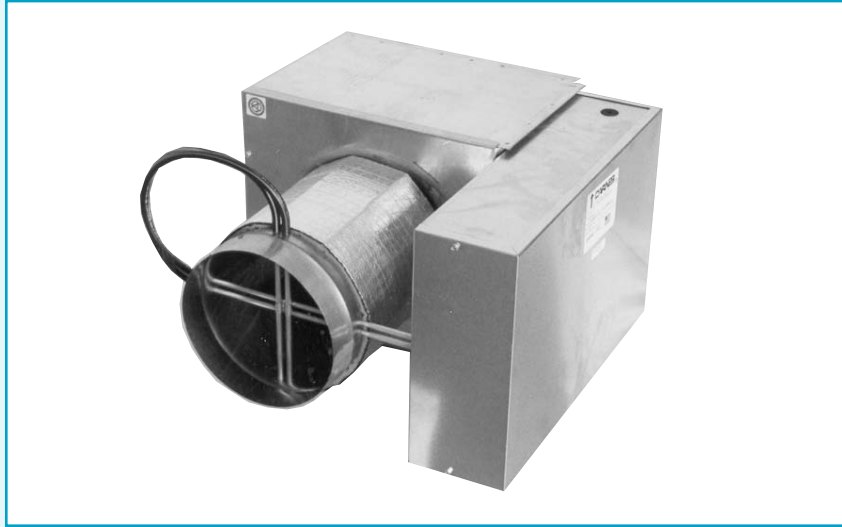


SINGLE DUCT VAV – Model AVC**Model AVC**

The Carnes Model AVC is available as a basic control unit with open end discharge, with an optional multi-discharge adapter module, or sound attenuator module.

This unit offers low pressure drop, low sound levels, and valve characteristics which create stable control conditions within the conditioned space.

Features Include:

- Air flow capacities from full shut-off to 7,300 CFM (0-3,000 FPM for each unit size).
- Open-end discharge units are provided with slip and drive connections for easy installation.
- Thermally and acoustically insulated casing meets **UL** and **NFPA** standards.
- Low leakage damper design.
- Pneumatic, electric, electronic, or manual control options available.
- Averaging type air flow sensor at inlet of unit.
- Optional cross flow averaging type velocity sensor at inlet of unit.
- Optional pressure independent and pressure dependent controls.
- Optional hanger brackets.
- Optional internal foil faced insulation.
- Optional fiber-free lining.
- Optional controls enclosure.
- Optional access panel for component inspection.
- Multi-discharge adapters have round outlet connections with integral balancing dampers.
- ARI certified product.

Available Modules:

- Basic Control Unit — **Model AVC**
- Sound Attenuator — **Model AXA**
- Multi-Discharge Adapter — **Model AXM**



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Certification Program



Foil Faced Insulation
Available

AVC

Discharge and Radiated (NC) Noise Criteria

Inlet Size (Inches)	CFM	Minimum Pressure Drop (Damper Full Open)				Min ΔP_s (Damper Full Open)															
		Min. ΔP_s		Min ΔP_t		1.0" ΔP_s				1.5" ΔP_s				3.0" ΔP_s							
		Basic Unit	With Atten.	Basic Units	With Atten.	ΔP_t	Discharge NC		Rad.	ΔP_t	Discharge NC		Rad.	ΔP_t	Discharge NC		Rad.	ΔP_t	Discharge NC		Rad.
5	75	.02	.01	.04	.03	.04	—	—	—	1.02	14	13	—	1.52	15	14	—	3.02	20	19	11
	100	.03	.01	.07	.05	.07	—	—	—	1.04	16	15	10	1.54	19	16	11	3.04	22	22	12
	200	.11	.06	.25	.20	.25	12	11	—	1.14	23	23	13	1.64	25	25	14	3.14	32	31	19
	300	.23	.15	.55	.47	.55	15	13	12	1.32	29	28	17	1.82	31	31	19	3.32	37	37	23
	350	.30	.22	.74	.65	.74	15	13	14	1.43	30	28	19	1.93	32	30	21	3.43	39	37	26
6	110	.04	.01	.05	.03	.05	—	—	—	1.02	16	15	—	1.52	19	18	11	3.02	25	23	21
	200	.06	.02	.13	.09	.13	11	—	—	1.06	21	20	12	1.56	23	22	13	3.06	29	28	22
	300	.09	.06	.24	.30	.24	12	10	10	1.14	23	23	14	1.64	24	22	14	3.14	31	31	23
	400	.14	.10	.40	.35	.40	13	11	13	1.25	24	23	15	1.75	25	23	18	3.25	32	31	23
	500	.21	.16	.61	.56	.61	14	12	18	1.40	24	23	18	1.90	29	27	20	3.40	33	31	24
7	140	.00	.00	.02	.02	.02	—	—	—	1.02	21	21	12	1.52	22	22	13	3.02	33	31	17
	200	.01	.00	.04	.04	.04	—	—	—	1.03	23	23	13	1.53	28	27	14	3.03	35	34	19
	400	.05	.01	.19	.14	.19	11	10	11	1.14	24	23	14	1.64	30	28	16	3.14	36	34	23
	600	.12	.03	.42	.33	.42	13	12	12	1.30	26	17	18	1.80	30	30	20	3.30	35	35	26
	700	.17	.04	.59	.45	.59	13	12	14	1.41	27	26	19	1.91	30	30	21	3.41	35	35	37
8	185	.00	.01	.02	.02	.02	—	—	—	1.02	21	21	12	1.52	21	21	13	3.02	32	31	17
	400	.01	.02	.08	.09	.08	11	—	—	1.07	22	22	14	1.57	24	23	15	3.07	34	33	22
	600	.03	.03	.19	.20	.19	12	10	10	1.16	23	22	15	1.66	27	25	19	3.16	34	34	24
	800	.05	.05	.34	.33	.34	12	11	12	1.29	24	22	18	1.79	28	25	21	3.29	33	33	27
	1000	.08	.06	.53	.51	.53	14	13	18	1.45	25	23	21	1.95	28	27	23	3.45	34	34	29
10	300	.00	.01	.02	.02	.02	—	—	—	1.02	22	20	16	1.52	29	29	30	3.02	35	35	26
	500	.00	.00	.04	.04	.04	—	—	—	1.04	23	22	18	1.54	28	28	22	3.04	35	35	29
