

Venmar H50100E Part no. H50100E 50 to 100 CFM (0.4 in. w.g.)



# THE BRAND NEW VENMAR H50100E UNIT, THE 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 Venmar H50100E 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 Venmar H50100E 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<sup>®</sup> qualified

#### **REPAIRS AND MAINTENANCE**

All parts of the Venmar H50100E 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 Venmar H50100E unit is protected by a 2-year warranty on parts only. The energy recovery core is covered by a 5-year warranty, with the original proof of purchase.

Available at:			

## ENERGY RECOVERY VENTILATOR

#### 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.
- If desired, the following main controls are available:
  - Altitude programmable digital control

	with SMART mode	no. 40440
	- Deco-Touch digital control	no. 40395
	- Constructo	no. 40350
	- Lite-Touch Constructo	no. 40370
	<ul> <li>Simple-Touch Constructo</li> </ul>	no. 40390
•	Also, the following optional auxiliary controls can also be	e added:

- 20/40/60-minute lighted push buttonno. 03364- 60-min. mechanical timerno. 00910- 11227
- Dehumidistat no. 11297

#### Options

- Dual exterior hood kit (including Tandem® transition), part no. 14690
- 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 Venmar H50100E 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 TE	MPERATURE	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 то -27	7 MINUTES / 25 MINUTES		
-17 AND LESS	-27 AND LESS	10 minutes / 20 minutes		

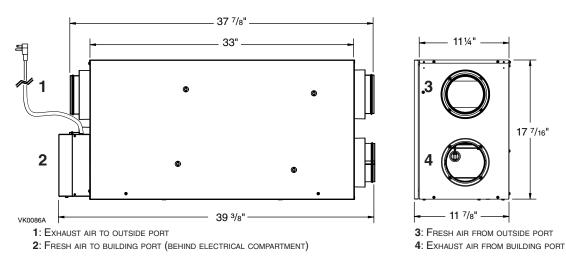
#### **Energy Recovery Core**

Dimensions: 10 in. x 10 in. (25.4 cm x 25.4 cm x 25.4 cm) Exchange surface: 70 sq. ft. (6.5 m<sup>2</sup>) 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<sup>®</sup> qualified

### DIMENSIONS: VENMAR H50100E



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).

Ex	TERNAL	NET SUPPLY			GROSS AIR FLOW					
STATIC	Pressure		AIR FLOV	v	SUPPLY			Exhaust		
Pa	IN. W.G.	L/S	CFM	м <sup>3</sup> /н	L/S	CFM	м³/н	L/S	CFM	м³/н
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

#### VENTILATION PERFORMANCE

#### **ENERGY PERFORMANCE**

SUF TEMPE	PPLY RATURE	N Air I	et Flow	Power Consumed	Sensible Recovery	Apparent Sensible	LATENT RECOVERY/ MOISTURE
°C	°F	L/S	CFM	WATTS	EFFICIENCY	EFFECTIVENESS	TRANSFER (%)
Hea	TING						
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
Coo	LING				TOTAL RECOVERY EFFICIENCY		
35	95	24	51	40		53	55

NOTE: All specifications are subject to change without notice.

<ul><li>Model: H50100E</li><li>Part number: H50100E</li></ul>	Housing: Pre-painted steel	<ul> <li>Speed control on unit: Low &amp; High speeds.</li> <li>Other modes available with main and</li> </ul>		
	Insulation: Expanded polystyrene	optional wall controls.		
<ul> <li>Total assembled weight (including</li> </ul>				
polymerized paper core): 47 lb. (21.3 kg)	Installation: Suspension by chains	Energy recovery core:		
	and springs	- Exchange surface: 70 sq. ft. (6.5 m <sup>2</sup> )		
Round 5" ports		- Type/Material : Cross flow/Polymerized paper		
Core filters: 2 washable	Supply and Exhaust Blower Motor: 1 motor	Unit Electrical Characteristics:		
9 3/8″ x 10″ x 3/8″	- Protection type: Thermally protected	Volts Frequency Ampere Watts		
(23.8 cm x 25.4 cm x 0.95 cm)	- Insulation class: B	120 60 Hz 0.6 68		

Project:		REMARKS
Location:		
Part number: H50100E		
Quantity:		
Submitted by:	Date:	



**S**PECIFICATIONS

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