

The Carnes Model AVGA is basically the AVBA by-pass control valve. A slot diffuser and balancing damper are integral with the unit eliminating the cost of ducting to one diffuser. The slot diffuser is generally accepted as the best diffuser choice for VAV applications.

This unit provides variable air volume to individual zones while by-passing the unneeded air to the ceiling plenum for recirculation.

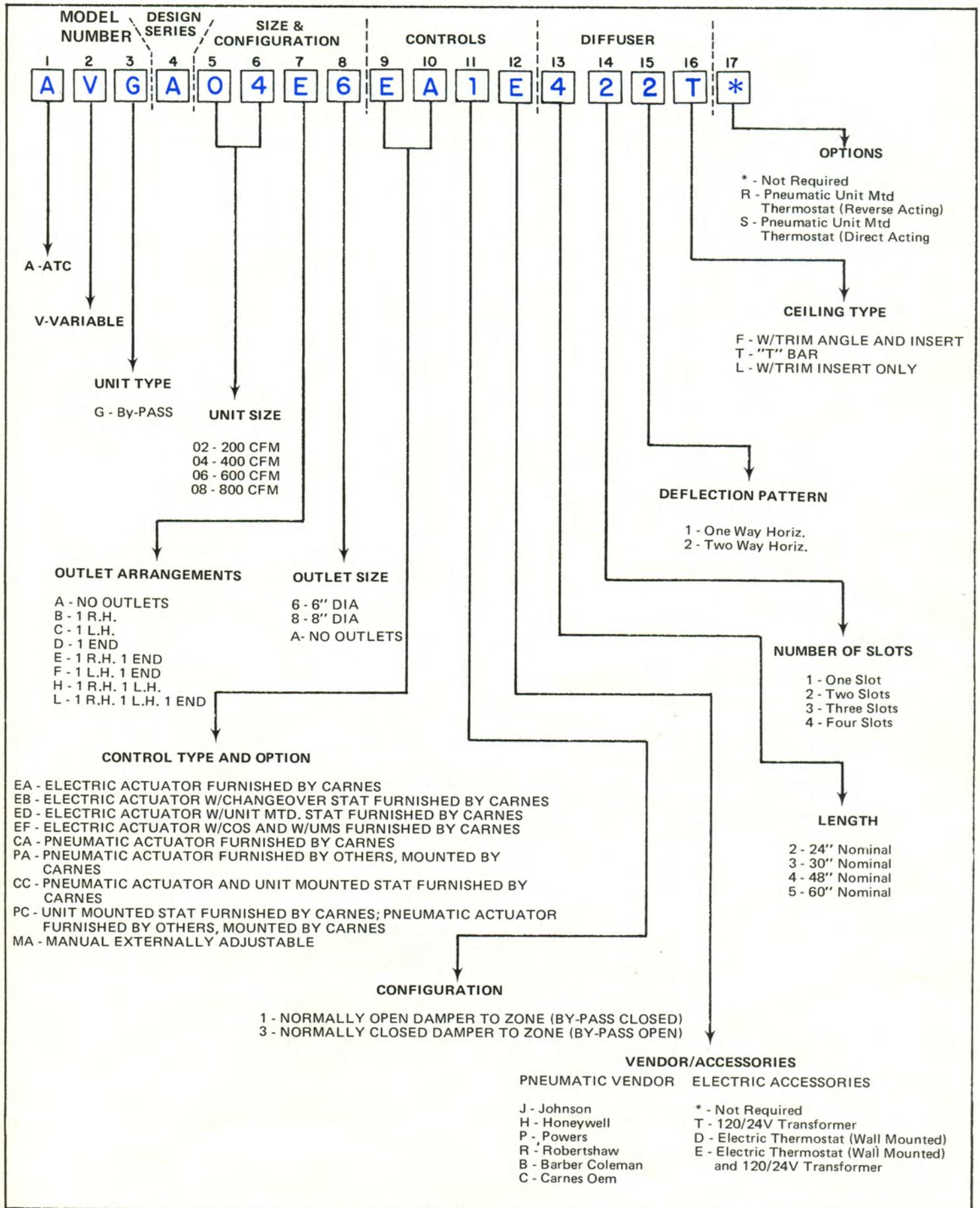
Although zone air volumes in small buildings may vary greatly, the cost of fan controls many times cannot be justified. Zone variable air volumes are realized with the by-pass unit while the supply fan delivers a constant CFM.

