

ENERGY RECOVERY VENTILATOR

VENMAR AVS DUO 1.4

Part #43700 Canada/US

64 to 120 CFM (0.4 in. w.g.)



VB0008

THE «HEALTH CONSCIOUS» SYSTEM THAT IS RIGHT FOR YOU

Designed to provide clean air all year round, the AVS DUO is particularly intended for customers with health concerns. Airborne bacteria, mites and allergens such as dust, pollen and mold are removed. Combined with an optional filter that can be inserted in the unit, the AVS DUO is the perfect ventilation system that provides a healthier indoor environment. The AVS DUO is also the prime choice to work in combination with an air conditioning unit.

- Reversible unit installation
- Improved standard filter performance
- Unique pan design, easier to clean and maintain
- Integrated balancing dampers and pressure taps
- Polymeric enthalpy wheel: recovers heat and humidity
- No drain
- Exclusive HomeShield™ patented defrost system
- SilentSure™ operation
- PSC motor

REPAIRS AND MAINTENANCE

Venmar AVS DUO modular design makes it possible to remove all mechanical parts in less than 5 minutes. The recovery wheel and its driving mechanism are characterized by their simplicity and ease of maintenance. Resorting to proven technologies, the Venmar development team applied the principle of the belt-driven system used in cars and used a shock and vibration-absorbing axle to prevent wear on the motor.

The low power consumption PSC motor is permanently lubricated. Even better, the entire motor subassembly can be removed in less than a minute for easier maintenance. Finally, the electronic circuit board eliminates electromechanical parts, reducing repair time to a minimum.

WARRANTY

The Venmar AVS DUO is fully protected by a 5-year warranty including the energy recovery thermal wheel. We are so confident in our product that we also offer a 90-day in-home warranty on parts and service.

Available at:

Controls

• Built-in electronic circuit board ready to receive one of the following main controls:

- ULTIMA #40340 - *Ideal for this system*
- VENTA #40310
- SUPRA #40320

• One or more of the following optional controls can be added:

- Humidity Control #11297
- 20-min. lighted push button #12030
- 60-min. mechanical timer #00910
- 20/40/60-minute push button #03364
- Wireless 20-minute remote control #03366

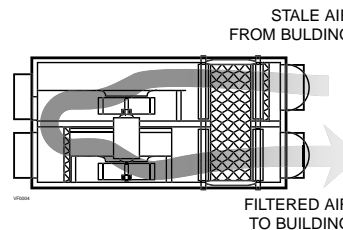
Options

- Complete line of registers and diffusers
- Electric duct heater
- Filters:
 - Charcoal #03315
 - Pleated #03316
 - Electronic #03314

HomeShield™ Defrosting System

The AVS DUO uses a unique defrosting method. No negative pressure is created by air exhausted to the outside, as the air is recirculated into the house, thus avoiding any backdraft from the chimney. Moreover, this defrosting method by air circulation ensures that no shortage of air is created for combustion units.

OUTSIDE TEMPERATURE °C	OUTSIDE TEMPERATURE (°F)	DEFROST CYCLE defrosting min./ operating min.
-5 TO -15	(23 TO 5)	9/60
-15 TO -27	(5 TO -19)	9/32
-27 & LESS	(-19 & LESS)	9/20



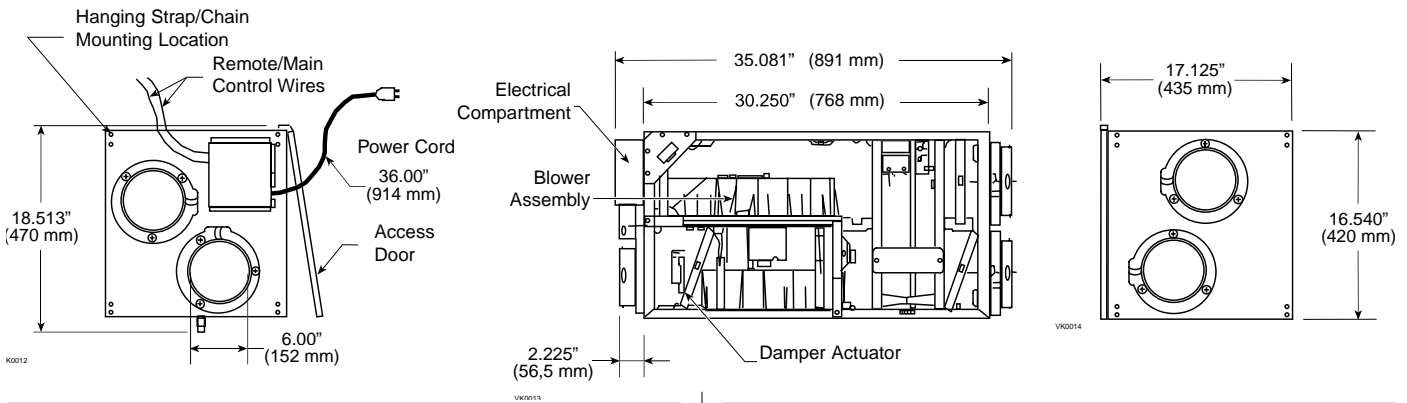
Energy Recovery Wheel

Dimensions: 12"ø x 3-3/4" (30.5 cm ø x 9.5 cm)
 Weight: 4.2 lbs (1.9 kg)
 Material: Plastic composite impregnated with desiccant
 Type: Thermal wheel
 Warranty: 5-year warranty

Requirements and Standards

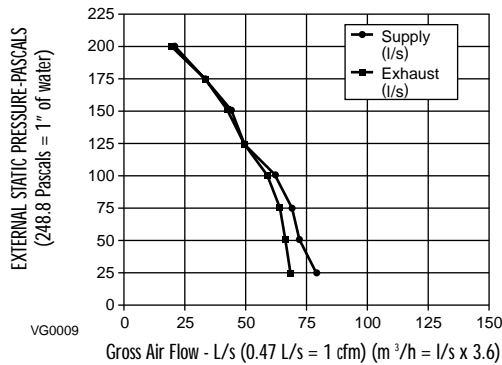
- Complies with the UL 1812 requirements regulating the installation of Heat Recovery Ventilators.
- Complies with the CSA C22.2 #113 Standard applicable to ventilators.
- Complies with the CSA C444 requirements regulating the installation of Energy Recovery Ventilators.
- Technical data was obtained from published results of tests relating to CSA C439 Standards.
- HVI certified.

Dimensions and Service Clearances: Venmar AVS DUO 1.4



Ventilation Performance

EXT STATIC PRESSURE	Pa	in.w.g.	NET SUPPLY AIR FLOW			GROSS AIR FLOW					
			l/s	cfm	m ³ /h	SUPPLY			EXHAUST		
25	.1		69	145	248	70	148	252	78	165	281
50	.2		65	137	234	66	140	238	72	153	259
75	.3		60	127	216	61	129	220	65	138	234
100	.4		57	120	205	58	123	209	60	127	216
125	.5		49	104	176	50	106	180	49	104	176
150	.6		43	91	155	44	93	158	42	89	151
175	.7		30	64	108	31	66	112	31	66	112
200	.8		22	46	79	22	47	79	23	49	83



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	m ³ /h				
HEATING								
0	+32	32	68	115	110	70	80	0.79
0	+32	47	100	169	164	65	74	0.67
0	+32	57	121	205	172	64	72	0.60
-25	-13	29	61	104	120	64	79	0.65
-25	-13	---	---	---	---	---	---	---
COOLING								
						TOTAL RECOVERY EFFICIENCY		
+35	+95	31	66	112	104	69		
+35	+95	57	121	205	168	61		

NOTE: All specifications are subjected to change without notice.

Specifications and Ratings

- Model: Venmar AVS DUO 1.4
- Part Number: #43700 Canada/US
- Total Assembled Weight (Including energy recovery wheel): 65 lbs (29.5 Kg)
- Supply Air Duct Connections: 6" (15.24 cm) diameter
- Exhaust Air Duct Connections: 6" (15.24 cm) diameter
- Filters: 20 ppi washable reticulated foam: -15.375" x 7.125" x 0.75" (39 x 18 x 1.9 cm)
- Cabinet: 20 ga. pre-painted steel
- Insulation: 1" (2.54 cm) aluminium foil faced fiberglass 0.825" (2.10 cm) expanded polystyrene
- Mounting: suspension by chains and springs
- Supply & Exhaust Blower Motor: 1 motor
 - Protection type: Thermally protected
 - Insulation class: B
 - Motor marking: 120 V ac, 50/60 Hz, 1.2/1.0 A, 1050/1300/1660 RPM
- Fan Speed Control: -Low or increased low & high speed.
 - Two speeds available for the user.
 - Low or increased low speed is selected at the time of installation.
- Unit Electrical Characteristics:

	Volts	Freq	Amperes	Watts
Canada/US	120	60 Hz	1.4	160

Submitted by:		Date:	Project:
Qty:	Model #:	Remarks:	Location:
			Architect:
			Engineer:
			Contractor:

