Energy Recovery Ventilator

Model No.： IWMBCOOF1AYE

54–102 CFM @ 0.4 in. w.g.

The Exinda Energy Recovery Ventilator (ERV) is engineered to improve indoor air quality and energy efficiency by capturing heat and moisture from outgoing stale air and transferring them to incoming fresh air. Utilizing a high-performance heat exchanger, the ERV recovers heat energy and humidity from exhaust air before it exits the building. This process preconditions the incoming air, significantly reducing the electric load on heating and cooling systems.

Energy Efficiency **Improved Air Quality** **Humidity Control**

- **Constant airflow** - Exinda ERV ensures balanced ventilation, preventing energy loss and poor air quality caused by duct resistance, filter clogging or pressure changes.
- **Auto-Balancing** - Fastest installation in its class, reducing setup time by up to 20 minutes per unit, thanks to Exinda innovative auto-balancing and self-adjusting technology.
- **Flexible mounting option** - Includes horizontal and wall-mounted configurations, enabling seamless integration into a variety of applications.
- **ECM motors -** High-performance ECM motors ensure reliable, energy-efficient operation.
- **Easy maintenance** - The ERV features an easily accessible door for hassle-free maintenance and filter replacement.
- **Three-speed airflow** - With a selectable airflow speed range from 54 – 102 CFM meets the needs of a medium-large size home.
- Unit UL1812(safety), CSA439 (performance) approved.

Product Details

Power Supply (V/Hz/Ph):	120/60/1
Power Supply Connections:	L, N, Ground
Connection Duct Diameter (in):	4
Min Circuit Amps MCA (A):	1.4
Max Overcurrent Protection MOP (A):	15
Max input power (W):	180
Dimensions (HxWxD) (in):	20-5/8 × 16-5/8 × 16-9/16
Condensate Pipe Connection	NA
Net Weight (lb):	44
Ext Static Pressure (HH/H/L) (in. w.g.)	0.4/0.2/0.1
Airflow Rate (HH/H/L) (CFM):	102 / 70/ 54
Sound Pressure Level (HH/H/L) (dBA):	30 / 27 / 23
Outdoor operating temperature range (°F DB)	−18 to 109 °F
Filter level /type / Qty	MERV 8 / Washable / 2
ERV Core / type	Cross Flow / Non-washable
Motor/Drive	ECM Motor Brushless Digitally controller/Direct
Number of speeds available with Basic Control	3
Defrost Type	Recirculation defrost
Balancing	Auto-Balancing

Fan Efficacy

External Static Pressure		Net Supply Airflow	Net Supply Airflow	Gross Supply Airflow	Gross Supply Airflow	Gross Exhaust Airflow	Gross Exhaust Airflow	Power
Pa	in.w.g.	Standard L/s	CFM	Standard L/s	CFM	Standard L/s	CFM	Watts
25	0.1	46	98	47	100	51	109	69
50	0.2	47	100	48	102	51	108	77
75	0.3	48	101	49	103	51	109	86
100	0.4	48	102	49	104	52	110	95
125	0.5	49	103	50	105	52	110	102
150	0.6	49	104	50	106	52	111	110
175	0.7	49	104	50	106	52	111	118
200	0.8	49	104	50	106	52	109	125
225	0.9	49	104	50	106	50	106	131
250	1.0	49	103	50	106	48	102	136
300	1.2	48	101	49	104	40	85	135

Fan Curves

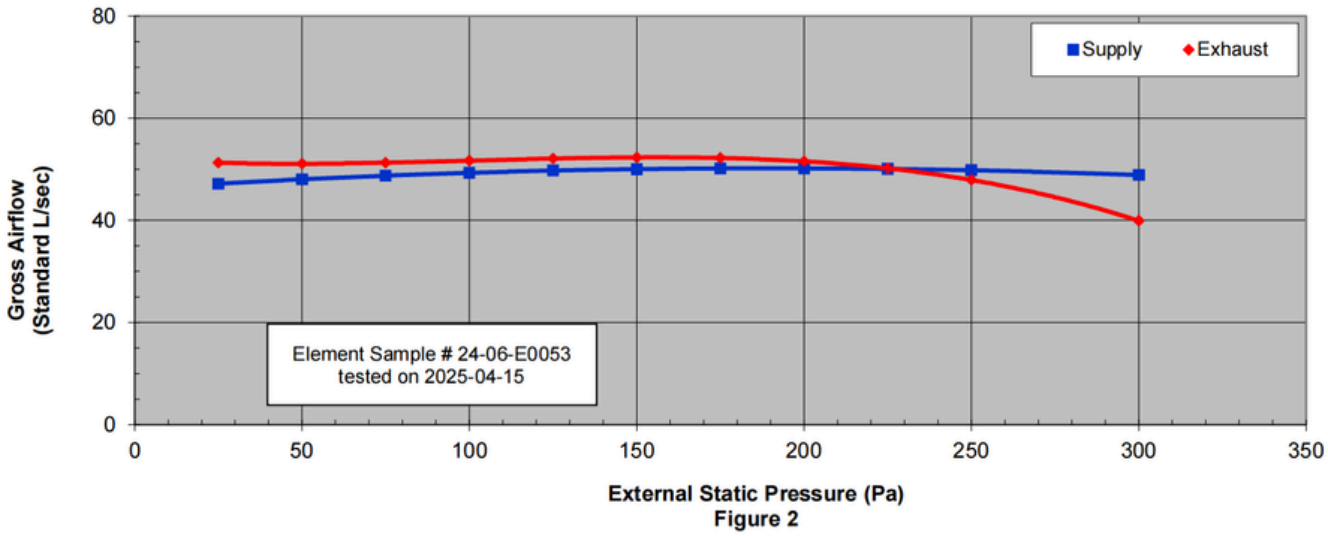

Figure 2

Energy Performance

HEATING	Inlet supply temperature		Net outdoor Airflow		Average power (watts)	Sensible recovery efficiency	Adjusted sensible recovery efficiency	Fan efficacy	
	℃	℉	L/s	scfm				L/s/W	cfm/W
1	0	32	30	64	30	72.7%	76.5%	1.0	2.1
2	0	32	46.6	99	92	67.7%	72.5%	0.51	1.08
COOLING	Inlet supply temperature		Net outdoor Airflow		Average power (watts)	Sensible total efficiency	Adjusted total recovery efficiency	Fan efficacy	
	℃	℉	L/s	scfm				L/s/W	cfm/W
1	35	95	26.7	56	30	57.1%	59.5%	0.89	1.86

Dimension Drawing