

SER 8504

Light Commercial ERV

Product #: 44926



The SER series lowers demand on air conditioning systems. Air supplied from outdoors enters through the energy recovery core where it transfers the heat and moisture from the incoming air to the outgoing air that was cooled and dried by the building's air conditioner. The air brought into the working area is cooled and the humidity is reduced for maximum comfort. Reduces the load on an air conditioner to save on cooling costs. This unit is designed for warmer, humid climates with longer cooling seasons

Feature

- Push-pull configuration
- External low voltage contacts
- Dual service doors & reversible electrical box
- External three position switch (Low/Standby/Medium)
- Weighs 210 lbs (95Kg)

Applications

- Class Room
- Offices
- Retail Shops
- Clinics
- Hair Salon
- Animal Shelters
- Bars & Restaurants
- Larger Homes

Specifications

- Voltage/Phase – 120/1
- Power rated – 1320 W
- Amp – 11 A
- Average airflow – 825 cfm (389 L/s)
@ 0.4" P_s (100Pa)

Port configuration

The unit has access doors on the front and back. Also, the main control panel may be moved from front to back allowing for ducting layout.



Motors

Four (4) factory balanced motors with backward curved blades. Motors come with permanently lubricated sealed ball bearings and (TOP) thermal overload protected.

Energy recovery core

Three (3) modular energy recovery cores manufactured from a flame-proof/Polyester-based synthetic paper designed to transfer sensible and latent heat. During winter, the core transfers heat and moisture from the outgoing air to the incoming fresh air. While in summer core transfers heat and moisture from the incoming air to the outgoing air to reduce the latent load. The SER 8504 features three cores, each 12" x 12" (305 mm x 305 mm) with a 15" (380 mm) depth.

Defrost

A preset frost control sequence is initiated if the outdoor temperature falls below the set point of 23°F (-5°C). During the initial stage, the supply blower shuts down & the exhaust blower switches into high speed to eliminate frost build-up in the core. The unit then returns to normal operation for the final stage of the frost control sequence at which time the sequence is repeated if the outdoor air temperatures is still below the set point.

Serviceability

Cores, filters and drain pan can be accessed easily from both sides of the ERV from hinged access panels. Cores conveniently slide out with only 15" (380 mm) clearance. Blowers can be accessed from both side of the ERV from fastened access panels. Blowers are easily removed by taking off the access panel and sliding the motor plates out of the ERV. A quick connect allows for fast inspection of blowers.

Case

20 gauge galvanized steel. Baked powder coated paint.

Insulation

Insulated with 1 in. (25 mm) fiberglass with FSK facing for condensation control.

Filters

The exhaust and fresh air streams are protected by MERV1 washable filters constructed to meet UL 900. Optional MERV6 filters are direct replacement to the MERV1. Use of MERV6 filters will add an additional system pressure of 0.22in.wg (55 Pa) at 850 cfm (401 l/s).

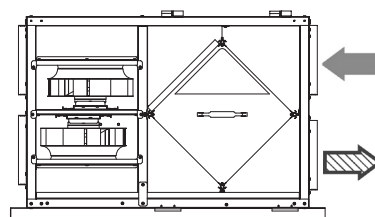
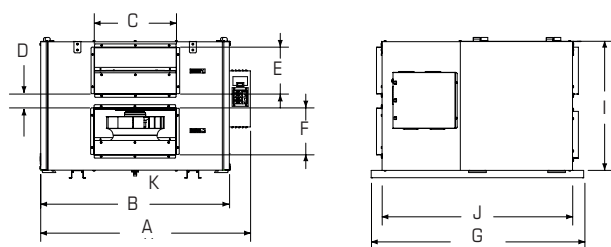
Controls

External three (3) position (Low/Stand By/Medium) rocker switch that will offer continuous ventilation. In addition Fantech offers a variety of external controls.

Mounting

Unit may be suspended by using threaded rod, not supplied, or placed on a platform. Unit shall be adaptable for easy service of electrical components

Dimensions & airflow

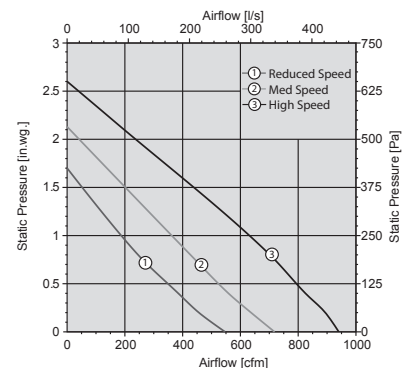


- Fresh air to inside
- Fresh air from outside
- Stale air from inside
- Stale air to outside

Model	A		B		C		D		E		F		G		I		J		K	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
SER8504	51 2/5	1306	47 1/5	1199	20	508	2 2/5	61	8	203	8	203	36 1/3	923	22	559	32 1/2	826	1 1/2	13

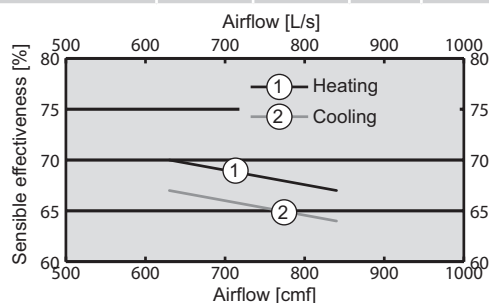
Ventilation Performance

in. wg. (Pa)	0.2 (50)	0.4 (100)	0.8 (200)	1.0 (250)	1.4 (350)	1.7 (425)	1.9 (475)
	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)
Supply High	888 (419)	827 (390)	697 (329)	629 (297)	485 (229)	370 (175)	291 (137)
Supply Med	635 (300)	559 (264)	426 (201)	365 (172)	245 (116)	152 (72)	85 (40)
Supply Low	459 (217)	381 (180)	245 (115)	186 (88)	77 (36)	-	-



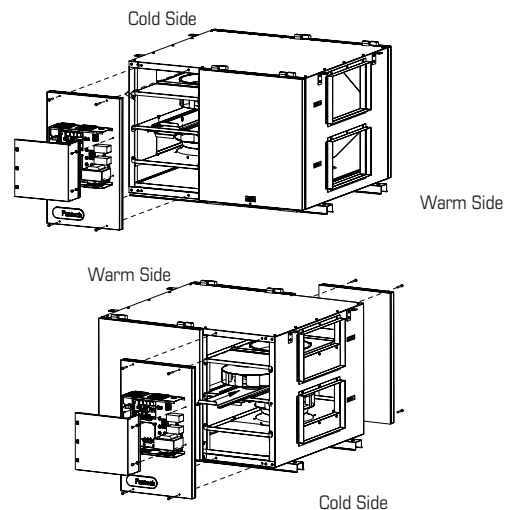
Energy performance

	Supply temperature		Net airflow		Effectiveness	
					Sensible	Latent
	°F	°C	cfm	L/s	%	%
Heating	35	1.7	840	396	67	39
	35	1.7	630	297	70	46
Cooling	95	35	840	396	64	28
	95	35	630	297	67	34



Port configuration

Standard Configuration as shipped from factory



Requirements and standards

- Complies with the UL 1812 requirements regulating the construction and installation of Heat Recovery Ventilators
- Complies with the CSA C22.2 no. 113 Standard applicable to ventilators
- Technical data was obtained from published results of test relating to AHRI 1060 Standards

Contacts

Submitted by:	Date:
Quantity:	Model:
Comments:	Project #:
Location:	
Architect:	
Engineer:	Contractor:

Distributed by:

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