# **Specification Sheet**

# SER 5504

# Light Commercial ERV





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 169 lbs (77Kg)

# **Applications**

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

# Larger Homes

# Specifications

- Voltage/Phase
- Power rated
- Amp

– 5.5 A

- 120/1

- 660 W

- Average airflow 540 cfm (255 L/s)
  - @ 0.4" P<sub>s</sub> (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

Two (2) factory balanced motors with backward curved blades. Motors come with permanently lubricated sealed ball bearings and (TOP) thermal overload protected.

# **Energy recovery core**

Two (2) 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 5504 features two 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 1in. (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 0.20in.wg (50 Pa) at 550 cfm (259 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**



#### Ventilation Performance

in. wg. (Pa)	0.2 (50)	0.4 (100)	0.8 (200)	1.0 (250)	1.4 (350)	1.7 (475)
	cfm (L/s)					
Supply High	593 (280)	540 (255)	439 (207)	382 (180)	267 (126)	177 (84)
Supply Med	380 (179)	321 (151)	210 (99)	161 (76)	79 (37)	34 (16)
Supply Low	258 (122)	194 (92)	99 (47)	64 (30)	-	-



#### **Energy performance**

	Supply temperature		Net airflow		Effectiveness	
					Sensible	Latent
	°F	°C	cfm	L/s	%	%
Heating	35	1.7	560	264	67	39
	35	1.7	420	198	70	46
Cooling	95	35	560	264	64	28
	95	35	420	198	67	34



### **Requirements and standards**

Complies with the UL 1812 requirements regulating the construction and installation of Heat Recovery Ventilators

**Distributed by:** 

- 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

	Date:				
Model:	Project #:				
Architect:					
	Contractor:				
	Model:				

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# **Port configuration**

Standard Configuration as shipped from factory



Warm Side



Cold Side

