SHR 800

Commercial Heat Recovery Ventilators

Product #: 99270

The SHR 800 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
- Removable screw terminal for easy connection
- Dual service doors & reversible electrical box
- External three position switch (Low/Standby/High))
- Weight 158 lbs (90Kg)

Specifications

- Voltage/Phase – 120/1
- Power rated – 636 W
- Amp – 5.3 A
- Average airflow @ 0.4" P_S (100Pa) – 794 cfm (375 L/s)

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.

Warranty

Limited lifetime on aluminum core, 3 years on motors, and 3 years on parts.

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

Fantech manufactures this fixed plate cross-flow heat exchanger using new 1100 alloy aluminum. Heat exchanger is engineered with a turbulence inducing geometry in order to maximize heat transfer while allowing an effective evacuation of condensate. The plates are hemmed and sealed to ensure no cross-contamination of airstreams. The aluminum core had a plastic handle for easy removal. The SHR 800 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 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

22 gauge galvanized steel. Baked powder coated paint.

Insulation

Insulated with 1 in. (25 mm) fiberglass with FSK facing and 2 in. (50 mm)of foil-faced high density polystyrene foam on the outdoor air side 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 0.76 in.wg (190 Pa) at 800 cfm (378 l/s). Additional MERV Rated filters available upon request.

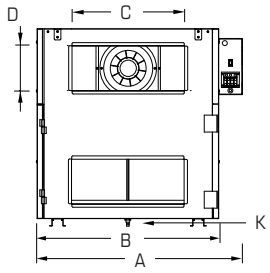
Controls

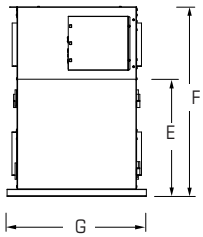
External three (3) position (Low/Stand By/High) rocker switch that will offer continuous ventilation. In addition Fantech offers a variety of external controls.

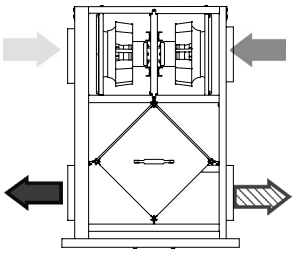
Mounting

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





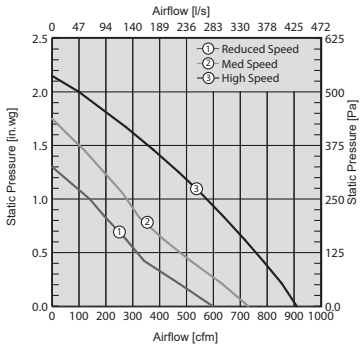


Fresh air to inside
Fresh air from outside
Stale air from inside
Stale air to outside

Model	A		B		C		D		E		F		G		K	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
SHR 800	36 1/2	927	32 3/16	818	21 1/8	537	7 15/16	202	21 1/2	546	35	889	25 3/4	654	1/2	13

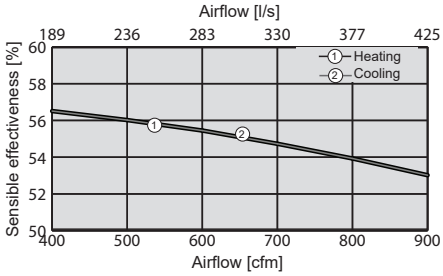
Ventilation Performance

in. wg. (Pa)	0.2 (50)	0.4 (100)	0.6 (150)	0.8 (200)	1.0 (250)	1.4 (350)	1.6 (400)	1.8 (450)
	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)
Supply high	854 (403)	794 (375)	728 (344)	656 (310)	577 (272)	402 (190)	306 (144)	203 (96)
Supply med	626 (295)	530 (250)	439 (207)	354 (167)	273 (128)	126 (59)	-	-
Supply low	480 (227)	379 (179)	286 (135)	200 (94)	120 (57)	-	-	-



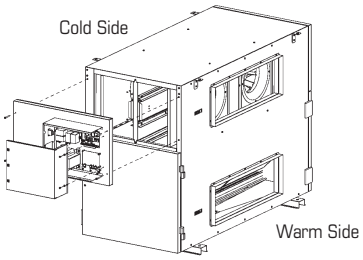
Energy performance

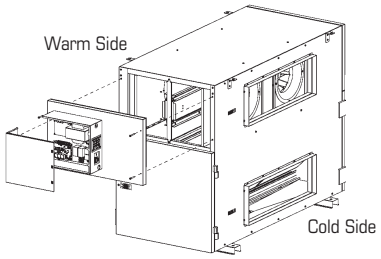
	Supply temperature		Net airflow		Net Effectiveness	
					Sensible	Total
	°F	°C	cfm	L/s	%	%
Heating	35	1.7	690	326	55	36
	35	1.7	518	244	56	37
Cooling	95	35	690	326	55	21
	95	35	518	244	56	21



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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