

SHR 700 Heat Rec Ventilator

Item Number: 99268

Variant: 120V 1~ 60Hz



- Airflow up to 723 cfm @ 0.4" PS
- Push-pull configuration
- Removable screw terminal for easy connection
- Dual service doors & reversible electrical box
- External three position switch (Low/Standby/High)

Application

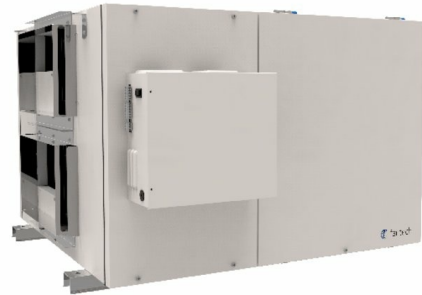
The SHR 700 Commercial Heat Recovery Ventilation system (HRV) complements today's tight buildings.

How it works

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.

Defrost cycle

A preset defrost sequence is activated at an outdoor air temperature of 23°F and lower. During the defrost sequence, the supply blower shuts down & the exhaust blower switches to high speed to maximize the effectiveness of the defrost strategy. The unit then returns to normal operation, and continues the cycle.



Technical parameters

Unit		
Frequency	60	Hz
Voltage (nominal)	120	V
Phase(s)	1~	
Input current	5.58	A
MCA	6.88	A
MOP	15	A
Input power	670	W
Air flow	max 723.0	cfm

Static pressure	0.4 in.wg
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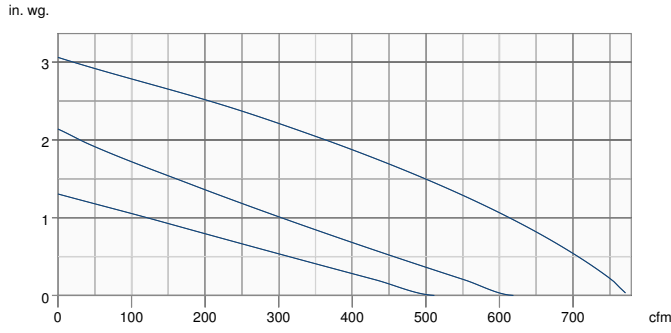
Dimensions and weights

Weight	215 lb
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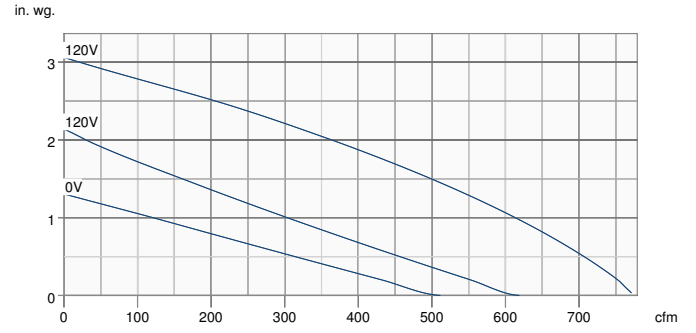
Certificates

Certificate	CSA, AHRI
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Supply - Performance curve



Extract - Performance curve

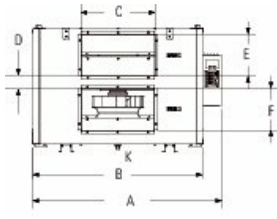


Unit	Supply	Extract
Required air flow	-	-
Working air flow	-	-
Required external pressure	-	-
Working air pressure	-	-
Power	-	-
Current	-	-
Air density	0.075 lb/ft ³	
Fan control - RPM	-	-

Performances

	Supply Temperature	Net Airflow	Net Effectiveness	
			Sensible	Total
	°F (°C)	cfm (L/s)	%	%
Heating	35 (1.7)	690 (326)	57	37
	35 (1.7)	518 (244)	61	40
Cooling	95 (35)	690 (326)	47	18
	95 (35)	518 (244)	49	19

