

HERO® 160E-EC

Energy Recovery Ventilator (ERV)

Product #: 599160



* 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 **160** **E** **-** **EC**
Product Name Approximate CFM @ 0.4 in. w.g. Energy Recovery Electronically Commutated

The HERO 160E-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 81% 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)
- 6 in. (152 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 – 6 in. (152 mm.) round
- Voltage/Phase – 120/1
- Power rated – 164 W
- Amp – 6.4 A
- Average airflow – 159 CFM (75 L/s) @ 0.4 in. w.g. (100 Pa)
- Weight – 58.5 lbs (26.5 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 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 12 in. (305 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 accessed easily from the access panel. Core conveniently slides out with only 14 in. (355 mm.) clearance.

Duct Connections

6 in. (152 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, MERV 3, 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 commissioning¹

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

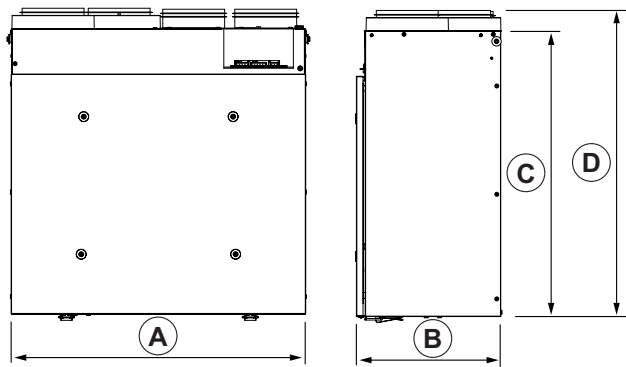
Installation

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

Limited Warranty

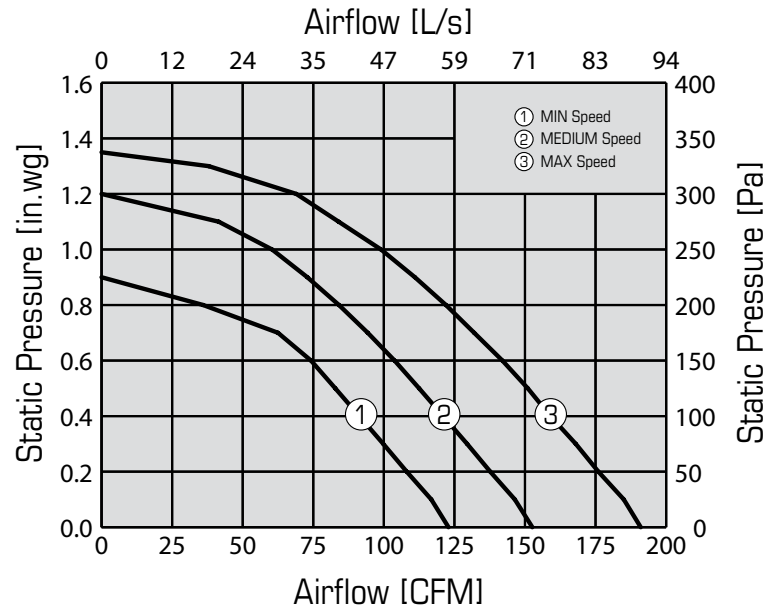
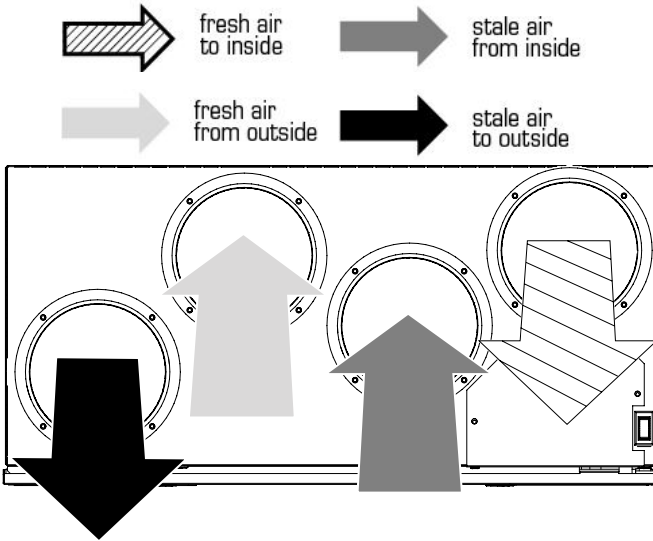
7 years on motor, 5 years on electrical components and core.

Dimensions & Airflow



A		B		C		D	
in	mm	in	mm	in	mm	in	mm
27 7/8	707	13 3/8	341	23	584	24 7/8	626

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



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	185 (87)	176 (83)	168 (79)	159 (75)	151 (71)	142 (67)	132 (63)	122 (58)
Gross supply airflow	192 (91)	183 (86)	174 (82)	165 (78)	157 (74)	147 (70)	138 (65)	127 (60)
Gross exhaust airflow	195 (92)	185 (87)	176 (83)	166 (79)	157 (74)	147 (69)	135 (64)	123 (58)

¹ Balancing Range : 90 CFM (42 L/s) to 210 CFM (99 L/s). If a balanced flow outside the above range is required, please revisit our product offerings to ensure a properly sized unit is selected.

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	26	1.6	0.76	81	85	0.80
	32	0	66	31	33	2.0	0.93	79	82	0.77
	32	0	150	71	90	1.6	0.78	70	74	0.63
	-13	-25	68	32	42	1.6	0.76	64	65	0.60

	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	%	%	-
Cooling	95	35	42	20	27	1.5	0.74	78	80	0.75
	95	35	150	71	102	1.4	0.69	61	65	0.60

Contacts

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

Distributed by:

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