Shutter Mounted Exhaust Fan Manual

Thermostat Included With Select Models

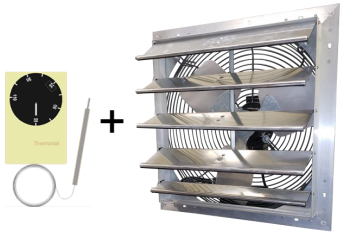
Sizes: 8” - 36” • 115V/60HZ • UL/cUL 705

Models Covered—Without Thermostat

8SF, 10SF, 12SF, 12SF4T50C, 14SF, 16SF, 16SF4T60C, 18SF, 18SF180, 20SF, 20SF4T90C, 24SF, 24SF240, 24SF6D240C, 30SF8N240, 36SF8N370

Models Covered—Thermostat Included

8SF-TH, 10SF-TH, 12SF-TH, 14SF-TH, 16SF-TH, 18SF-TH, 20SF-TH, 24SF-TH



Please read and save these instructions. Read carefully before attempting to install, operate or maintain the equipment described within this manual. Carefully follow all safety information.

Save this manual for future reference.

Model # _____ Purchase Date:_____

Index

Tools/Materials Needed:

- Drill/drill bits
- Ratchet/Socket set
- Mounting Fasteners

Contents:

- Exhaust Fan (1)
- Instruction Manual (1)

Inspection

After unpacking your fan, carefully inspect for any damage that may have occurred during transit. Inspect for loose, missing or damaged parts. If there is physical damage to any parts of the fan, a freight claim must be filed with the carrier. Check to make sure that all bolts, screws and set screws are securely tightened and have not become loose during transit. Retighten as required.

Warning: **General Safety Instructions**

Before installing or servicing, disconnect all power. Keep hands and body parts clear of all moving parts when installing or servicing.

Read and follow all instructions, cautions and warnings. Failure to do so could result in personal injury, death or property damage.

Electrical connections, installation and maintenance must be done by qualified personnel in accordance with all applicable codes. Unit must be adequately grounded.

To reduce the risk of fire or electrical shock, do not expose this fan to water or touch electrically live components.

Free rotation of the propeller is critical. It must not touch any part of the guard, shutter, or opening framework.

Ensure that all power cords do not come in contact with any sharp edges, hot surfaces or chemicals. Immediately replace any damaged cords.

Keep hands and body parts clear of all moving parts when installing or servicing.

Fan Installation & Operation Tips

Caution: ***Before operating your new fan, check blade for proper torque, check all fasteners for tightness. Ensure fan blade is not obstructed.***

For exhaust opening dimensions, refer to rough-in opening dimensions shown in the specifications table in this manual.

Position the fan for desired airflow. Refer to fan mounting orientation in this manual.

Ensure the fan is fastened securely to the wall to avoid excess “rattling” or vibration. Fasteners not included.

Refer to motor nameplate for wiring diagram.

Ensure that the area in front of and behind the fan is clear of any objects that may interfere with airflow.

Shutter louvers must open and close freely.

Adequate intake air must be available to the fan for proper exhausting of air.

Check for excessive vibration while fan is running. If excessive vibration is noticed, refer to troubleshooting chart in this manual.

When using speed controls on the variable speed capable models, it is recommended to operate at no less than 50% of line voltage. Controls sold separately.

Variable speed controls should be installed by a qualified electrician.

“-TH” models include thermostat.

Performance/Specifications (Models Without Thermostat)

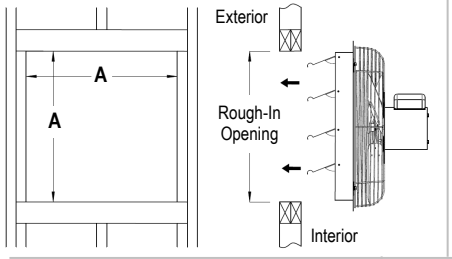
Model:	High CFM	Area Cov. Sq Ft	Prop Dia.	HP	Ph	Volts	High Amps	Spd	Rough-In Opening Dim. A	Dim. B In.	Dim. C In.	Dim. D In.	Dim. E In.
8SF	300	150	8”	1/25	1	115	.6	Var. Cap.	8.5	5.7	6.0	8.0	11.0
10SF	650	200	10”	1/25	1	115	.6	Var. Cap.	10.5	5.7	6.0	10.0	13.0
12SF	900	250	12”	1/15	1	115	1.0	Var. Cap.	12.5	5.7	6.0	12.0	15.0
12SF4T50C	1100	300	12”	1/12	1	115	1.0	3	12.5	5.7	6.0	12.0	15.0
14SF	1350	325	14”	1/10	1	115	1.1	Var. Cap.	14.5	5.7	7.0	14.0	17.0
16SF	1400	350	16”	1/10	1	115	1.1	Var. Cap.	16.5	5.7	7.0	16.0	19.0
16SF4T60C	1325	325	16”	1/12	1	115	1.1	3	16.5	5.7	6.0	16.0	19.0
18SF	1785	400	18”	1/10	1	115	1.1	Var. Cap.	18.5	5.7	7.0	18.0	21.0
18SF180	3130	800	18”	1/4	1	115	2.8	Var. Cap.	18.5	5.7	11.0	18.0	21.0
20SF	3340	900	20”	1/4	1	115	2.8	Var. Cap.	20.5	5.7	11.0	20.0	23.0
20SF4T90C	2860	775	20”	1/8	1	115	1.3	3	20.5	5.7	7.0	20.0	23.0
24SF	4160	1100	24”	1/3	1	115	3.0	Var. Cap.	24.5	5.7	12.0	24.0	27.0
24SF240	4450	1300	24”	1/3	1	115	3.2	Var. Cap.	24.5	5.7	12.0	24.0	27.0
24SF6D240C	4450	1300	24”	1/3	1	115	3.2	2	24.5	5.7	12.0	24.0	27.0
30SF8N240	5895	1750	30”	1/3	1	115	3.8	1	30.5	5.7	12.0	30.0	33.0
36SF8N370	8860	2200	36”	1/2	1	115	5.6	1	36.5	5.7	13.0	36.0	39.0

Variable Speed Capable Models DO NOT include control. Variable speed control sold separately.

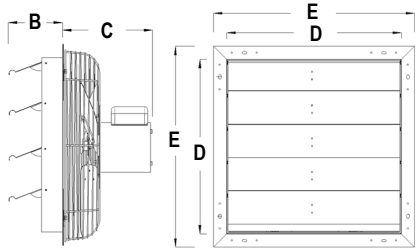
Performance/Specifications (Models Including Thermostat)

Model: Thermostat Included	High CFM	Area Cov. Sq Ft	Prop Dia.	HP	Ph	Volts	High Amps	Thermostat			Rough-In Opening Dim. A	Dim. B In.	Dim. C In.	Dim. D In.	Dim. E In.
								Electrical Rating		Probe Length In.					
8SF-TH	300	150	8”	1/25	1	115	.6	16A	400V	48	8.5	5.7	6.0	8.0	11.0
10SF-TH	650	200	10”	1/25	1	115	.6	16A	400V	48	10.5	5.7	6.0	10.0	13.0
12SF-TH	900	250	12”	1/15	1	115	1.0	16A	400V	48	12.5	5.7	6.0	12.0	15.0
14SF-TH	1350	325	14”	1/10	1	115	1.0	16A	400V	48	14.5	5.7	7.0	14.0	17.0
16SF-TH	1400	350	16”	1/10	1	115	1.0	16A	400V	48	16.5	5.7	7.0	16.0	19.0
18SF-TH	1785	400	18”	1/10	1	115	1.0	16A	400V	48	18.5	5.7	7.0	18.0	21.0
20SF-TH	3340	900	20”	1/4	1	115	2.8	16A	400V	48	20.5	5.7	11.0	20.0	23.0
24SF-TH	4160	1100	24”	1/3	1	115	3.2	16A	400V	48	24.5	5.7	12.0	24.0	27.0

Rough-In



Dims.