	800	.00	-0.1	.11	.09	.11	10	—	—	1.11	24	23	20	1.61	29	28	23	3.11	35	35	30
	1200	.00	-0.3	.24	.21	.24	13	12	16	1.24	24	23	21	1.74	29	29	25	3.24	36	35	32
	1500	.00	-0.5	.38	.33	.38	13	12	18	1.38	25	22	22	1.88	30	29	25	3.38	36	35	32
12	430	.00	.00	.02	.01	.02	—	—	—	1.02	22	22	14	1.52	28	28	15	3.02	34	34	23
	800	.00	-0.2	.05	.03	.05	—	—	—	1.05	23	23	16	1.55	27	27	21	3.05	34	34	30
	1200	.00	-0.3	.12	.09	.12	11	10	11	1.12	25	24	20	1.62	30	28	25	3.12	35	35	32
	1800	.00	-0.5	.26	.21	.26	12	11	14	1.27	26	24	23	1.77	31	29	29	3.27	35	35	36
	2300	.00	-0.7	.43	.36	.43	14	13	20	1.43	27	24	25	1.93	31	29	31	3.43	36	35	38
14	600	.01	.01	.02	.02	.02	—	—	—	1.02	22	22	14	1.52	27	26	18	3.02	38	38	25
	1000	.00	-0.1	.05	.03	.05	—	—	—	1.05	22	22	18	1.55	28	27	22	3.05	39	38	29
	1600	-0.1	.04	.11	.08	.11	10	—	—	1.12	24	23	21	1.62	28	28	25	3.12	40	38	32
	2400	-0.2	-0.8	.24	.19	.24	12	11	18	1.26	25	24	22	1.76	30	29	27	3.26	40	38	34
	3100	-0.3	-1.1	.41	.33	.41	12	12	25	1.44	25	24	25	1.94	30	30	30	3.44	42	40	36
16	780	.00	.01	.01	.03	.01	—	—	—	1.02	20	20	15	1.52	29	28	19	3.02	37	37	25
	1600	.00	-0.2	.07	.05	.07	10	—	—	1.07	21	21	20	1.57	29	28	23	3.07	37	36	31
	2400	.00	-0.5	.15	.10	.15	12	10	13	1.15	23	21	22	1.65	30	28	27	3.15	38	36	33
	3600	-0.1	-0.9	.34	.24	.34	13	12	20	1.33	23	21	25	1.83	30	25	29	3.33	38	36	36
	4200	-0.1	-1.1	.46	.34	.46	14	14	23	1.45	24	23	27	1.95	31	28	30	3.45	38	37	37
18	1100	.01	.02	.02	.03	.02	—	—	—	1.01	19	19	18	1.51	23	23	21	3.01	31	30	27
	2300	.06	.07	.12	.13	.12	10	10	13	1.06	21	21	22	1.56	25	24	25	3.06	34	33	31
	3600	.17	.17	.32	.33	.32	13	12	20	1.15	22	20	25	1.65	25	24	29	3.15	34	32	35
	4500	.29	.27	.53	.51	.53	15	14	26	1.24	23	22	27	1.74	28	25	30	3.24	35	33	35
	5500	.48	.41	.84	.77	.84	18	14	33	1.36	25	22	28	1.86	29	25	31	3.36	35	33	37
24	1480	.01	.00	.02	.01	.02	—	—	—	1.01	21	20	17	1.51	24	23	22	3.01	31	30	32
	3200	.04	.00	.09	.05	.09	11	10	13	1.05	22	21	22	1.55	25	24	28	3.05	33	31	35
	4800	.09	.02	.20	.13	.20	14	14	20	1.11	24	21	27	1.61	28	27	31	3.11	35	34	39
	6000	.17	.04	.31	.21	.31	15	14	27	1.17	24	21	28	1.67	28	27	33	3.17	35	34	40
	7300	.29	.16	.54	.41	.54	20	19	33	1.25	25	22	31	1.75	30	27	34	3.25	35	33	43

