

FIT[®] 80E Series

Energy Recovery Ventilator (ERV)



FIT 80E part #	– 463408
FIT 80E-M part #	– 479401
FIT 80E-HC part #	– 479402
FIT 80E-M-HC part #	– 479403

FIT	80	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 – 4 in. (100 mm.) round
- Voltage/Phase – 120/1
- Rated power – 58 W
- Running amperage – 0.6 A
- CSA rated amperage – 1.1 A
- Average airflow – 78 CFM (37 L/s) @ 0.4 in. w.g. (100Pa)
- Weight – 29 lbs (13 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 10 in. x 10 in. (255 x 255 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 1/2 in. (216 mm.) clearance. Only needs 2 3/8 in. (61 mm.) above the electrical box to do the wire connections.

Duct Connections

4 in. (100 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), UL900 certified, washable electrostatic panel type air filters 9 1/2 in. (242 mm.) x 8 1/2 in. (217 mm.) x 1/8 in. (3 mm.)

Compatible Controls

Compatible with all Fantech controls.

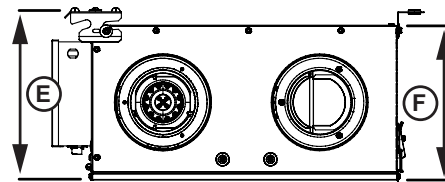
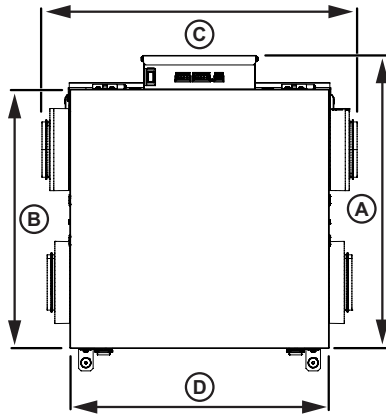
Installation

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

Limited Warranty

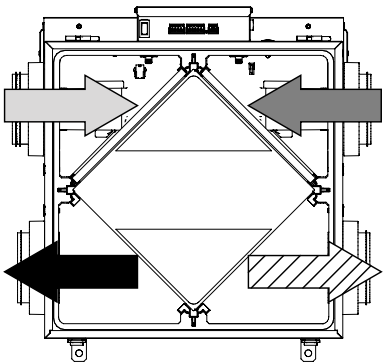
7 years on the Motor, 5 years on the electrical components and the core.

Dimensions & Airflow

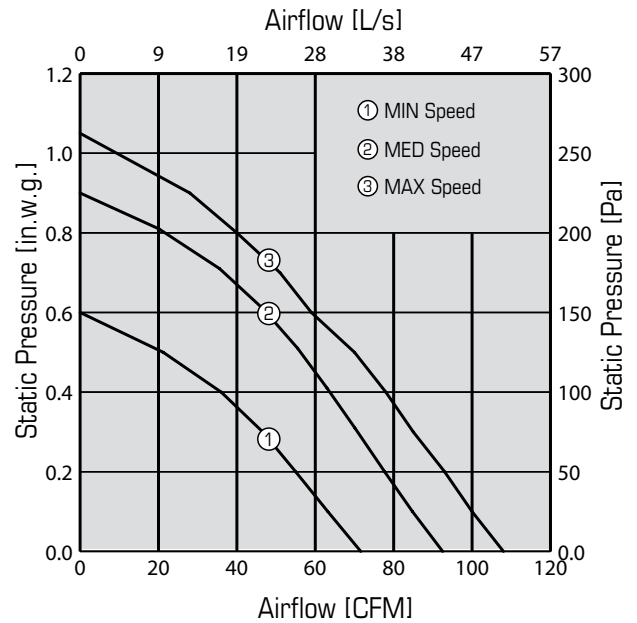
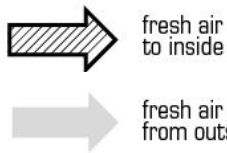
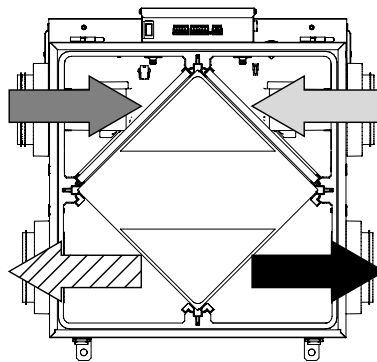


A		B		C		D		E		F		ØD	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
20 5/8	523	18 3/16	462	21 5/8	548	18 1/4	463	10 1/16	255	9 1/4	235	4	100

Standard ERV Airflow



Mirrored (-M) ERV Airflow



Ventilation Performance

in. w.g. (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	100 (47)	93 (44)	85 (40)	78 (37)	70 (33)	59 (28)	51 (24)	40 (19)
Gross supply airflow	102 (48)	95 (45)	89 (42)	81 (38)	72 (34)	64 (30)	53 (25)	42 (20)
Gross exhaust airflow	104 (49)	97 (46)	89 (42)	83 (39)	74 (35)	66 (31)	55 (26)	44 (21)

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	L/s/W	%	%	
Heating	32	0	42	20	42	1.0	0.47	70	75	0.40
	32	0	81	38	52	1.5	0.73	65	70	0.35
	-13	-25	53	25	43	1.2	0.58	55	60	0.20

	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	L/s/W	%	%	
Cooling	95	35	42	20	39	1.0	0.51	50	52	0.40
	95	35	81	38	51	1.5	0.74	45	46	0.35

Contacts

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

Distributed by:

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