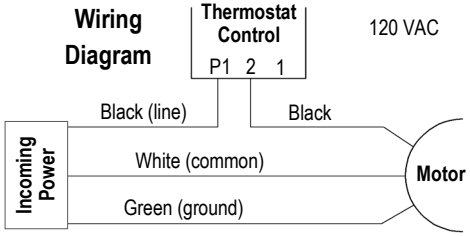


Thermostat
Model: TH120C

Wall Mount Junction Box

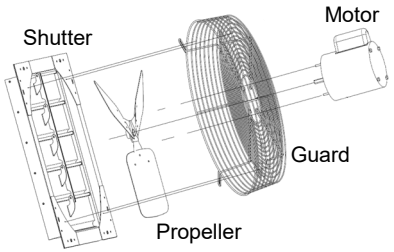
Extendable Temperature Probe Up to 48”

Wiring Diagram



Model:	Prop	Guard	Motor	Shutter
8SF	9001655	G7SF	E030-4	S7SF
10SF	9001656	G10SF	E030-4	S10SF
12SF	9001657	G12SF	E035-4	S12SF
12SF4T50C	9001694	G12SF	E060-43C	S12SF
14SF	9001695	G14SF	E075-4	S14SF
16SF	9001658	G16SF	E075-4	S16SF
16SF4T60C	9001696	G16SF	E060-43C	S16SF
18SF	9001959	G18SF	E075-6	S18SF
18SF180	9001660	G12SF	B180-4	S18SF
20SF	9001652	G20SF	B180-4	S20SF
20SF4T90C	9001494	G20SF	E090-43C	S20SF
24SF	9001665	G24SF	B180-6	S24SF
24SF240	9001664	G24SF	B240-6	S24SF
24SF6D240	9001664	G24SF	B240-6/2	S24SF
30SF8N240	9001666	G30SF	B250-8F	S30SF
36SF8N370	9001667	G36SF	B370-8F	S36SF

Replacement Parts Breakdown



Model:	Prop	Guard	Motor	Shutter	Thermostat
8SF-TH	9001655	G7SF	E030-4	S7SF	TH120C
10SF-TH	9001656	G10SF	E030-4	S10SF	TH120C
12SF-TH	9001657	G12SF	E035-4	S12SF	TH120C
14SF-TH	9001695	G14SF	E075-4	S14SF	TH120C
16SF-TH	9001658	G16SF	E075-4	S16SF	TH120C
18SF-TH	9001959	G18SF	E075-6	S18SF	TH120C
20SF-TH	9001652	G20SF	B180-4	S20SF	TH120C
24SF-TH	9001665	G24SF	B180-6	S24SF	TH120C

Thermostat

Maintenance

Periodic maintenance and component cleaning schedules should be set to assure reliability and performance of the fan.

Periodically inspect and tighten all set screws and hardware—check torque on prop.

Assure all mounting hardware remains properly secured.

Motors feature permanently sealed ball bearings and require no further lubrication.

Note: *Please contact the dealer/distributor where you purchased the fan from with any questions regarding the fan, the manual or replacement parts.*

Troubleshooting Guide

Symptom	Possible Cause(s)	Corrective Action
Fan will not start	1. Tripped circuit breaker 2. Defective motor 3. Incorrectly wired 4. Electricity turned off	1. Reset circuit breaker 2. Repair or replace 3. Shut off power, check for proper connections 4. Contact local power company
Excessive noise or vibration	1. Propeller is bent or hitting housing 2. Fan / shutter not securely anchored 3. Bad/noisy bearings	1. Free propeller of obstruction/replace propeller 2. Secure properly 3. Replace motor
Insufficient airflow	1. Incorrect voltage applied 2. Defective motor 3. Propeller is damaged 4. Blocked Airflow 5. Not enough intake air 6. Fan is dirty	1. Wire properly 2. Replace motor 3. Replace propeller 4. Remove obstructions 5. Add additional air intake openings 6. Clean fan guards/screens, motor and propeller
Motor overheats or trips out	1. Over/under line voltage 2. Defective motor 3. Fan is dirty 4. Not enough intake air	1. Contact local power company 2. Replace motor 3. Clean fan guards/screens, motor and propeller 4. Add additional air intake openings