

# HEAT RECOVERY VENTILATOR/ENERGY RECOVERY VENTILATOR

## Venmar Model 12LC and vänEE model V12LC

767 pcm to 1026 cfm (0.4 in. w.g.)



### FOR LIGHT COMMERCIAL APPLICATIONS

High CFM ventilation for small business owners concerned about indoor air quality (excess moisture, smoke, odors and cleanliness).

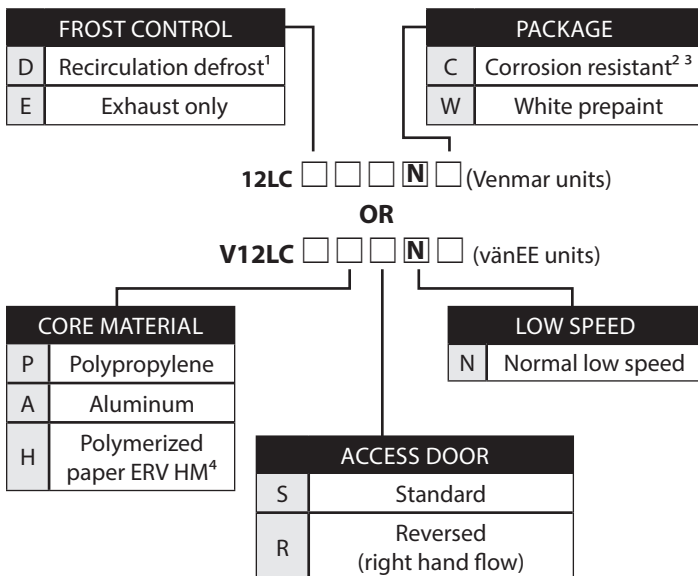
Suitable for installation above a suspended ceiling, mechanical room or suspended from a ceiling, this model delivers year-round comfort and sensible heat recovery with virtually no cross leakage. On this unit, the heat exchange efficiency can reach up to 60%.

- Only 24.5" high for false ceiling installation
- Defrost system
- Two-speed control
- Low voltage remote switch

### REPAIRS AND MAINTENANCE

All parts of the 12LC and V12LC, such as the large access door and the entire motor sub-assembly, can be removed for ease of maintenance. Furthermore, the electronic circuit board reduces electro-mechanical parts, minimizing repair time to a minimum.

### ORDERING EXAMPLE



<sup>1</sup> When ordered, the recirculation defrost damper module is factory installed.

<sup>2</sup> Not recommended with aluminum cores.

<sup>3</sup> Not recommended for ERV.

<sup>4</sup> Not for all configurations; please contact a sales representative for more details.

### Controls

- Built-in electronic circuit board ready to receive one of the following main controls:
  - Venta (Venmar) no. 40310
  - Basic (vänEE) no. 40210

### Heat recovery cores/Energy recovery cores

Dimensions: 12" x 12" x 13.125"

Exchange surface: 200 ft<sup>2</sup>

Weight: HRV Polypropylene: 9.2 lb.; Aluminum 13.9 lb.  
ERV Polymerised paper: 11.2 lb.

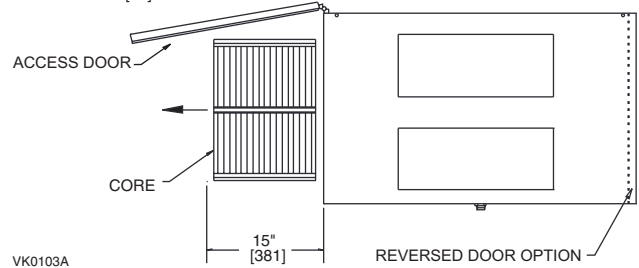
Type: crossflow

Quantity: 3

Material: HRV polypropylene or aluminum  
ERV polymerised paper

Warranty: HRV 15 years; ERV 5 years

A MINIMUM OF 15" [381] CLEARANCE FROM ANY OBSTRUCTION IS REQUIRED FOR REMOVAL OF CORES, FANS, ETC. THE ACCESS DOOR CAN BE REMOVED FROM CABINET WITH ONLY 2" [51] OF CLEARANCE.



