HERO® 120E-EC

Energy Recovery Ventilator (ERV)

Product #: 579555

* This product earned the ENERGY STAR® by meeting strict efficiency guidelines set by Natural Resources Canada and the US EPA. It meets ENERGY STAR® requirements only when used in Canada.

HERO	120	E	-	EC
Product Name	Approximately 112 CFM @ 0.4 in. w.g.	Energy Recovery		Electronically Commutated

The HERO 120E-EC is a high-performance energy recovery ventilator (ERV) designed for single-family and multi-family residential applications, including condominiums and apartments. Its counterflow enthalpy core achieves over 85% sensible recovery efficiency (SRE), transferring both heat and moisture. The top-port configuration supports stringent design requirements, while the drainless design simplifies installation and maintenance. An integrated internal damper enables recirculation for efficient defrosting.

EC motors use intelligent technology with integral electronic controls to ensure energy savings no matter what the airflow demands. Reduced energy usage results in lower operating costs. The motors develop less heat so significantly less maintenance is needed and the lifetime of the motor is increased.

Features

- Electronically commutated motors (ECM)
- 5 in. (125 mm) round metal duct connections with rubberized duct seals
- Top-port, drainless design
- Counterflow energy recovery core
- Multiple speed operation
- Internal recirculation defrost
- Removable screw terminal for easy connection with external access
- Includes wall mounting ***speed*** **bracket**

Specifications

- Duct size – 5 in. (125 mm) round
- Voltage/Phase – 120/1
- Power rated – 128 W
- Amp – 3.0 A
- Average airflow – 112 CFM (53 L/s) @ 0.4 in. wg (100 Pa)
- Weight – 46.3 lbs (21 Kg)

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 and ENERGY STAR® certified

Fans

Two (2) electronically commutated motors. The EC fans operate at high efficiency levels and offer a great energy-saving potential not only at full load, but especially at part-load. When operating at part-load, the energy used is much lower than with an AC motor of equivalent output. Reduced energy usage guarantees a drop in operating costs.

Energy Recovery Core

Counterflow energy recovery core made from water vapor transport durable polymer membrane that is highly permeable to humidity. The ERV core is freeze tolerant and water washable. Core dimensions are 14 3/8 x 14 3/8 in. (366 x 366 mm) with a 10 in. (255 mm) depth.

Defrost

The unit incorporates a unique and quiet internal recirculation defrost that does not depressurize the home during the defrost cycle. A preset defrost sequence is activated when the outdoor temperature falls below 23° F (-5° C) and automatically adjusts itself based on operating conditions. The fan speed is also adjusted automatically to provide a smooth and quiet transition between Ventilation & Defrost mode.

Serviceability

Core, filters, fans and electronic panel can be accesses easily from the access panel. Core conveniently slides out with only 12 in. (305 mm) clearance.

Duct Connections

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

Case

22 gauge galvanized steel cabinet with a pre-painted steel corrosion resistant door.

Insulation

Cabinet is fully insulated with 3/4 in. (20 mm) high density expanded polystyrene.

Filters

Two (2), UL900 certified, washable electrostatic panel type air filters 7 7/8 in. (200 mm) x 9 13/16 in. (250 mm) x 1/8 in. (3 mm).

Compatible Controls

Compatible with all Fantech controls.

Balancing and commissioning[1]

Balancing must be completed using the Fantech ECO-Touch® Programmable Touch Screen Wall Control.

Installation

This appliance can be wall mounted using the mounting bracket or hung from the ceiling with the hanging chain installation kit.

Limited Warranty

7 years on motor, 5 years on electrical components and core.