The AVGA is compatible with reverse or direct acting pneumatic or electric thermostats. Zone thermostats directly controlling the by-pass damper assures that only the air that is needed is delivered to the zone.

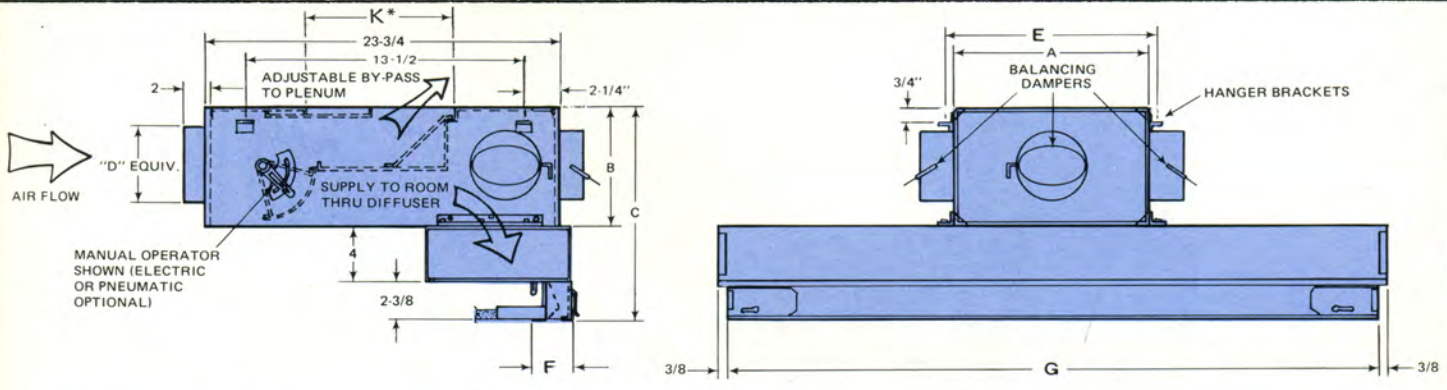
Other features include:

- Air flow capacities to 800 CFM.
- Pneumatic, electric, or manual damper control
- Thermally and acoustically insulated casing.
- Slot diffuser — Choice of 1-4 slots; choice of 2-5 foot lengths; choice of 1 or 2 way throw
- Suitable for T-bar and flush ceilings.
- As an option, unit mounted pneumatic or electric aspirating thermostat with adjustable set point through diffuser slots.
- Multi-discharge units have round or elliptical outlet connections with integral balancing dampers.
- Air flow sensor at inlet of unit.
- Hanger brackets for easy mounting characteristics.

Model Numbering System—AVGA - By-Pass Externally Powered 6



1-WAY BLOW INTEGRAL SLOT DIFFUSER



Unit Size	CFM	A	B	C	D	E	K	Diffuser	Nominal CFM	F	G	OUTLET ARRANGEMENT TOP VIEW			
												Unit Size	Unit Size	Unit Size	Unit Size
02	200	13	8	14-3/8	5	14	5-3/8	211	100	2	23-1/16		No Outlet	OUTLET SIZE INCHES	
04	400	13	8	14-3/8	7	14	5-3/8	221	200	3-9/16	23-1/16				
06	600	14	10	16-3/8	9	15	6-3/8	231	300	5-5/32	23-1/16				
08	800	17	10	16-3/8	10	18	6-3/8	311	125	2	29-1/16				
								321	250	3-9/16	29-1/16	02	6	6	6
								331	400	5-5/32	29-1/16	04	6	6	6
								411	200	2	47-1/16	06	6 or 8	6 or 8	6 or 8
								421	400	3-9/16	47-1/16	08	6 or 8	6 or 8	6 or 8
								431	600	5-5/32	47-1/16				
								511	250	2	59-1/16				
								521	400	3-9/16	59-1/16				
								531	600	5-5/32	59-1/16				

