

ENERGY RECOVERY VENTILATOR

ODD-ERV100EC
ODD-ERV100EC-M (Mirrored Model)



CERTIFICATIONS









DEFROST

Integrated dampers allow seamless defrosting to prevent the energy recovery core from freezing in cold weather in order to maintain high energy efficiency. Normal operation switches to defrost mode automatically based on outdoor conditions. The default defrost mode

Optional: Exhaust only defrost mode available when paired with ODD-ERV-EC control.

Recirculation Defrost						
Outside Te	emperature	Defrost Cycle min./				
°C	°F	Operating min.				
Warmer Than -10	Warmer Than 13.8	No Defrost				
-10 To -15	13.8 To 4.7	9/60				
-15 To -20	4.7 To -4	9/35				
-20 To -27	-4 To -17.1	9/27				
-27 To -30	-17.1 To -22.6	9/20				
-30 And Less	-22.6 And Less	9/4				

T=60min

5 YEAR WARRANTY

HIGHLIGHTS

Energy Recovery Ventilator boosting comfort & cutting energy costs for a healthier, more efficient space

- Enhanced Indoor Air Quality: This air exchange system improves indoor air quality by retaining existing heat and optimizing interior moisture levels. Mirrored: Mirrored unit available for identical but
- Built-in Humidity Control: Includes a humidity sensor to automatically maintain optimal indoor moisture
- levels for comfort. **Adjustable Airflow:** Supply and exhaust airflow can be manually adjusted within a range of 40 to 100 CFM.
- Advanced Energy Recovery Core: Features a counterflow graphene core for superior energy transfer and thermal efficiency.
- Efficient EC Motors: Powered by two enclosed EC motors designed for quiet, continuous, and reliable
- Simplified Installation: Hard-wired option available. Mounting brackets included for easy setup for ceiling
- Low-Temperature Protection: Designed to maintain performance and prevent freezing in extreme
- Filtration: Utilizes MERV4 washable and replaceable filters with 20 PPI for improved air purity. MERV 8 & 13
- Sound Level: 1.5 sones @ 100 CFM*
 Safety Feature: Equipped with a door switch that cuts
- power to the motors when the access door is opened. **Customizable Run Time:** Timer knob allows run time adjustments from 5 to 60 minutes per hour, providing
- flexibility to suit your needs. **Airflow Testing:** Features built-in test ports with plugs in each area for precise airflow and pressure measurement during startup and balancing.

 Certified Performance: Compliant with CSA Standard
- C439-18 for trusted energy recovery performance.

*not tested under controlled environment

SPECIFICATIONS

ODD-ERV100EC	ODD-ERV100EC-M		
Efficiency (SRE)	87% @ 48CFM		
Airflow	98.8CFM @ 0.2"wg		
Voltage	120V / 1 Ph / 60Hz		
Wattage	61.8W		
Amp	0.52A		
Fans	EC motor		
Duct Size	6"		
Weight	42 lbs		

INFUSE NATURE INTO YOUR SPACE

ORTECH reserves the right to modify at any time, without notice, any or all of our product's features, designs, components and specifications to meet market changes.









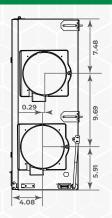


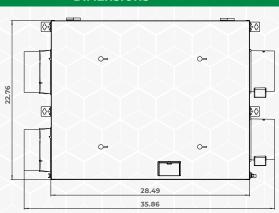
ENERGY RECOVERY VENTILATOR

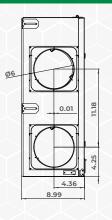
ODD-ERV100EC ODD-ERV100EC-M (Mirrored Model)

DIMENSIONS

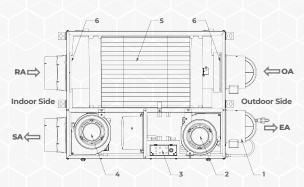
(All measurements are in inches)







AIRFLOW



OA: Outside Air SA: Supply Air RA: Room Air EA: Exhaust Air

- 1. Duct Connecting Collars
- 2. Exhaust Fan
- 3. Control Box
- 4. Supply Fan
- 5. Energy Exchanger Core
- 6. Air Filters

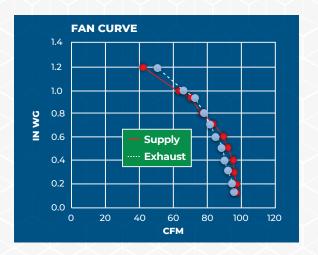
	/ -6	5	6—	
	V =			
OA⇔ (⇒RA
Outdoor Side				Indoor Side
		. 4		
EA				⇒SA
1_/_2		3_4		

(Mirrored Option)

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EXHAUST CFM	SUPPLY CFM	IN WG
98.2	98.9	0.10
97.3	98.8	0.20
95.9	97.9	0.30
94.0	96.0	0.40
91.4	93.2	0.50
88.1	89.3	0.60
84.0	84.3	0.70
79.0	78.2	0.80
73.0	71.0	0.90
66.0	62.5	1.00
48.4	41.6	1.20



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ENERGY PERFORMANCE

HEATING		PPLY MP.	NET AIRFLOW (CFM)	AVERAGE POWER	SENSIBLE RECOVERY EFFICIENCY (SRE)	ADJUSTED SENSIBLE RECOVERY EFFICIENCY (ASRE)	APPARENT SENSIBLE EFFECTIVENESS (ASE)	NET MOISTURE TRANSFER
iK.	0°C	32°F	48.5	19W	87.4	90.3	92.4	0.88
ii	0°C	32°F	60.8	24W	83.7	86.6	89.1	0.83
iii	0°C	32°F	81.4	39W	79.2	82.7	83.9	0.78
iv	-25°C	-13°F	49.2	41W	63.6	65.8	86.3	0.61

	COOLING		PPLY MP.	NET AIRFLOW (CFM)	DOWED		ADJUSTED SENSIBLE RECOVERY EFFICIENCY (ASRE)	APPARENT SENSIBLE EFFECTIVENESS (ASE)	NET MOISTURE TRANSFER
ᄉ		35°C	95°F	47.7	20W	75.3	81.1	86.1	0.84

ACCESSORIES (SOLD SEPARATELY)







ERV-SC-1 (Screen Controller)



FAP (Flush Access Panel)



MAP (Mud Access Panel)



PAV-B (Polymeric Air Valve)



SAV (Supply Air Valve)



REFERENCE	QUANTITY	REMARKS	PROJECT DETAILS	
			Project:	
			Location	
			Architect:	
			Engineer:	
			Contractor:	
			Submitted By:	
			Date:	

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