- NOTES:**
1. ΔP_s static pressure difference from inlet to discharge.
 2. ΔP_s is the minimum pressure required to deliver CFM shown with the primary damper in wide open position.
 3. ΔP_t is the total pressure difference from inlet to discharge.
 4. Dash (—) indicates NC level less than 10.

NC levels are derived from tests conducted in accordance with ARI Standard 880-98 and are calculated in accordance with ARI Standard 885-98 as application data based on the following:

- Discharge NC levels are based on —
- a) 5 foot rectangular 12" x 12" duct lined with 1" fiberglass insulation.
 - b) Rectangular tee attenuation entering branch duct.
 - c) 6 foot lined flex duct (8" diameter).
 - d) Maximum of 300 CFM per outlet.
 - e) Space effect factor (5000 ft³) at 5 feet from outlet.
 - f) End reflection.
 - g) Environmental adjustment factor.

- Radiated NC levels are based on—
- a) Plenum / ceiling effect - 5/8" mineral fiber tile, 35 lb / ft³ - 3 foot plenum.
 - b) Space effect factor (5000 ft³) at 10 feet from source.
 - c) Environmental adjustment factor.

NC is not part of the ARI 880 Certification Program.

APPLICATION/PERFORMANCE DATA – Model AVC

Sound Data (Sound Power by Octave Band)

Discharge Sound Power

Inlet Size (Inches)	CFM	Minimum ΔP_s							1.0" ΔP_s							1.5" ΔP_s							3.0" ΔP_s						
		Sound Power (db) by Octave Band							Sound Power (db) by Octave Band							Sound Power (db) by Octave Band							Sound Power (db) by Octave Band						
		ΔP_s	(2)	(3)	(4)	(5)	(6)	(7)	(2)	(3)	(4)	(5)	(6)	(7)	(2)	(3)	(4)	(5)	(6)	(7)	(2)	(3)	(4)	(5)	(6)	(7)			
5	75	.02	39	27	21	19	17	15	50	48	48	44	43	39	51	51	51	47	43	53	55	55	53	53	50				
	100	.03	42	31	27	24	22	19	53	52	50	46	45	40	54	54	53	49	44	56	57	58	55	54	52				
	200	.11	48	43	40	36	34	26	60	58	56	51	48	43	62	60	59	54	52	64	64	63	60	58	54				
	300	.23	51	50	48	43	40	30	65	62	59	53	50	45	66	64	62	57	54	68	68	66	62	60	56				
	350	.30	53	53	51	46	43	32	67	64	61	55	51	45	68	66	63	58	55	49	70	69	68	63	61	57			
6	110	.04	39	22	15	14	13	12	47	48	48	44	42	48	50	52	51	50	47	50	54	57	57	57	57	56			
	200	.06	44	34	28	27	24	18	54	53	52	51	48	44	55	55	55	55	52	49	57	59	61	61	59	57			
	300	.09	48	42	37	35	31	22	59	56	54	54	50	44	60	58	58	57	54	50	62	62	63	63	61	58			
	400	.14	51	48	43	41	37	25	62	59	56	55	51	45	65	63	61	61	57	52	65	64	65	65	62	59			
	500	.21	53	52	48	46	41	27	65	60	58	57	52	46	66	63	61	61	57	52	68	66	66	66	62	60			
7	140	.00	37	19	10	10	—	10	49	54	50	49	43	39	50	57	54	52	48	43	53	63	61	59	55	51			
	200	.01	40	27	19	19	16	15	53	56	52	51	45	40	54	59	56	55	49	45	57	64	63	61	58	52			
	400	.05	47	40	35	35	28	23	61	59	55	55	48	43	62	62	59	56	52	47	65	68	66	65	59	55			
	600	.12	51	48	44	45	36	28	65	61	57	57	49	45	67	65	61	61	54	49	70	70	68	67	61	56			
	700	.17	53	52	48	49	38	30	67	62	58	58	50	45	69	65	62	62	54	49	71	69	68	68	61	57			
8	185	.00	37	20	12	12	10	11	53	53	52	51	45	41	55	56	56	56	49	45	58	62	62	61	57	53			
