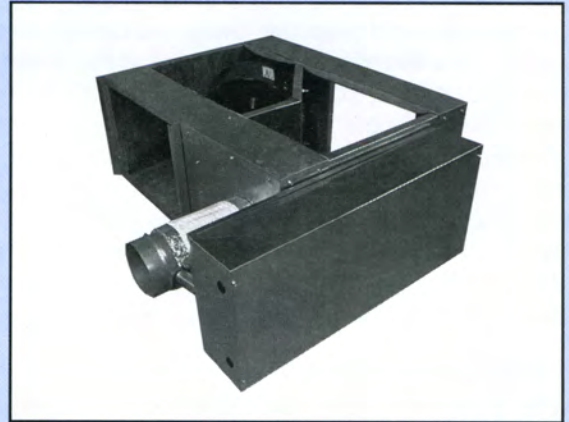


3 FAN TERMINAL UNITS — Intermittent Volume (Parallel Flow)

Models ASF w/o Reheat
ASW w/Hot Water Reheat
ASE w/Electric Reheat

The Carnes intermittent fan terminal unit provides constant air volume to the space for reheat applications while retaining a variable air volume system during normal cooling operation.

The primary air control assembly operates independently as a standard throttling valve for cooling loads. As cooling loads diminish, the secondary air supply fan(s) is energized to induce warm ceiling plenum air. A wide variety of control sequences makes this fan powered unit compatible with the most energy efficient system design.



Other Features Include:

