

Download BIM model and Specs

| | |
|---|---|
| FIT 120E part # | – 463401 |
| FIT 120E-M part # | – 463405 |
| FIT 120E-HC part # | – 463409 |
| FIT 120E-M-HC part # | – 463412 |

| FIT | 120 | E | - | M | - | HC |
|---|---|---|---|---|---|---|
| Product Name | Approximate CFM @ 0.4 in. w.g. | Energy Recovery | | Mirrored | | Hard Connect |

These ERVs are specifically designed for multi-family applications. They can be programmed to supply balanced ventilation continuously or intermittently. This product line includes code-compliant and variable solutions to fit any multi-family floor plan.

**Features**

- Warm supply and return air on the right-hand side (standard products) or on the left-hand side (-M products)
- Hard-connect system, no power cord provided (-HC products)
- No drain required
- Easy to install on ceiling or wall with mounting bracket included
- Energy recovery core (washable)
- Electrostatic filters (washable)
- Removable screw terminal for easy connection with external access
- Multiple speed operation

**Specifications**

- Duct size – 5 in. (125 mm) round
- Voltage/Phase – 120/1
- Rated power – 120 W
- Running amperage – 1.0 A
- CSA rated amperage – 1.4 A
- Average airflow – 127 CFM (60 L/s) @ 0.4 in. wg (100Pa)
- Weight – 34 lbs (15 kg) including core

**Requirements and standards**

- UL 1812
- CSA C22.2 no. 113
- CSA F326
- Technical data was obtained from published results of test relating to CSA C439 Standards
- HVI certified

**Fans**

Two (2) factory-balanced fans with backward curved blades. Motors come with permanently lubricated, sealed ball-bearings to guarantee long life and maintenance-free operation.

**Energy Recovery Core**

Energy recovery core made from water vapor transport durable polymer membrane that is highly permeable to humidity. The ERV core is freeze tolerant, water washable, and is resistant to mold and bacteria. Core dimensions are 12 in. x 12 in. (305 x 305 mm.) with a 8 1/8 in. (207 mm.) depth.

**Frost Prevention**

A preset frost prevention sequence is activated at an outdoor air temperature of 14°F (-10°C) and lower. During the frost prevention sequence, the supply blower shuts down and the exhaust blower switches into high speed to maximize the effectiveness of the frost prevention strategy. The appliance then returns to normal operation, and continues the cycle.

**Serviceability**

Core, filters, fans and electronic panel can be accessed easily. Core conveniently slides out with only 8.5 in. (216 mm.) clearance.

**Duct Connections**

5 in. (125 mm.) round metal duct connections with rubberized seal.

**Case**

22 gauge G90 galvanized corrosion resistant steel case (pre-painted door).

**Insulation**

Insulated with 3/4 in. (20 mm.) high density expanded polystyrene.

**Filters**

Two (2), MERV 3, UL900 certified, washable electrostatic panel type air filters 11 5/16 in. (287 mm.) x 8 1/8 in. (207 mm.) x 1/8 in. (3 mm.)

**Compatible Controls**

Compatible with all Fantech controls.

**Installation**

This appliance is typically mounted on the ceiling or wall using the included mounting bracket.

**Limited Warranty**

7 years on the Motor, 5 years on the electrical components and the core

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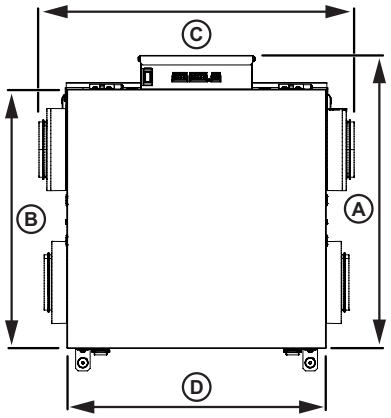
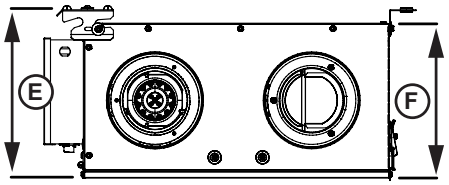
a systemair company

**United States** 10048 Industrial Blvd. • Lenexa, KS 66215 • 1.800.747.1762 • www.fantech.net
**Canada** 50 Kanalflakt Way • Bouctouche, NB E4S 3M5 • 1.800.565.3548 • www.fantech.net