	400	.01	44	35	30	30	24	21	59	58	56	56	48	44	61	61	60	59	53	49	65	67	66	66	60	57			
	600	.03	48	43	40	40	31	27	63	61	58	58	50	46	65	64	62	62	55	50	68	70	68	69	62	58			
	800	.05	50	49	47	47	37	30	65	63	60	60	52	47	67	66	63	64	56	51	71	72	70	70	63	59			
	1000	.06	52	54	52	52	41	33	67	64	61	61	52	48	69	68	65	65	57	52	73	73	71	72	64	60			
10	300	.00	36	22	13	13	12	12	55	59	55	54	48	43	57	62	59	58	53	48	61	67	66	66	60	56			
	500	.00	41	33	25	25	21	19	59	61	58	56	50	46	61	64	62	61	55	50	65	70	69	69	62	58			
	800	.00	45	42	36	36	30	25	63	63	60	59	52	48	65	66	64	63	56	52	69	72	71	71	64	60			
	1200	.00	49	50	46	46	38	30	66	65	62	61	54	49	69	68	66	66	58	54	72	74	73	73	65	62			
	1500	.00	51	54	52	51	42	33	68	66	63	62	54	50	70	69	67	67	59	55	74	75	75	74	66	63			
12	430	.00	37	23	15	14	13	13	55	60	56	53	48	44	58	64	61	57	52	49	63	70	68	65	59	57			
	800	.00	42	35	32	28	24	21	61	63	60	56	51	47	63	67	64	61	55	52	68	73	72	68	62	59			
	1200	.00	46	43	42	37	31	27	64	65	62	58	52	49	67	68	67	63	56	54	72	75	74	71	63	61			
	1800	.00	49	51	53	47	38	32	68	66	65	61	54	51	70	70	69	65	58	55	75	76	76	73	65	63			
	2300	.00	51	56	59	52	42	36	70	67	66	62	55	52	73	71	70	66	59	56	77	77	78	74	66	64			
14	600	.01	41	23	18	15	15	13	58	60	58	56	49	45	61	64	62	60	54	49	66	71	69	68	61	57			
	1000	.00	45	33	31	27	25	21	62	62	61	58	52	47	65	66	65	63	56	51	70	73	72	71	63	59			
	1600	-.01	48	42	45	38	35	28	66	64	63	60	53	48	69	68	68	65	58	53	74	75	75	73	65	61			
	2400	-.02	52	50	57	48	44	35	69	65	66	62	55	50	72	69	70	67	59	54	77	77	77	75	67	62			
	3100	-.03	54	55	65	54	49	39	71	66	67	63	56	51	74	70	71	68	60	55	80	78	79	78	69	63			
16	780	.00	38	24	16	15	14	14	59	61	57	51	48	43	63	65	61	55	52	48	68	72	68	62	59	56			
	1600	.00	47	40	37	32	29	25	65	65	62	57	52	47	68	69	66	60	56	51	73	75	73	67	63	59			
	2400	.00	52	49	50	41	38	31	68	67	65	60	54	49	71	70	69	64	58	54	76	77	76	70	66	61			
	3600	-.01	57	58	62	51	47	37	70	68	68	63	56	51	74	72	72	67	61	56	79	79	79	73	68	63			
	4200	-.01	59	61	67	54	50	40	72	69	69	64	57	52	75	73	73	68	61	57	80	79	80	74	69	64			
18	1100	.01	34	22	15	11	10	—	58	60	57	58	50	45	61	64	62	60	55	49	67	71	69	70	68	63			
	2300	.07	48	43	39	34	32	25	64	65	61	60	58	52	68	69	65	64	62	57	73	76	73	72	70	65			
	3600	.19	57	56	54	48	45	37	68	69	63	61	59	54	71	72	68	65	63	59	77	79	75	73	71	67			
	4500	.33	62	63	61	55	51	43	70	70	64	61	59	55	73	74	69	66	64	59	79	81	76	73	71	67			
	5500	.52	65	68	68	62	57	48	71	71	65	62	60	55	75	75	70	66	64	60	81	82	77	74	72	68			
24	1480	.01	39	32	25	21	19	17	61	65	60	60	58	52	64	68	64	64	62	57	70	74	70	71	69	64			
	3200	.04	53	50	46	40	37	32	67	69	64	63	61	55	70	72	68	67	65	59	75	78	74	74	72	67			
	4800	.09	60	60	57	50	47	39	70	71	67	65	62	56	73	74	70	69	66	61	78	80	76	76	73	68			
	6000	.17	64	65	62	56	52	44	72	72	68	66	63	57	75	75	71	70	67	62	80	81	77	77	74	69			
	7300	.29	68	70	68	61	57	47	73	73	69	66	64	58	76	76	72	71	68	62	82	82	79	77	75	70			