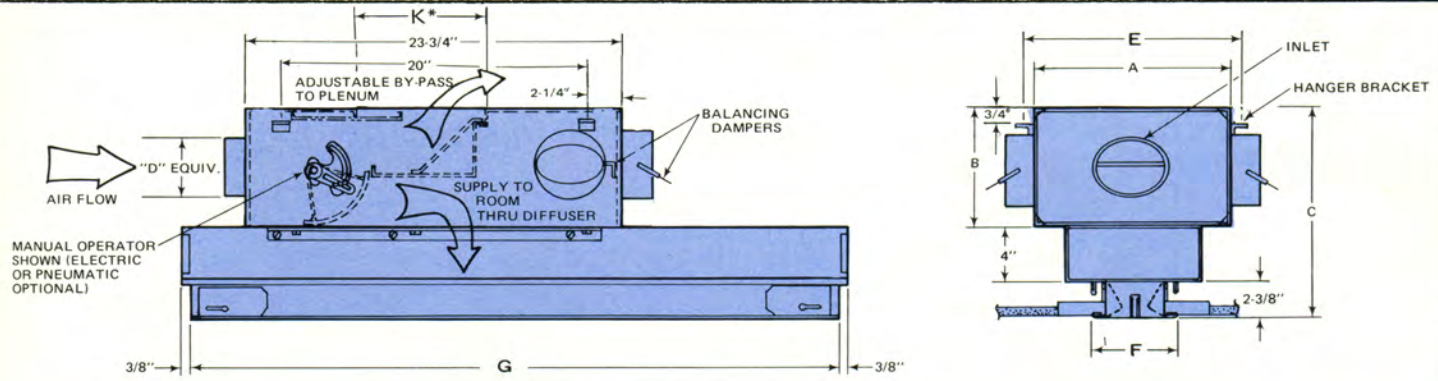
● Indicates Elliptical
 *By-Pass Opening = K x A

NOTE:

THREE SLOT DIFFUSERS
 AVAILABLE ONLY WITH SIZES 06 AND 08

6 Indicates 6" Round
 8 Indicates 8" Round

2-WAY BLOW INTEGRAL SLOT DIFFUSER



Unit Size	CFM	A	B	C	D	E	K	Diffuser	Nominal CFM	F	G	OUTLET ARRANGEMENT TOP VIEW			
												Unit Size	Unit Size	Unit Size	Unit Size
02	200	13	8	14-3/8	5	14	5-3/8	222	200	4-5/32	23-1/16		No Outlet	OUTLET SIZE INCHES	
04	400	13	8	14-3/8	7	14	5-3/8	232	300	5-3/4	23-1/16				
06	600	14	10	16-3/8	9	15	6-3/8	242	400	7-11/32	23-1/16				
08	800	17	10	16-3/8	10	18	6-3/8	322	250	4-5/32	29-1/16				
								332	400	5-3/4	29-1/16	02	6	6	6
								342	500	7-11/32	29-1/16	04	6	6	6
								422	400	4-5/32	47-1/16	06	6 or 8	6 or 8	6 or 8
								432	600	5-3/4	47-1/16	08	6 or 8	6 or 8	6 or 8
								442	800	7-11/32	47-1/16				
								522	500	4-5/32	59-1/16				
								532	600	5-3/4	59-1/16				
								542	800	7-11/32	59-1/16				

● Indicates Elliptical
 *By-Pass Opening = K x A

NOTE:

THREE AND FOUR SLOT DIFFUSERS
 AVAILABLE ONLY WITH SIZES 06 AND 08.

6 Indicates 6" Round
 8 Indicates 8" Round