

Energy Recovery Ventilator Model SYNC-110SE-S1





October 2023





The Affordable Balanced Ventilation Solution

Compact, Energy-Efficient Energy Recovery Ventilator

Features:

- The **SYNC-110SE-S1** energy recovery ventilator (ERV) is the perfect high-performance solution for single or multifamily installations with limited mechanical space.
- The **low-profile design** (9.75-inch height) simplifies installations in bulkheads and drop ceilings.
- The **SYNC-110SE-S1** is powered by two electronically commutated motors (ECM) with adaptive, variable speed technology programmed to adapt to the static pressure associated with a dirty filter or core. The motor reacts to increased static pressure by increasing its speed to ensure you have the airflow required to maintain a healthy balance.
- 50-130 cfm operational range with high-speed selections.
- Total Recovery Core: The cross-flow energy recovery core transfers heat and moisture between two airstreams without allowing cross contamination. Used for balanced mechanical ventilation in humid environments to reduce air conditioning (AC) energy costs. In colder climates, moisture transfer is reversed. The unit helps to moderate humidity and the core is a highly efficient heat exchanger. Can be easily removed for cleaning or service.



- HVI Certified
- Frost Prevention: Temperature sensor activated. Supply air shuts off to defrost core with warm exhaust air at high speed. Condensation lines are not required.

Additional Benefits

- A convenient hinged door without screws and a removable motor and electronic assembly allow for easy maintenance and service.
- Swing open junction box cover for quick access to the circuit board and DIP switches.
- Washable antimicrobial MERV-6 air filters in exhaust and supply airstreams. MERV-13 upgrade option is available.
- Brackets included for easy ceiling installation.
- 20-gauge prepainted galvanized steel for superior corrosion resistance, insulated to prevent exterior condensation.
- Available in mirrored and hardwired configurations upon request.





OPTIONAL ACCESSORIES:

Control Options

All controls offer continuous ventilation, continuous low-speed operation, 3-wire connection and are compatible with the Wireless Timer (435248).

Additional Features	Precision- SYNC Digital Wall Control (435244)	Two-Speed Switch with Humidity Sensor (435245)	Two-Speed Switch with Intermittent Mode (435246)
5-speed fan operation on each mode	\checkmark		
2-speed fan operation (Low/High)		\checkmark	\checkmark
Humidity control with adjustable dehumidistat	\checkmark	\checkmark	
Large digital LCD screen	\checkmark		
LED status indicator lights		\checkmark	\checkmark
20 ON/40 OFF	\checkmark		\checkmark
10 ON/50 OFF	\checkmark		
20/40/60 min. high-speed override button	\checkmark		

PRECISION SYNC



435244





HAVEN IAQ Control Bundle

Using the HAVEN Central Air Monitor and Central Air Controller (485673) in combination with your Greenheck ASSURE or SYNC ERV and up to one additional HVAC device (e.g. dehumidifier) provides automated indoor air quality management for a **simple, affordable indoor air quality system**.

The Monitor measures whole-house airflow and detects particles (PM2.5), chemicals (VOC), temperature, and relative humidity in the air and uses its readings to inform the Controller when to automate your ERV to temporarily initiate HIGH Fan speed ventilation. The ERV will return to the selected operational mode and fan speed setting when the detected event is cleared from the Central Air Monitor.

Timer Options

20/40/60 Minute Timer (435247)

Initiates high speed ventilation for 20, 40 or 60 minutes. 3-wire connection.

20/40/60 Minute Wireless Timer (435248)

Initiates high speed ventilation for 20, 40 or 60 minutes. Wirelessly connects to main control for ease of installation. 40 ft approximate range. Pair with the Wireless Repeater (435249) to extend the range of the timer.

Additional Accessories

Dual Intake and Exhaust Hood (435250)

Features a 5-inch dual hood. Ideal for space constrained ERV applications, with only one 6-inch opening required for intake/exhaust.

MERV 13 Filter (485463)

MERV 13 filters are designed to offer added protection from dust, pollen, mold, bacteria, and any airborne particles with a size of 0.3 microns (μ m).



485673



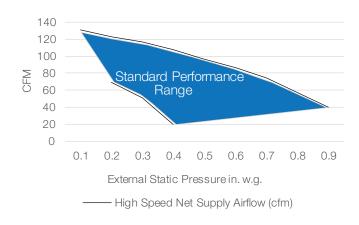




Airflow Performance

SYNC110

Ext. Static Pressure (in. wg)	High Speed Net Supply Airflow (CFM)	Power (Watts)	CFM/Watt
0.1	131	74	1.8
0.2	123	72	1.7
0.3	117	68	1.7
0.4	108	66	1.6
0.5	97	62	1.6
0.6	87	58	1.5
0.7	74	53	1.4
0.8	57	49	1.2
0.9	40	46	0.9
1.0	85	126	0.67



Energy Performance

	Outd Air Cond	litions	Indo Air Cond	litions	Net Airflow (CFM)	Power (Watts)	CFM/ Watt	Sensible Recovery Efficiency	Apparent Sensible Effectiveness	Adjusted Sensible Recovery Efficiency	Latent Recovery	Total Recovery Efficiency	Adjusted Total Recovery Efficiency	Electrical Specifications
	Temp	RH %	Temp	RH %										
					49	22	2.23	72%	80%	75%	64%	-	-	
Heating	32° F	75%	71.6° F	40%	64	26	2.46	71%	77%	-	-	-	-	
					96	50	1.92	66%	72%	-	-	-	-	120V/60hz/1.4A
Cooling	95° F	50%	75° F	50%	49	22	2.23	60%	73%	-	45%	51%	53%	1200700112/1.4A
Cooling	30 1	50 70		00%	-	-	-	-	-	-	-	-	-	
												UVI Contificu	d Daint	

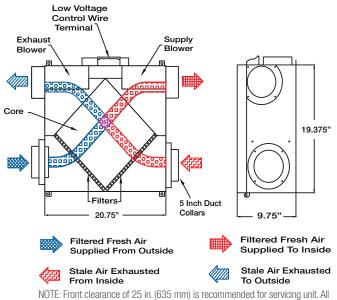
= HVI Certified Point

Sound Performance

Speed Setting	Outlet CFM	Sones	dBA
1	60	1.2	35.6
2	70	1.4	36.9
3	77	1.7	38.4
4	84	1.9	39.4
5	84	2.3	41.1

NOTE: Data represents radiated sound measured at five feet at 0.1" static pressure in an accredited ACMA sound testing facility For additional sound performance, please consult ERV submittal

Dimensions



NOTE: Front clearance of 25 in. (635 mm) is recommended for servicing unit. A ducts use 5 in. (125 mm) round collars. MERV 13 upgrade: 485463

Weight: 34 lbs (15.5 kg) • Shipping weight: 36 lbs (16 kg)



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