fantech®
a systemair company

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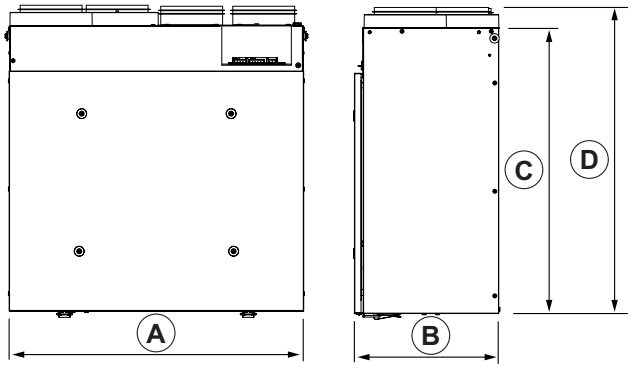
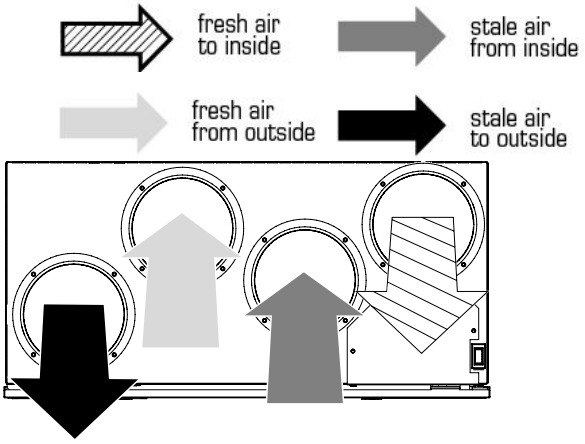
Canada 50 Kanalflakt Way • Bouctouche, NB E4S 3M5 • 1.800.565.3548 • www.fantech.net

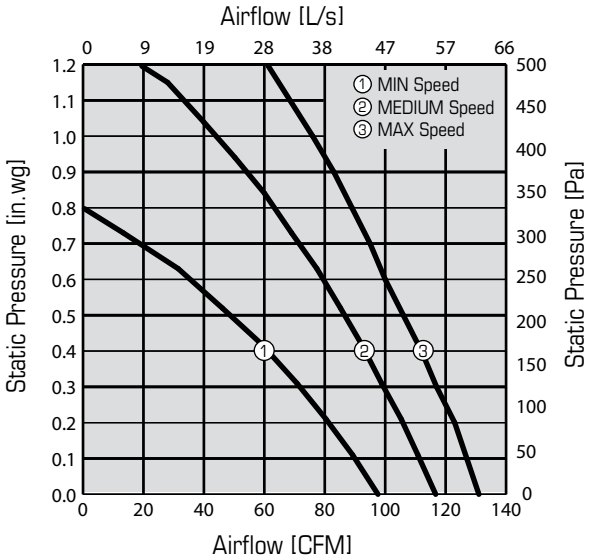
Dimensions & Airflow



A		B		C		D	
in	mm	in	mm	in	mm	in	mm
23 1/4	590	11 1/2	291	22 5/8	575	24 1/4	616

All units feature three foot plug-in power cord with 3-prong plug.





Ventilation Performance

in. wg. (Pa)	0.1 (50)	0.2 (50)	0.3 (75)	0.4 (100)	0.5 (125)	0.6 (150)	0.7 (175)	0.8 (200)	0.9 (225)	1.0 (250)
	CFM (L/s)	CFM (L/s)	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	127 (60)	123 (58)	117 (55)	112 (53)	106 (50)	100 (47)	95 (45)	89 (42)	83 (39)	76 (36)
Gross supply airflow	131 (62)	127 (60)	121 (57)	117 (55)	110 (52)	104 (49)	97 (46)	91 (43)	85 (40)	78 (37)
Gross exhaust airflow	131 (62)	127 (60)	121 (57)	117 (55)	110 (52)	104 (49)	97 (46)	91 (43)	85 (40)	78 (37)

[1] Balancing Range : 40 CFM (19 L/s) to 140 CFM (66 L/s) if a balanced flow outside the above range is required, please revisit our product offeringsc to ensure a properly sized unit is selected

Energy performance

Heating	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	%	%	-
	32	0	42	20	21	2.0	0.95	85	88	0.86
	32	0	70	33	33	2.1	1.00	79	82	0.78
	32	0	117	55	73	1.6	0.75	72	76	0.70
	-13	-25	70	33	45	1.3	0.63	63	64	0.65

Cooling	Supply temperature		Net airflow		Consumed power	Fan efficacy		Total recovery efficiency	Adjusted Sensible recovery efficiency	Latent recovery/ moisture transfer
	°F	°C	CFM	L/s	W	CFM/W	L/s/W	%	%	-
	95	35	42	20	23	1.8	0.86	80	83	0.81
	95	35	117	55	87	1.3	0.63	62	64	0.63

Contacts

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

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