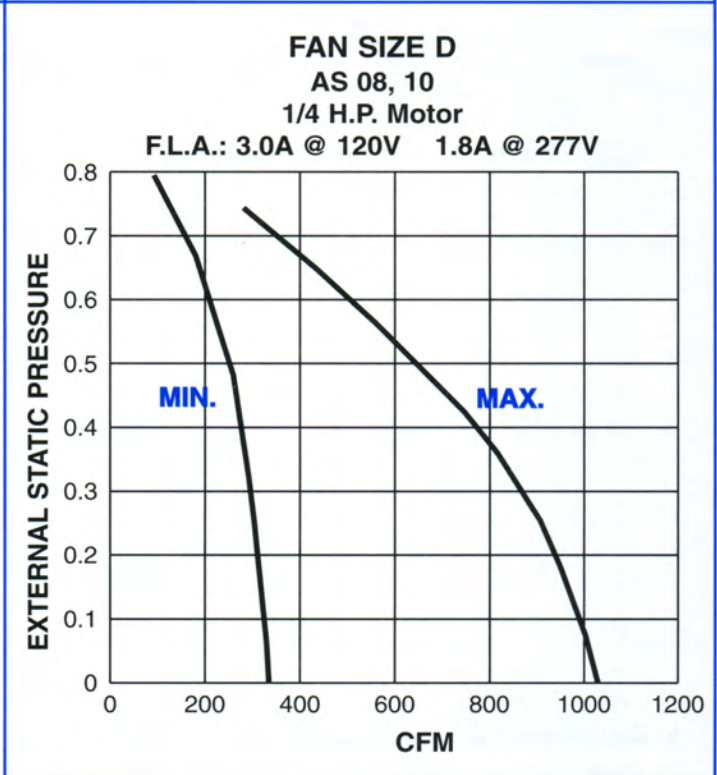
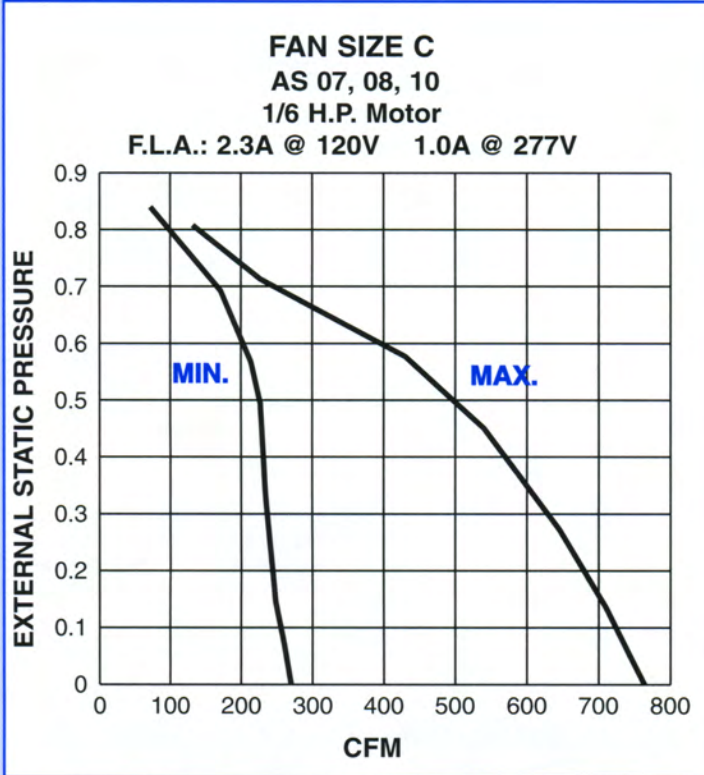
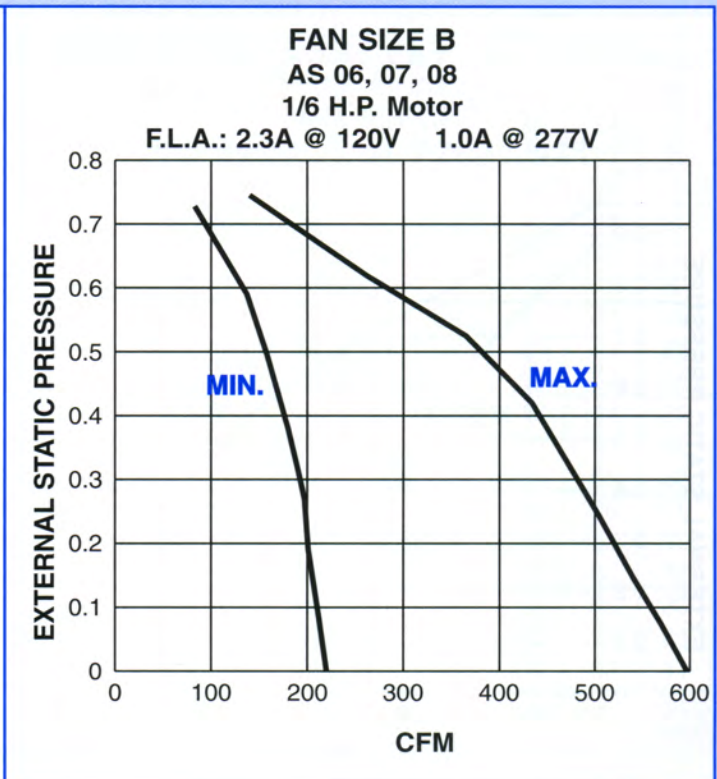
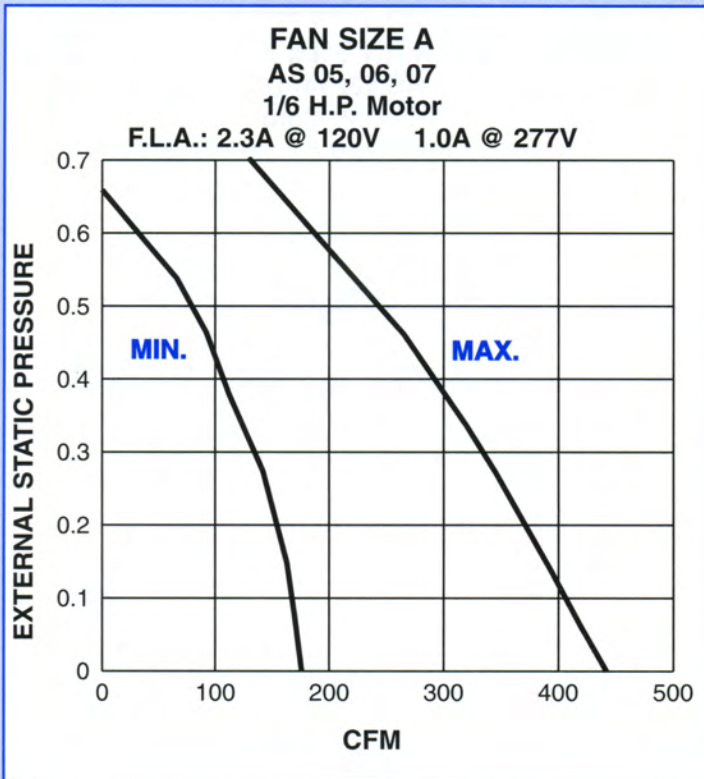
- Seventeen unit/inlet size variations offering air flow capacities to 4200 CFM primary air and 2100 CFM secondary air with low pressure drop and low sound levels.
- Durable 22 gauge galvanized steel casing construction.
- Bottom access panel for internal components.
- Flange or slip and drive discharge connections.
- Forward curved centrifugal type fan assemblies with thermally protected, permanent split capacitor type 115 or 277 volt fractional horsepower motors.
- Fan/motor assemblies are isolated from the casing using rubber isolators to minimize vibration transmission.
- Adjustable SCR fan speed control.
- Field adjustable P/E switch with pneumatic controls.
- Performance data based on tests conducted in accordance with ARI Standard 880-94.
- Averaging type velocity sensor and calibration chart for measuring primary air flow.
- Secondary air filter rack.
- All units equipped with pneumatic or electronic pressure independent controls.
- Insulation is 1" thick, 1-1/2 lb. dual density fiberglass with surface treatment to prevent air erosion. UL listed and meets NFPA 90A requirements.
- Damper controls and fan controls are located in one enclosure.
- Low leakage primary air damper design.
- ARI listed.
- Optional ETL listing.
- Optional secondary air sound baffle. Sound baffle is factory attached to secondary air inlet. (Contact Carnes)
- Optional one or two row hot water coils (Model ASW). Coil is factory attached to primary air discharge.
- Optional electric reheat coils (Model ASE). Coil is factory attached to primary air discharge, or shipped separately for field mounting.
- Optional secondary air filters, Class I (re-usable) and Class II (throw away).
- Optional non-fused or fused fan disconnect switch.
- Optional foil coated insulation (Hospital, Laboratory, etc. applications).

