ENERGY RECOVERY VENTILATOR

Broan ERVH100
Part no. ERVH100S
50 to 100 CFM (0.4 in. w.g.)

VB0245

THE BROAN ERVH100 UNIT IS A NEW GENERATION OF HEPA FILTRATION

Indeed, this energy recovery ventilator is equipped with a HEPA filter that removes 99.97% of allergens and other microscopic particles in the air. ERV technology is a great choice to increase the comfort of the living areas as it balances the moisture level of the incoming fresh air, making it not too humid in summer and not too dry during winter.The Broan ERVH100 unit has an ultra-quiet operation, barely audible at low speed (2.5 sones), thanks to the advanced design of its blower, which also contributes to its high energy efficiency. Furthermore, since the Broan ERVH100 ducting diameter is reduced to 5 inches, its installation is now easier and faster than before.

- 5-in. diameter ports mean smaller duct to ease installation
- Integrated control
- Removable terminal block to ease optional wall control connections
- Integrated pressure taps
- Ultra-quiet operation
- Furnace interlock capability
- ENERGY STAR® qualified

REPAIRS AND MAINTENANCE

All parts of the Broan ERVH100 unit that could need maintenance can be removed in less than five minutes, allowing direct access for easy repairs. The PSC motor is permanently lubricated.

WARRANTY

The Broan ERVH100 unit is protected by a 5-year warranty on parts only. The energy recovery core is covered by a 5-year warranty, with the original proof of purchase.

Available at:

Controls

- This unit is very simple to operate: once it is installed, press on its push button, located on the bottom of the electronic compartment, to activate it. Press once for low speed, once again for high speed, and once more to stop it.
- For more convenience, this unit can also be controlled by an optional main control. For a complete list of optional main and auxiliary controls available, refer to the ***Wall Control Compatibility Chart*** on last pages of wall controls specification sheet, available at www.broan.com.
- For more details about controls, refer to the ***Main and auxiliary wall controls*** user guide, also available at www.broan.com.

Options

- Dual exterior hood kit (including Tandem® transition), part no. TYIK1
- Complete line of registers and diffusers

Homeshield™ Defrost System

When the outside temperature is below 23°F, energy recovery creates frost in the core. To maintain its proper operation, the Broan ERVH100 unit is programmed to defrost the energy recovery core, using a unique defrosting method. No negative pressure is created by air exhausted to the outside, as the air is recirculated into the house, helping to prevent any backdraft.

Outside Temperature		Defrost Cycle
°F	°C	Defrost / Air Exchange
Warmer than 23	Warmer than -5	No defrost
from 23 to 5	from -5 to -15	6 minutes / 40 minutes
from 5 to -17	from -15 to -27	7 minutes / 25 minutes
-17 and less	-27 and less	10 minutes / 20 minutes

Energy Recovery Core

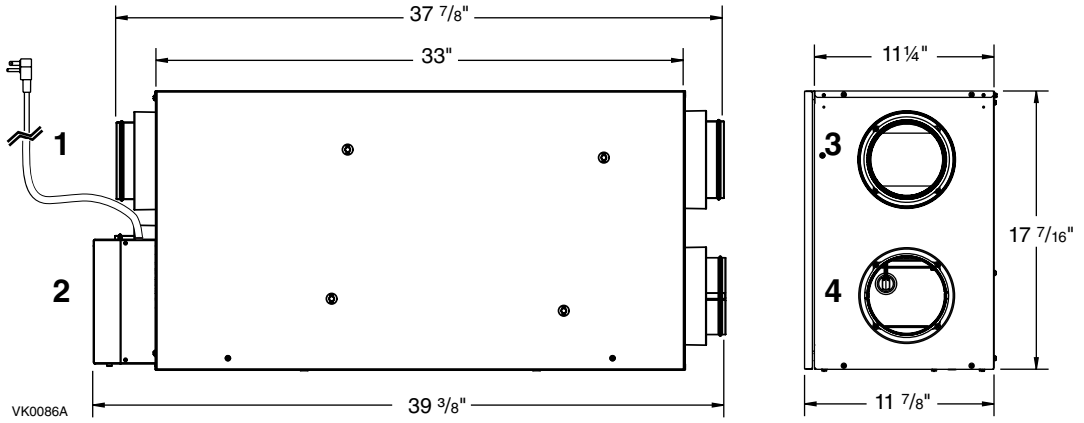
Dimensions: 10 in. x 10 in. x 10 in. (25.4 cm x 25.4 cm x 25.4 cm)
Exchange surface: 70 sq. ft. (6.5 m^2)
Weight: 5 lb. (2.3 kg)
Material: Polymerized paper
Type: Cross flow
Warranty: 5 years

