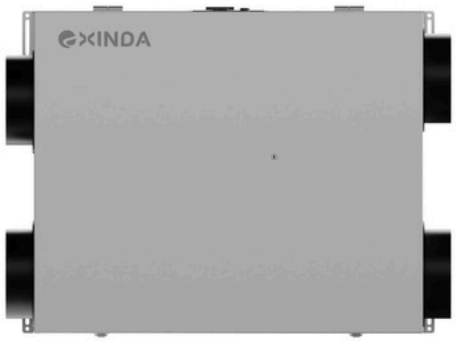
Energy Recovery Ventilator

Model No.： ICMBCOFF1AYE

49–133 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** - Including horizontal and wall-mounted configurations, enable 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 49 – 133 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):	6
Min Circuit Amps MCA (A):	1.6
Max Overcurrent Protection MOP (A):	15
Max input power (W):	180
Dimensions (HxWxD) (in):	9-11/16 × 26 × 21-9/16
Condensate Pipe Connection	NA
Net Weight (lb):	43
Ext Static Pressure (HH/H/L) (in. w.g.)	0.4/0.2/0.1
Airflow Rate (HH/H/L) (CFM):	133/85/49
Sound Pressure Level (HH/H/L) (dBA):	36 /33 /24
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	61.3	129	61.9	131	64.5	136	89
50	0.2	61.8	130	62.4	132	66.4	140	95
75	0.3	62.4	132	63.0	133	67.5	143	108
100	0.4	63.1	133	63.7	135	67.9	143	116
125	0.5	63.6	134	64.2	136	67.5	143	127
150	0.6	63.8	135	64.4	136	66.4	140	134
175	0.7	63.5	134	64.1	135	64.4	136	145
200	0.8	62.5	132	63.1	133	61.6	130	146
225	0.9	60.7	128	61.3	129	58.0	122	143
250	1.0	57.8	122	58.4	123	53.6	113	134
300	1.2	48.4	102	48.8	103	42.1	89	120

Fan Curves

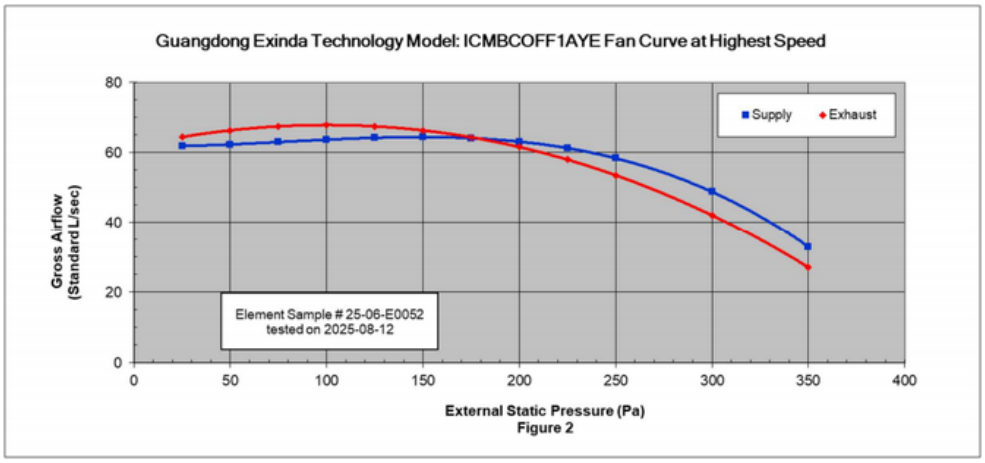


Figure 2

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	23.1	49	26	77.5%	81.3%	0.88	1.9
2	0	32	40.2	85	45	70.2%	73.8%	0.89	1.9
3	0	32	63.5	134	94	62.8%	67.3%	0.67	1.4
COOLING	Inlet supply temperature		Net outdoor Airflow		Average power (watts)	Total recovery efficiency	Adjusted total recovery efficiency	Apparent effectiveness	Net Moisture Transfer
	℃	℉	L/s	scfm					
1	35	95	21.9	46	29	56%	58.1%	85.5%	51%

Dimension Drawing