Available Modules:

- Basic control unit — **Model ASF.**
- Basic control unit with hot water coil — **Model ASW.**
- Basic control unit with or without electric coil — **Model ASE.**

FAN CURVES

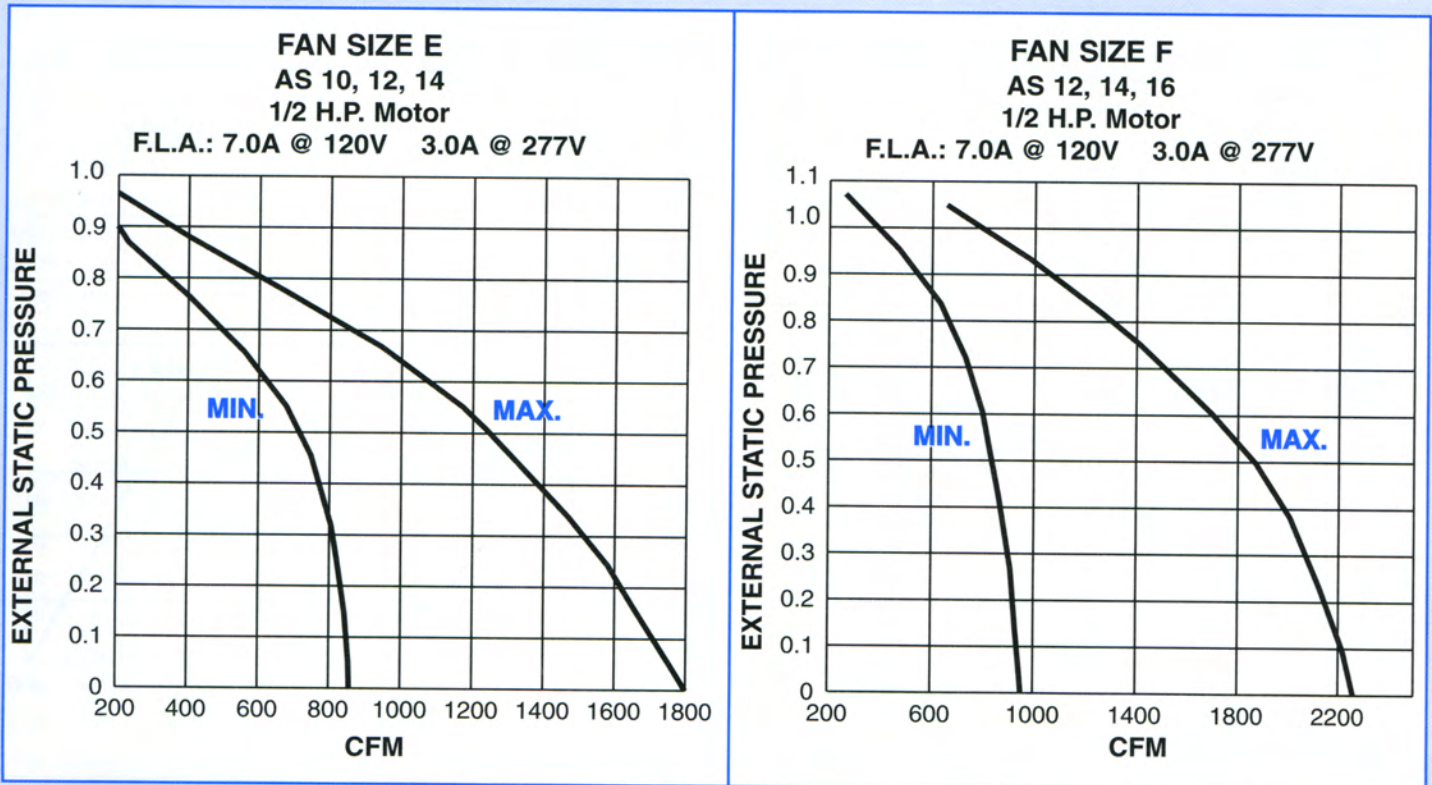
CFM vs EXTERNAL STATIC PRESSURE



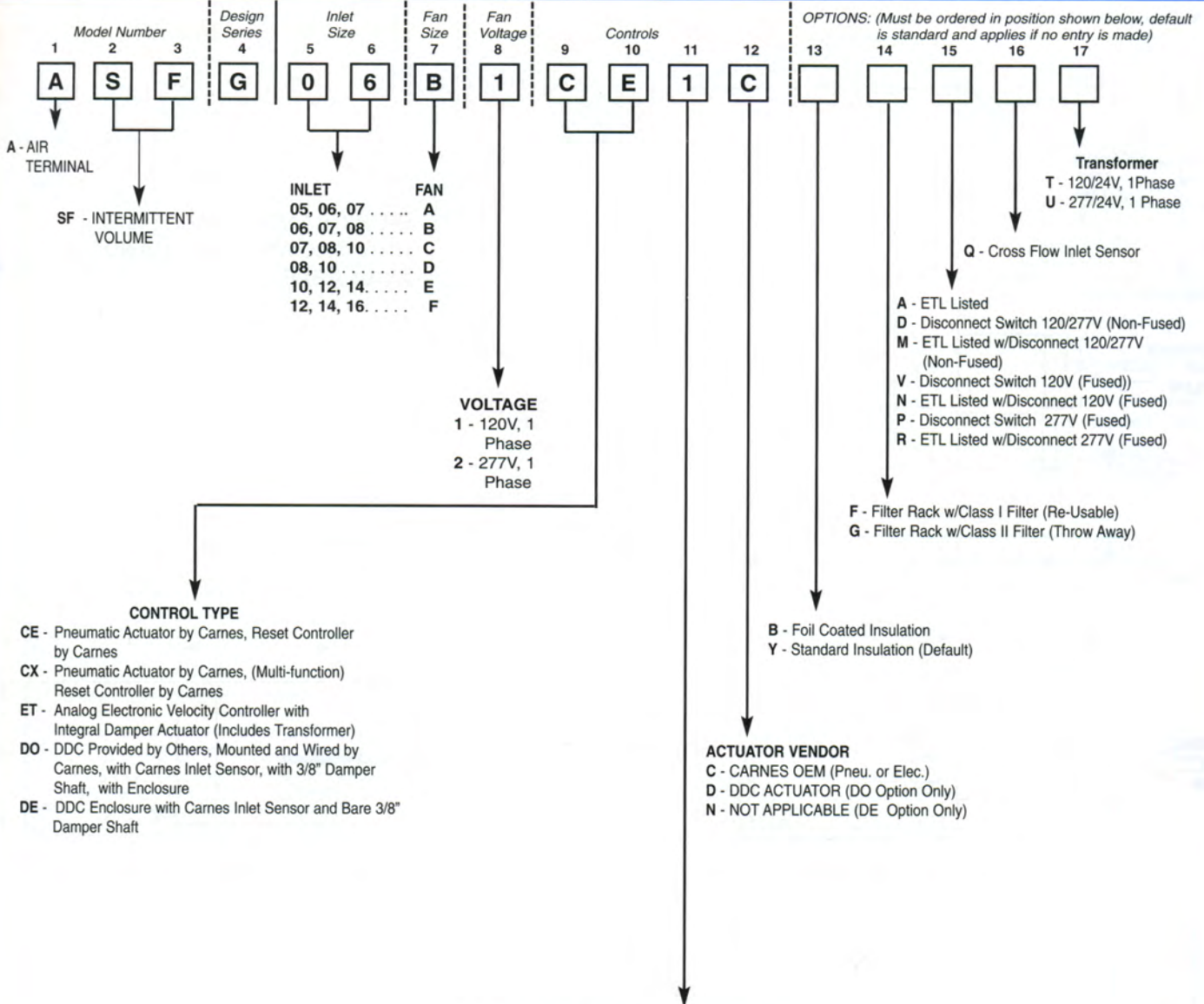
- NOTES:**
1. External static pressure (ESP) consists of downstream ductwork, coils, flex duct, etc.
 2. Pressure drops due to heating coils are treated as external static pressure (Refer to coil sections of this catalog for additional information).
 3. F. L. A. = Full Load Amps of motor.
 4. For proper operation, the downstream ESP must be at least 0.20" W.G.