Requirements and standards

- Complies with the UL 1812 requirements regulating the installation of Energy Recovery Ventilators
- Complies with the CSA C22.2 no. 113 Standard applicable to ventilators
- Complies with CSA C444 requirements regulating the installation of Energy Recovery Ventilators
- Technical data was obtained from published results of tests relating to CSA C439 Standards
- HVI certified
- ENERGY STAR® qualified

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

Dimensions: Broan ERVH100



1: Exhaust air to outside port
2: Fresh air to building port (behind electrical compartment)
3: Fresh air from outside port
4: Exhaust air from building port

NOTE: All unit ports were created to be connected to ducts having a minimum of 5" diameter, but if need be, they can be connected to bigger sized ducts by using an appropriate transition (e.g.: 5" diameter to 6" diameter transition).

Ventilation Performance

External Static Pressure		Net Supply Air Flow			Gross Air Flow					
					Supply			Exhaust		
Pa	in. w.g.	L/s	CFM	m^3/h	L/s	CFM	m^3/h	L/s	CFM	m^3/h
25	0.1	55	117	198	57	121	205	61	128	220
50	0.2	53	111	191	54	115	194	58	123	209
75	0.3	50	106	180	51	109	184	55	116	198
100	0.4	47	100	169	49	103	176	51	109	184
125	0.5	44	94	158	46	97	166	48	102	173
150	0.6	41	88	148	43	91	155	44	94	158
175	0.7	39	82	140	40	84	144	41	87	148
200	0.8	35	75	126	37	77	133	38	80	137
225	0.9	32	68	115	33	70	119	34	73	122
250	1.0	29	61	104	30	63	108	32	67	115

Energy Performance

Supply Temperature		Net Air Flow		Power Consumed Watts	Sensible Recovery Efficiency	Apparent Sensible Effectiveness	Latent Recovery/ Moisture Transfer (%)
°C	°F	L/s	CFM				
Heating							
0	32	24	51	42	67	77	56
0	32	31	66	48	66	75	54
0	32	41	86	59	63	71	52
-25	-13	25	52	52	61	75	57
-25	-13	31	66	61	57	72	55
Cooling					Total Recovery Efficiency		
35	95	24	51	40	53		55

NOTE: All specifications are subject to change without notice.

Specifications

- Model: ERVH100
- Part number: ERVH100S
- Total assembled weight (including polymerized paper core): 47 lb. (21.3 kg)
- Round 5" ports
- Core filters: 2 washable
  9 3/8" x 10" x 3/8"
  (23.8 cm x 25.4 cm x 0.95 cm)
- Housing: Pre-painted steel
- Insulation: Expanded polystyrene
- Installation: Suspension by chains and springs
- Supply and Exhaust Blower Motor: 1 motor
  - Protection type: Thermally protected
  - Insulation class: B
- Speed control on unit: Low & High speeds. Other modes available with main and optional wall controls.
- Energy recovery core:
  - Exchange surface: 70 sq. ft. (6.5 m^2)
  - Type/Material : Cross flow/Polymerized paper
- Unit Electrical Characteristics:

Volts	Frequency	Ampere	Watts
120	60 Hz	0.6	68

Project:	REMARKS
Location:	
Part number: ERVH100S	
Quantity:	
Submitted by: Date:	

Broan-NuTone LLC, 926 West State Street, Hartford, WI 53027 (1-877-862-7626)