# **SHR 6905R**

## Commercial Heat Recovery Ventilators Product #: 41047



The SHR 6905R Commercial Heat Recovery Ventilation system (HRV) complements today's tight buildings. Fantech Heat Recovery Ventilators (HRV) are designed to supply air into a building while exhausting an equal amount of contaminated air to the outside. The aluminum heat exchanger core transfers sensible energy between air streams resulting in tempering of the supply air and reduced loads on the HVAC system.

#### **Feature**

- · Push-pull configuration
- External low voltage contacts
- Dual service doors & reversible electrical box
- External three position switch (Low/Standby/Medium)
- Weighs 201 lbs (91 Kg)

### **Specifications**

Voltage/Phase – 120/1
 Power rated – 660 W
 Amp – 5.5 A

• Average airflow – 687 cfm (324 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.





#### Fans

Two (2) factory balanced fans with backward curved blades. Motors come with permanently lubricated sealed ball bearings, (TOP) thermal overload protected and maintenance-free operation.

## **Heat recovery core**

The heat recovery cores are fixed plate cross-flow heat exchanger using 1100 alloy aluminum and capable of transferring sensible heat between air streams. The heat recovery cores are engineered with a turbulence inducing geometry in order to maximize heat transfer while allowing an effective evacuation of condensate. The plates are hemmed to avoid cross-contamination of airstreams. The SHR 6905R features two cores, each 12" x 12" (305 mm x 305 mm) with a 15" (380 mm) depth.

#### Defrost

During the defrost sequence, a motorized damper temporarily blocks the incoming fresh air stream so that the warm air from the building can circulate through the HRV. The exhaust blower shuts down and the supply blower switches into high speed to maximize the effectiveness of the defrost strategy.

### Serviceability

Cores, filters and drain pan can be accessed easily from both sides of the HRV from hinged access panels. Cores conveniently slide out with only 15" (380 mm) clearance. Blowers can be accessed from both side of the HRV from fastened access panels. Blowers are easily removed by taking off the access panel and sliding the motor plates out of the HRV. 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 0.26in.wg (60 Pa) at 690 cfm (326 l/s).

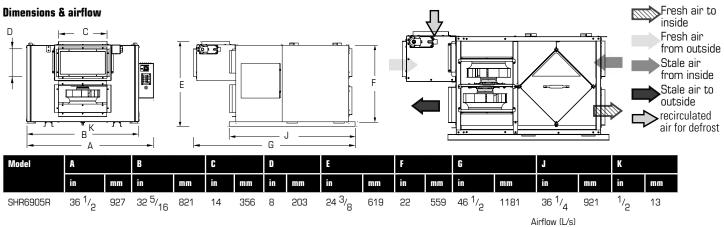
#### Controls

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**

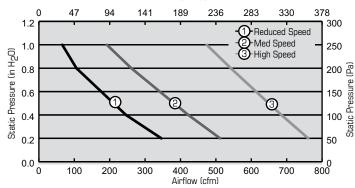
Unit may be suspended by using threaded rod, not supplied, or placed on a platform. Unit shall be adaptable for easy service of electrical components.





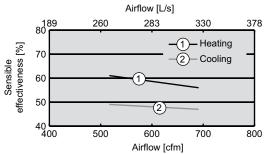
## **Ventilation Performance**

in. wg. (Pa)	0.2 (50)	0.4 (100) 0.8 (200)		1.0 (250)
	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)
Supply High	761 (359)	685 (323)	542 (256)	474 (224)
Supply Med	512 (242)	422 (199)	261 (123)	192 (91)
Supply Low	346 (163)	246 (116)	106 (50)	66 (31)



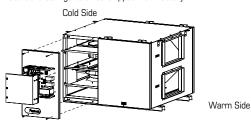
## **Energy performance**

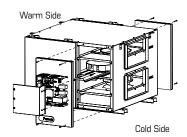
	Supply temperature		Net airflow		Sensible effectiveness
	°F	°C	cfm	L/s	%
Heating	35	1.7	690	326	56
	35	1.7	518	244	61
Cooling	95	35	690	326	47
	95	35	518	244	49



## **Port configuration**

Standard Configuration as shipped from factory





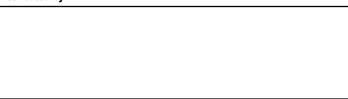
## Requirements and standards

- 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:	Project #:
Comments:		
Location:		
Architect:		
Engineer:		Contractor:

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United States 10048 Industrial Blvd. • Lenexa, KS 66215 • 1.800.747.1762 • www.fantech.net Canada 50 Kanalflakt Way • Bouctouche, NB E4S 3M5 • 1.800.565.3548 • www.fantech.net