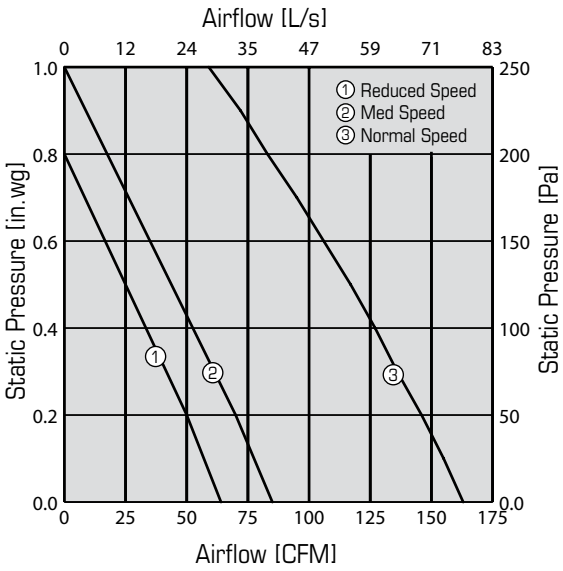
## Dimensions & Airflow



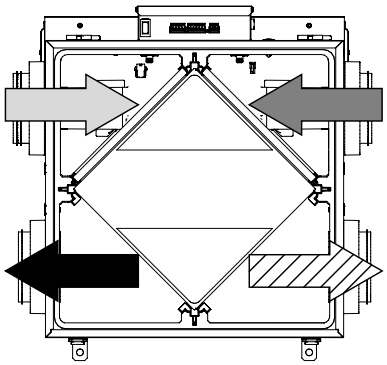




Clearances:
8 1/2 in. (216 mm.) in front of the product for removal of core.
2 3/8 in. (61 mm.) above the electrical box to do the wire connections.

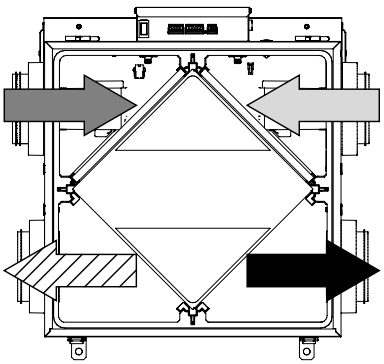
| A | | B | | C | | D | | E | |
|---|---|---|---|---|---|---|---|---|---|
| in | mm | in | mm | in | mm | in | mm | in | mm |
| 23 5/32 | 588 | 20 3/4 | 527 | 24 5/8 | 625 | 20 27/32 | 529 | 9 1/4 | 235 |


Standard ERV Airflow



Mirrored (-M) ERV Airflow



### Ventilation Performance

| in.wg. (Pa) | 0.1 (25) | 0.2 (50) | 0.3 (75) | 0.4 (100) | 0.5 (125) | 0.6 (150) | 0.7 (175) | 0.8 (200) |
|---|---|---|---|---|---|---|---|---|
| | CFM (L/s) | CFM (L/s) | CFM (L/s) | CFM (L/s) | CFM (L/s) | CFM (L/s) | CFM (L/s) | CFM (L/s) |
| Net supply airflow | 155 (73) | 146 (69) | 136 (64) | 127 (60) | 117 (55) | 106 (50) | 95 (45) | 83 (39) |
| Gross supply airflow | 159 (75) | 150 (71) | 140 (66) | 129 (61) | 119 (56) | 108 (51) | 97 (46) | 87 (41) |
| Gross exhaust airflow | 163 (77) | 153 (72) | 142 (67) | 131 (62) | 123 (58) | 112 (53) | 100 (47) | 89 (42) |

### Energy performance

| | Supply temperature | | Net airflow | | Consumed power | Fan efficacy | Sensible recovery efficiency | Adjusted sensible recovery efficiency | Latent recovery/moisture transfer |
|---|---|---|---|---|---|---|---|---|---|
| | °F | °C | CFM | L/s | W | CFM/W | % | % | % |
| Heating | 32 | 0 | 51 | 24 | 55 | 0.9 | 74 | 81 | 76 |
| | 32 | 0 | 68 | 32 | 63 | 1.0 | 69 | 75 | 71 |
| | 32 | 0 | 131 | 62 | 104 | 1.2 | 64 | 69 | 60 |
| | -13 | -25 | 51 | 24 | 55 | 0.9 | 61 | 63 | 54 |

| | Supply temperature | | Net airflow | | Consumed power | Fan efficacy | Total recovery efficiency | Adjusted total recovery efficiency | Latent recovery/moisture transfer |
|---|---|---|---|---|---|---|---|---|---|
| | °F | °C | CFM | L/s | W | CFM/W | % | % | % |
| Cooling | 95 | 35 | 51 | 24 | 55 | 0.9 | 64 | 68 | 68 |

### Contacts

Submitted by: Date:
Quantity: Model: Project #:
Comments:
Location:
Architect:
Engineer: Contractor:

### Distributed by: