

Venmar AVS X24HRV ECM Part no. X24HRVE 50 to 227 CFM (0.4 in. w.g.)



THE FUTURE OF FRESH AIR

Venmar AVS introduces its X Series which surpasses industry standards by bringing together the best performance and the best energy efficiency. Its high airflow, high heat recovery, low power consumption and superior filtration make it one of the most efficient and sophisticated platforms.

The **X24HRV ECM** is the perfect solution for mid to large size homes in need for the most energy-efficient ventilation solution. It is also possible to use it in some light commercial applications due to its high fresh air supply.

- Up to 227 CFM at 0.4 in. w.g.
- High efficency heat recovery core with a sensible recovery efficiency of 81% at 0°C (32°F) and 70% at -25°C (-13°F)
- ECM* motors
- Minimal power consumption of 19 W and 3.4 CFM/Watt at 64 CFM
- Merv 6 grade filters and optional HEPA filtration
- · Electronic balancing and no balancing dampers
- Included wall mounting bracket

*Electronically Commutated Motor.

REPAIRS AND MAINTENANCE

The X24HRV ECM high output ECM motors are permanently lubricated. The electronic circuit board eliminates electromechanical parts, reducing repair time to a minimum.

WARRANTY

The X24HRV ECM is protected by a 5-year warranty on parts only, except for the heat recovery core, which is covered by a limited lifetime warranty, with the original proof of purchase.

Available at:

HEAT RECOVERY VENTILATOR

Controls

The exclusive X-Touch wall control is the only compatible wall control with the X Series. At installation, the inside control panel features electronic balancing and no balancing dampers. The balancing is performed with the help of the X-Touch wall control.

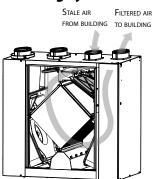
For more details about the control, refer to the User Guide - Main and auxiliary wall controls available at www.venmar.ca.

Option

HEPA Filter 21996

Additional 0.3 in. w.g. static pressure at highest speed to be considered. Refer to the HEPA filter instructions for more details.

Defrosting System



VF0064

With the help of the X-Touch wall control, this unit allows 3 defrost modes for recirculation:

- Standard (factory set regular mode)
- Plus (extended defrost for colder areas)
- Discretion (keeps the same speed when performing defrost as performing ventilation)

PERATURE*				DEFROST IN MINUTES / AIR EXCHANGE IN MINUTES						
	STAN	DARD	Discr	ETION	PLUS					
°F	CONTINUOUS MODE	TURBO FUNCTION	CONTINUOUS MODE	TURBO FUNCTION	CONTINUOUS MODE	TURBO FUNCTION				
17 and less	8/20	8/15	15/20	15/17	12/15	12/12				
-4 to -17	6/28	6/23	12/28	12/23	10/20	10/15				
5 to -4	6/35	6/32	12/35	12/30	8/25	8/20				
14 to 5	6/40	6/35	12/40	12/35	8/30	8/25				
23 to 14	6/50	6/45	12/50	12/45	8/40	8/30				
WARMER THAN 23	No defrost									
	17 and less -4 to -17 5 to -4 14 to 5 23 to 14 WARMER THAN 23	F MODE 17 and less 8/20 -4 to -17 6/28 5 to -4 6/35 14 to 5 6/40 23 to 14 6/50 WARMER THAN 23	MODE FUNCTION 17 and less 8/20 8/15 -4 to -17 6/28 6/23 5 to -4 6/35 6/32 14 to 5 6/40 6/35 23 to 14 6/50 6/45 WARMER THAN 23	H MODE FUNCTION MODE 17 and less 8/20 8/15 15/20 -4 to -17 6/28 6/23 12/28 5 to -4 6/35 6/32 12/35 14 to 5 6/40 6/35 12/40 23 to 14 6/50 6/45 12/50 WARMER THAN 23 No de No de	H MODE FUNCTION MODE FUNCTION 17 and less 8/20 8/15 15/20 15/17 -4 to -17 6/28 6/23 12/28 12/23 5 to -4 6/35 6/32 12/35 12/30 14 to 5 6/40 6/35 12/40 12/35 23 to 14 6/50 6/45 12/50 12/45	F MODE FUNCTION MODE FUNCTION MODE 17 and less 8/20 8/15 15/20 15/17 12/15 -4 to -17 6/28 6/23 12/28 12/23 10/20 5 to -4 6/35 6/32 12/35 12/30 8/25 14 to 5 6/40 6/35 12/40 12/35 8/30 23 to 14 6/50 6/45 12/50 12/45 8/40				

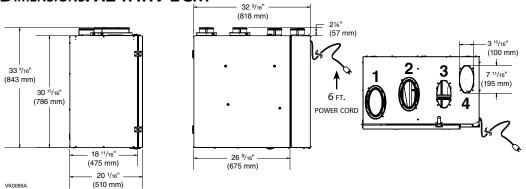
*Outdoor temperature is read by a thermistor located inside the unit, next to fresh air from outside port.

Requirements and standards

- · Complies with the CSA C22.2 no. 113 Standard applicable to ventilators
- Complies with CSA F326 requirements regulating the installation of Heat Recovery Ventilators
- Technical data was obtained from published results of tests relating to CSA C439 Standards
- HVI certified and ENERGY STAR[®] qualified**

**These products earned the ENERGY STAR[®] by meeting strict energy efficiency guidelines set by Natural Resources Canada and the US EPA. They meet ENERGY STAR requirements only when used in Canada.

DIMENSIONS: X24HRV ECM



NOTE: ALL UNITS PORTS WERE CREATED TO BE CONNECTED TO DUCTS HAVING A MINIMUM OF 6" DIAMETER, BUT IF NEED BE, THEY CAN BE CONNECTED TO BIGGER SIZED DUCTS BY USING AN APPROPRIATE TRANSITION (E.G.: 6" DIAMETER TO 7" DIAMETER TRANSITION).

- 1: EXHAUST AIR TO OUTSIDE PORT
- 2: FRESH AIR FROM OUTSIDE PORT
- 3: EXHAUST AIR FROM BUILDING PORT
- 4: FRESH AIR TO BUILDING PORT

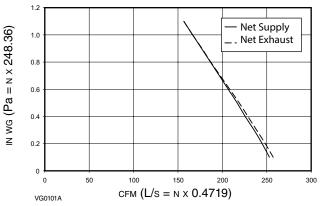
VENTILATION PERFORMANCE

EXTERNAL NET SUPP				GROSS AIR FLOW						
STATIC PRESSURE		AIR FLOW			SUPPLY			Exhaust		
Pa	IN. W.G.	L/S	CFM	м³/н	L/S	CFM	м ³ /н	L/S	CFM	м ³ /н
25	0.1	119	252	430	120	254	433	121	256	437
50	0.2	116	246	416	116	246	418	117	248	421
75	0.3	111	235	401	112	237	403	113	239	406
100	0.4	107	227	384	107	227	387	108	229	389
125	0.5	102	216	369	103	218	369	103	218	372
150	0.6	97	206	352	98	208	352	98	208	353
175	0.7	93	197	335	93	197	335	93	197	336
200	0.8	88	186	318	88	186	318	88	186	318
225	0.9	83	176	301	84	178	301	84	178	301
250	1.0	79	167	284	79	167	284	79	167	282
275	1.1	74	157	267	74	157	267	74	157	267

ENERGY **P**ERFORMANCE

Suf Tempe	PPLY	NET AIR FLOW		Power Consumed	SENSIBLE	SENSIBLE	Apparent Sensible	Latent Recovery/	
°C	°F	l/s	CFM	м³/н	WATTS	EFFICIENCY	RECOVERY EFFICIENCY	EFFECTIVENESS*	Moisture Transfer
HEA	TING								
0	32	30	64	109	19	81	82	84	0
0	32	47	100	170	28	75	77	79	0
0	32	66	140	238	48	70	72	75	0
-25	-13	30	64	109	32	70	71	87	0

FAN CURVE ACCORDING TO SPEED



Fully adjustable speed range from 50 cfm to maximum speed.

*Data not certified by HVI. NOTE: All specifications are subject to change without notice.

SPECIFICATIONS

- Model: X24HRV ECM
- Part Number: X24HRVE
- Total Assembled Weight (including polypropylene core): 94 lb. (43 kg)
- Oval shaped ports; fit 6" round ducts
- Drains: 1/2" (1.2 cm) fittings with 10 ft. (3m) PVC drain
- Core Filters: 2 washable Merv 6 filters
- Housing: Pre-painted steel

- Optional HEPA Filter
- Insulation: Expanded polystyrene
- Mounting: Suspension by chains and springs
 or wall bracket system
- Supply and Exhaust Blower Motors: - Two ECM motors
- Protection type: Thermally protected
- X-Touch wall control offering 5 manual modes: Recirculation, 20 MIN/H, Continuous Smart and Turbo
- Heat Recovery Core: - Dimensions: 12" x 12" x 16.6" (30.5 cm x 30.5 cm x 42.2 cm) - Exchange surface: 175 ft.² (16.3 m²) - Weight: 12 lb. (5.5 kg) - Type: Crossflow - Material: Polypropylene - Warranty: Limited lifetime Unit Electrical Characteristics: Volts Frequency Watts Amps 120 60 Hz 135 2.2

D14

X24HRVECMd2210

Project:		REMARKS
Location:		
Part no.: X24HRVE		
Qty.:		
Submitted by:	Date:	

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