- NOTES: 1. Based on tests conducted in accordance with ARI Standard 880-98.
 2. ΔP_s static pressure difference from inlet to discharge.
 3. ΔP_s is the minimum pressure required to deliver CFM shown with primary damper in wide open position.
 4. Dash (—) indicates db level less than 10.



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APPLICATION/PERFORMANCE DATA – Model AVC

Sound Data (Sound Power by Octave Band)

Radiated Sound Power

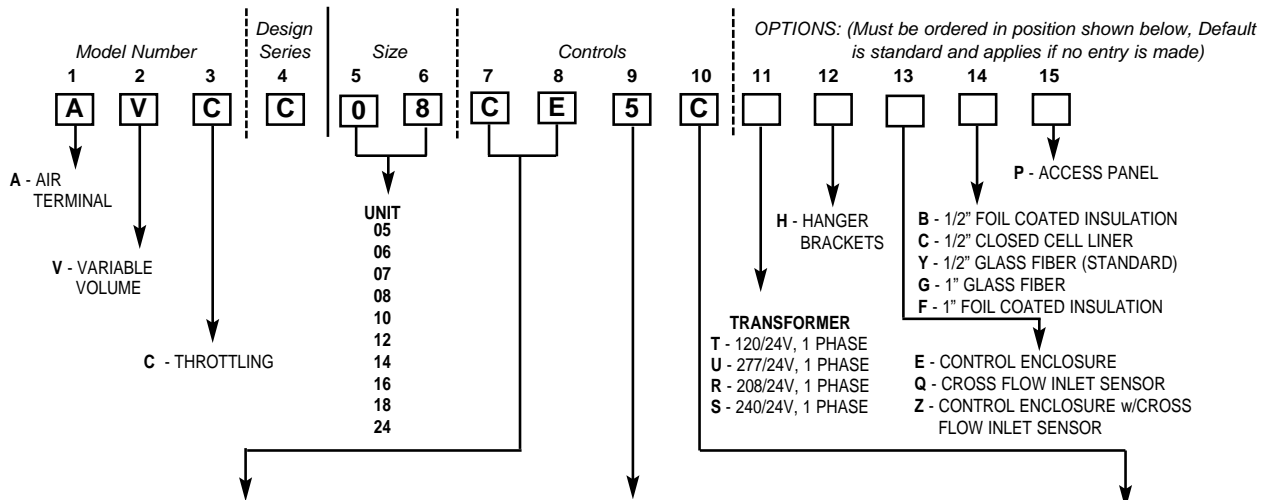
Inlet Size (Inches)	CFM	Minimum ΔP_s							1.0' ΔP_s							1.5' ΔP_s							3.0' ΔP_s						
		Sound Power (db) by Octave Band							Sound Power (db) by Octave Band							Sound Power (db) by Octave Band							Sound Power (db) by Octave Band						
		ΔP_s	(2)	(3)	(4)	(5)	(6)	(7)	(2)	(3)	(4)	(5)	(6)	(7)	(2)	(3)	(4)	(5)	(6)	(7)	(2)	(3)	(4)	(5)	(6)	(7)			
5	75	.02	25	12	—	—	—	42	33	27	27	27	26	43	35	30	30	31	31	44	39	35	35	38	39				
	100	.03	30	19	11	—	—	46	37	31	30	30	29	47	39	34	33	34	33	48	43	39	38	40	41				
	200	.11	42	34	29	23	18	13	54	47	42	37	36	55	49	44	40	40	38	57	53	49	46	46	46				
	300	.23	48	43	39	34	29	24	60	53	47	42	39	60	55	50	45	43	41	62	59	55	50	50	49				
	350	.30	51	46	43	38	34	28	62	55	50	45	41	62	57	52	46	45	43	64	61	57	51	51	51				
6	110	.04	29	13	11	—	—	38	37	36	32	29	30	39	39	39	35	34	35	41	42	44	41	41	44				
	200	.06	39	27	22	15	11	12	46	43	40	36	34	47	45	43	39	39	38	49	49	48	45	46	47				
	300	.09	45	36	30	24	27	19	52	48	43	38	37	53	50	46	42	42	40	55	53	51	48	49	49				
	400	.14	50	43	35	31	30	24	56	51	45	40	36	59	55	50	46	46	43	59	57	53	49	52	50				
	500	.21	54	48	39	36	36	27	60	54	46	42	41	61	56	50	46	46	43	62	59	54	51	53	52				
7	140	.00	41	—	—	—	—	42	42	38	33	33	29	43	45	42	37	37	35	45	50	48	43	45	45				
	200	.01	43	17	—	—	12	46	44	41	35	34	31	47	47	44	39	39	37	50	52	50	45	47	46				
	400	.05	48	34	26	21	18	17	55	49	45	39	37	56	52	48	43	42	39	59	57	54	49	50	49				
	600	.12	50	44	38	32	23	21	60	51	48	42	39	61	54	51	45	44	41	64	59	57	52	52	51				
	700	.17	51	48	43	36	25	22	62	52	48	42	40	63	55	52	46	44	42	65	60	58	52	52	51				
8	185	.00	32	17	—	—	—	42	42	38	35	33	30	44	45	42	39	37	36	47	50	48	45	45	45				
	400	.01	40	29	20	20	17	21	52	48	43	40	36	54	51	47	44	40	39	58	57	53	50	48	48				