FAN CURVES

CFM vs EXTERNAL STATIC PRESSURE



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NOTE: Hand of controls is determined by facing the averaging flow sensor (inlet of the unit) with the supply air hitting the back of your head.

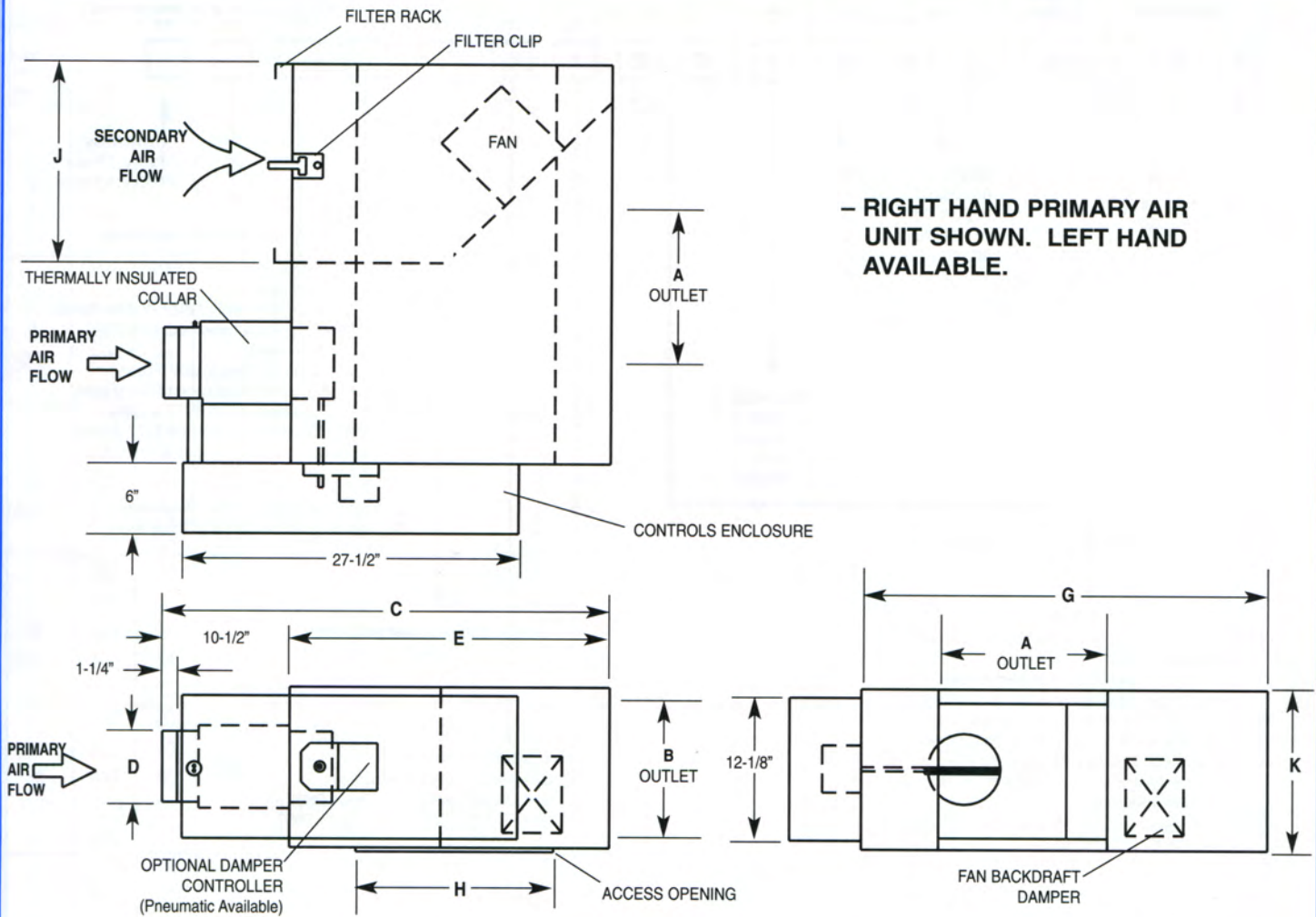
CONTROLS AND DAMPER ARRANGEMENT

- *1 - Normally Open - Right Hand Controls
(Electronic/DO, DE, ET)
(All Pneumatic Control Types for Reverse Acting Thermostat)
- *2 - Normally Open - Left Hand Controls
(Electronic/DO, DE, ET)
(All Pneumatic Control Types for Reverse Acting Thermostat)
- 3 - Normally Closed - Right Hand Controls
(All Pneumatic Control Types for Direct Acting Thermostat)
- 4 - Normally Closed - Left Hand Controls
(All Pneumatic Control Types for Direct Acting Thermostat)
- 5 - Normally Open - Right Hand Controls
(All Pneumatic Control Types for Direct Acting Thermostat)
- 6 - Normally Open - Left Hand Controls
(All Pneumatic Control Types for Direct Acting Thermostat)
- 7 - Normally Closed - Right Hand Controls
(All Pneumatic Control Types for Reverse Acting Thermostat)
- 8 - Normally Closed - Left Hand Controls
(All Pneumatic Control Types for Reverse Acting Thermostat)

A Carnes Electronic Thermostat **must be ordered** with the Electronic ET Control Option.

*Electronic and DDC Units DO NOT Fail Open. "1" or "2" is used for Model Numbering Only. Electronic Units are shipped with the Damper in Closed Position. (Refer to the Controls Catalog AV-02 for additional operating information.)

3 DIMENSIONAL DATA — Model ASF - Fan Sizes A Thru F



DIMENSIONS LISTED IN INCHES													
Fan Size	Inlet Size	Primary Nominal CFM	Secondary Nominal CFM @ .25" E.S.P.	Fan H.P.	*Outlet		C	D	E	G	H	J	K
					A	B							
A	05	350	300	1/6	14	12	36-11/16	4-7/8	26-3/16	33-3/4	17-13/16	17-1/4	14
	06	500						5-7/8					
	07	700						6-7/8					
B	06	500	450	1/6	14	12	36-11/16	5-7/8	26-3/16	33-3/4	17-13/16	17-1/4	14
	07	700						6-7/8					
	08	1000						7-7/8					
C	07	700	650	1/6	14	12	36-11/16	6-7/8	26-3/16	33-3/4	17-13/16	17-1/4	14
	08	1000						7-7/8					
	10	1500						9-7/8					
D	08	1000	900	1/4	14	12	36-11/16	7-7/8	26-3/16	33-3/4	17-13/16	17-1/4	14
	10	1500						9-7/8					
	10	1500						9-7/8					
E	12	2300	1600	1/2	16	15-1/2	44	11-7/8	33-1/2	44	21-1/8	21-1/2	17-1/2
	14	3100						13-7/8					
	12	2300						11-7/8					
F	14	3100	2100	1/2	16	15-1/2	44	13-7/8	33-1/2	44	21-1/8	21-1/2	17-1/2
	16	4200						15-7/8					
	16	4200						15-7/8					

*Outlet dimensions refers to the actual opening. Unit has 3/4" outlet flange.