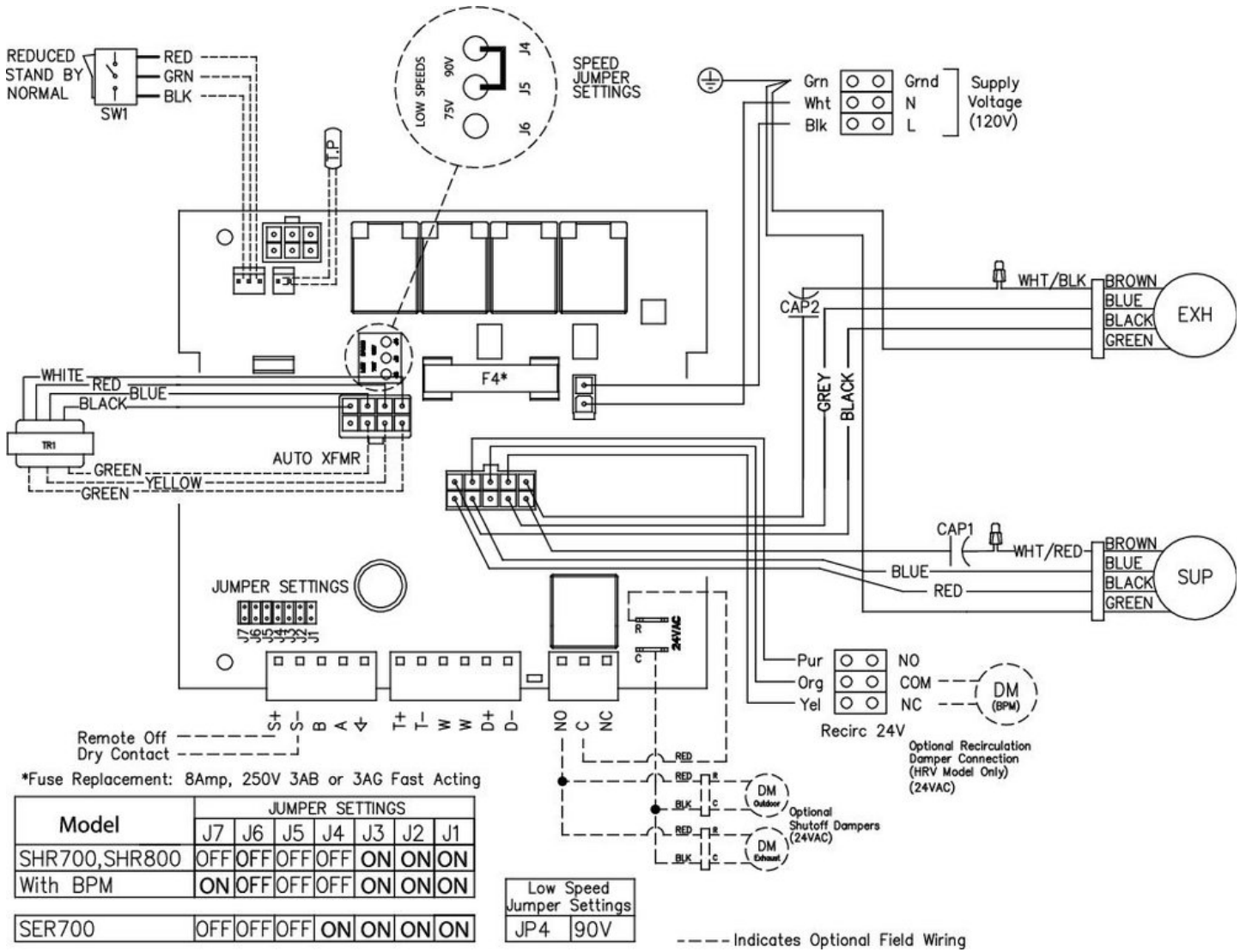
Dimensions



A	B	C	D	E	F	G	I	J	K (Drain)
36 1/2 (927)	32 3/16 (818)	13 7/8 (352)	2 3/8 (60)	8 (203)	8 (203)	36 1/4 (921)	22 (559)	32 1/2 (826)	1/2 (13)

Dimensional information is in inches (mm).

Wiring



Accessories

- BPM 08-14 Bypass module (99300)
- ECO-TOUCH® Pgrm Wall Control (44929)
- EDF7 Elec Multi-Funct Dehum (44883)
- IR 4 Iris Damper (411234)
- IR 6 Iris Damper (411236)
- MDEH1 Low Voltage Dehumidistat (40172)
- MGE 5 Metal Exhaust Grill (411370)
- MGE 8 Metal Exhaust Grill (411244)
- MGS 6 Metal Supply Grill (411242)
- RTS2 Pushbutton Timer (40164)
- CO2RT-R Transmitter (99315)
- EDF1 Multi-Func Ctrl (40375)
- EFD 14-8, Damper, TFB24 (99303)
- IR 5 Iris Damper (411235)
- IR 8 Iris Damper (411237)
- MGE 4 Metal Exhaust Grill (411106)
- MGE 6 Metal Exhaust Grill (411371)
- MGS 5 Metal Supply Grill (411369)
- MGS 8 Metal Supply Grill (411243)
- RTS5 Pushbutton Timer (44794)

Documents

- E400048 SHR 700 - SER 700 DIMENSIONAL SUBMITTAL.PDF
- E400052 LC HRV GUIDE SPECS EN.PDF
- E400039 SHR700 SUBMITTAL SHEET EN.PDF
- 444579 SHR700 SPEC SHEET EN.PDF
- 444567 LIGHT COMMERCIAL SHR IOM EN FR.PDF
- SHR 700 SERVICE MANUAL.PDF
- SHR 700, SER 700.DXF
- SHR 700 WITH BPM.DXF

Specification

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 700 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

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 0.64 in.wg (160 Pa) at 700 cfm (330 l/s). Additional MERV Rated filters available upon request.

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.

Warranty

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

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