### Option

- Medium efficiency air supply filters

### Recirculation or exhaust defrost

OUTDOOR TEMPERATURE		DEFROST CYCLE (IN MINUTES)
°C	°F	DEFROST/OPERATION
WARMER THAN -5	WARMER THAN 23	NO DEFROST
-5 TO -15	23 TO 5	12/60
-15 TO -30	5 TO -21	12/24
-30 & LESS	-21 & LESS	12/12

### Requirements and Standards

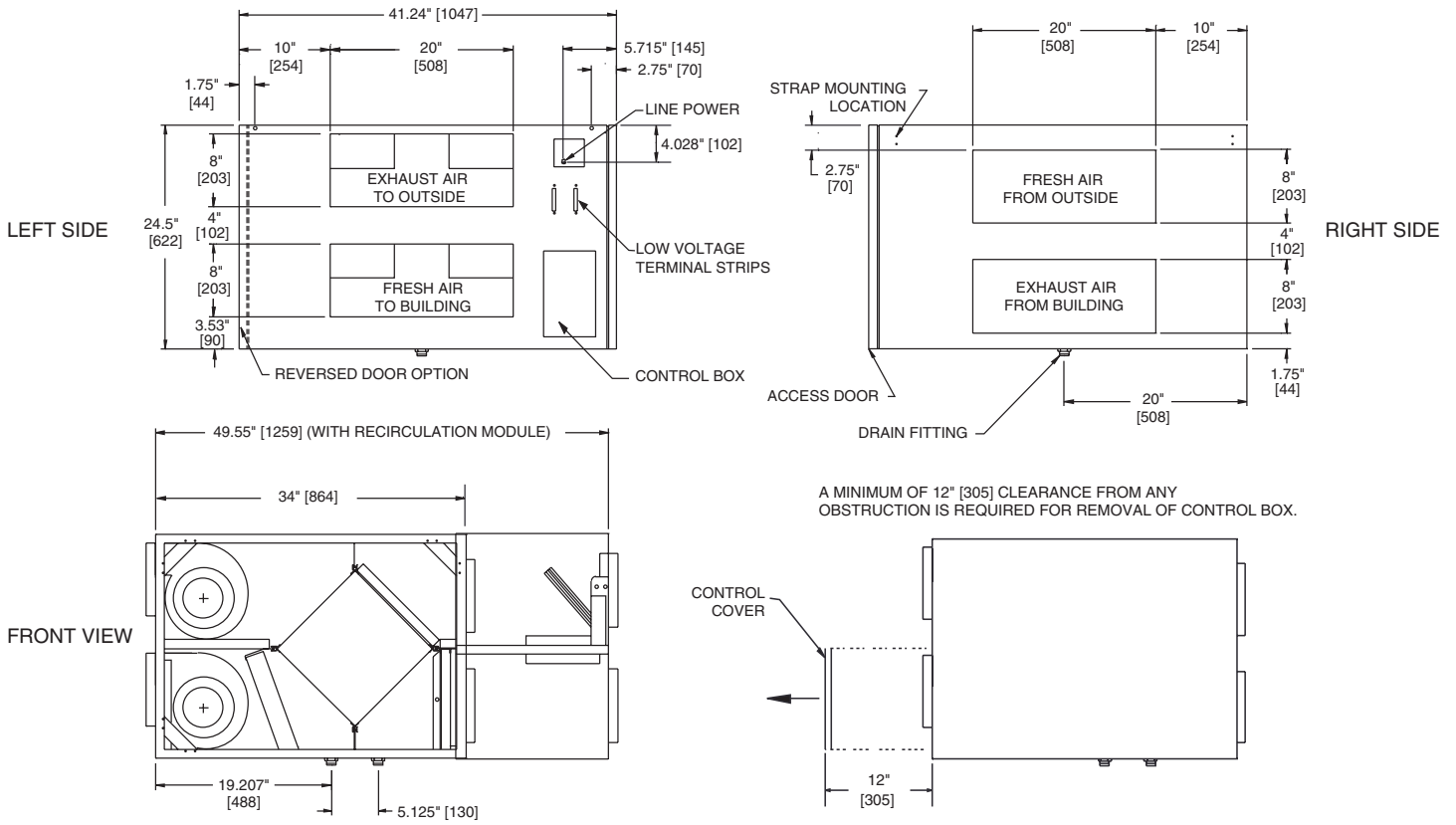
- Complies with the CSA C22.2, no. 113 Standard applicable to ventilators
- Complies with UL Standard 1812 - ducted Heat Recovery Ventilators and Energy Recovery Ventilators.

### Warranty

The 12LC and V12LC units are fully protected by a 2-year warranty on parts, the best in the industry; the heat recovery cores are covered by a 15-year warranty; the energy recovery cores are protected by a 5-year warranty.

Available at:

# DIMENSIONS AND SERVICE CLEARANCES: 12LC AND V12LC



NOTE: FOR UNITS WITH THE REVERSE DOOR OPTION, INTERIOR COMPONENTS WILL APPEAR AS A MIRROR IMAGE OF THE ABOVE DIAGRAM.

NOTE: Dimensions in brackets are in millimeters.

## WEIGHT

### 12LC and V12LC Exhaust Defrost

Core Types	Total Assembled Weight
Polypropylene	186 lb.
Aluminum	208 lb.
Polymerized paper	199 lb.

### 12LC and V12LC Recirculation Defrost

Core Types	Total Assembled Weight
Polypropylene	247 lb.
Aluminum	269 lb.
Polymerized paper	260 lb.

## PERFORMANCES

External Static Pressure			Power Consumed Watt		HRV High Speed		ERV High Speed		HRV and ERV		
					cfm	L/s	cfm	L/s	Medium Speed		Low Speed
In. w.g.	Pascal							cfm	L/s	cfm	L/s
0.1	25	1361	1138	537	1108	523	1000	472	776	366	
0.2	50	1328	1104	521	1074	507	965	455	767	362	
0.3	75	1290	1067	503	1037	489	930	439	756	357	
0.4	100	1247	1026	484	996	470	894	422	743	350	
0.5	125	1199	981	463	950	448	856	404	728	343	
0.6	150	1146	929	438	899	424	817	385	707	333	
0.7	175	1087	870	410	840	396	774	365	675	318	
0.8	200	1024	800	377	770	363	723	341	628	296	
0.9	225	955	714	337	685	323	657	310	571	269	
1.0	250	881	614	290	582	275					

## ENERGY PERFORMANCE

POLYPROPYLENE CORE				EFFECTIVENESS		
SUPPLY TEMPERATURE		NET AIR FLOW		SENSIBLE	LATENT	TOTAL
°F	°C	CFM	L/S			
HEATING						
35	1.7	600	283	57	0	38
35	1.7	450	212	63	0	42
COOLING						
95	35	600	283	55	0	21
95	35	450	212	60	0	23

ALUMINUM CORE				EFFECTIVENESS		
SUPPLY TEMPERATURE		NET AIR FLOW		SENSIBLE	LATENT	TOTAL
°F	°C	CFM	L/S			
HEATING						
35	1.7	600	283	54	0	36
35	1.7	450	212	57	0	38
COOLING						
95	35	600	283	52	0	20
95	35	450	212	56	0	21

POLYMERIZED PAPER CORE (HM)				EFFECTIVENESS		
SUPPLY TEMPERATURE		NET AIR FLOW		SENSIBLE	LATENT	TOTAL
°F	°C	CFM	L/S			
HEATING						
35	1.7	600	283	60	47	56
35	1.7	450	212	65	53	61
COOLING						
95	35	600	283	60	38	46
95	35	450	212	63	45	52

## EFFECTIVENESS

UNIT PERFORMANCE, SENSIBLE EFFECTIVENESS				
HEATING SUPPLY TEMPERATURE 35°F / 1.7°C	AIRFLOW (CFM)			
	450	700	950	1200
POLYPROPYLENE	70	61	54	51
ALUMINUM	63	57	63	50
POLYMERIZED PAPER (HM)	75	70	67	64

UNIT PERFORMANCE, TOTAL EFFECTIVENESS				
COOLING SUPPLY TEMPERATURE 95°F / 35°C	AIRFLOW (CFM)			
	450	700	950	1200
POLYMERIZED PAPER (HM)	47	41	37	35

NOTE: All specifications are subject to change without notice.

## ACOUSTIC NOISE POWER CHART (dBA) AT UNIT PORTS

Airflow	Fresh air to building port	Exhaust air from building port
1026 CFM at 0.4 in. w.g.	74.8 dBA	58.5 dBA
767 CFM at 0.2 in. w.g.	71.5 dBA	56.3 dBA

The data shown on left chart come from measurement performed according to ISO 5136 Standard. These data represent the sound power directly measured at the fresh air distribution port and exhaust air from building port. To get the actual noise level in the room, consider noise attenuation resulting from total ductwork installation.

## SPECIFICATIONS

- Models: 12LC and V12LC
- All duct connections: 20" x 8"
- Housing: 20 ga. pre-painted steel
- Mounting: Reinforced rubber straps
- Drains: 3/4" threaded fittings
- Filters: 6 reticulated washable foam filters (20 ppi)  
3 disposable MERV 8 filters (optional) part no. 63342
- Mounting: Reinforced rubber straps
- Insulation: 1" foil faced and 1" acoustic fiberglass wool
- Supply and exhaust blower motors:
  - Motor type: PSC motors with sealed sleeved bearings
  - 3 speeds (2 available to customer)
  - R.P.M.: 1625 - H.P.: 1/3
  - Fan type: direct drive centrifugal blower 7 1/8" x 6"
  - Housing: galvanised steel
- Fans speed control:
  - Low, medium and high speeds
  - 2 speeds available to user
  - Low or medium speed is selected at the time of installation
- Unit electrical characteristics:
 

Volts	MCA	MOP	Watts
120	14.3	20.0	1275

Project:	REMARKS
Location:	
Model No.:	
Quantity:	
Submitted by: _____ Date: _____	

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