	600	.03	44	36	30	29	23	23	58	52	46	42	37	59	55	49	46	42	41	63	60	55	52	50	50				
	800	.05	47	40	37	36	27	24	61	54	48	44	38	63	57	51	48	43	42	67	62	57	54	51	51				
	1000	.08	49	44	42	41	30	25	64	56	49	45	39	66	59	52	49	44	43	69	64	58	55	52	52				
10	300	.00	39	41	40	38	28	17	49	49	47	46	40	34	51	53	51	49	44	59	57	54	50	46					
	500	.00	43	42	41	39	30	21	53	51	49	46	42	36	55	55	53	50	45	60	59	57	55	51	48				
	800	.00	47	44	42	40	33	24	57	53	51	47	43	38	59	56	54	50	46	63	62	60	55	52	49				
	1200	.00	50	45	43	40	35	27	61	54	52	48	44	39	63	58	56	51	47	66	64	62	56	53	51				
	1500	.00	52	46	44	41	36	29	63	55	53	48	44	40	65	59	56	51	47	68	65	62	56	53	52				
12	430	.00	38	17	12	10	12	14	51	48	43	35	34	30	54	52	48	40	39	60	59	55	48	48	46				
	800	.00	44	27	25	20	18	18	56	52	48	40	37	34	59	56	52	45	43	64	63	60	53	51	49				
	1200	.00	48	35	34	27	22	21	60	54	51	43	40	36	62	58	56	48	45	67	65	63	56	54	52				
	1600	.00	51	42	43	34	26	24	63	57	54	47	42	39	66	61	59	51	47	71	68	66	59	56	54				
	2300	.00	54	46	49	38	28	26	65	58	56	49	43	40	68	62	60	53	49	73	69	66	61	57	55				
14	600	.01	40	23	17	13	14	15	52	50	46	39	36	34	55	54	50	43	40	60	59	56	49	46	46				
	1000	.00	44	31	28	21	19	19	56	53	49	43	39	36	59	56	53	46	43	64	62	59	52	49	48				
	1600	-.01	47	38	38	28	23	22	60	56	52	45	41	39	63	59	56	49	45	68	65	62	55	51	50				
	2400	-.02	50	44	46	35	27	25	64	58	54	48	43	41	67	62	58	52	47	72	67	64	58	53	52				
	3100	-.03	52	48	51	39	30	27	66	60	56	50	44	42	69	63	60	53	48	74	69	66	59	54	53				
16	780	.00	42	30	21	15	13	14	53	52	45	39	36	33	57	55	49	43	40	62	61	56	50	46	45				
	1600	.00	47	40	34	28	22	20	58	56	50	44	41	38	62	59	54	48	45	67	65	61	55	51	49				
	2400	.00	49	45	41	32	26	24	61	58	52	47	43	40	64	62	56	51	47	70	67	63	57	54	52				
	3600	-.01	52	51	48	38	31	28	64	61	55	49	46	43	67	64	59	53	50	73	70	66	60	56	54				
	4200	-.01	53	53	51	40	33	29	65	62	56	50	47	44	68	65	60	54	51	74	71	67	61	57	55				
18	1100	.01	46	29	18	16	16	19	58	54	49	41	34	32	61	57	52	45	38	66	62	57	51	45	43				
	2300	.07	54	46	38	30	25	26	63	58	53	43	36	33	66	61	56	47	40	71	66	61	53	47	44				
	3600	.19	59	56	51	38	31	31	66	61	55	44	37	34	69	64	58	48	41	74	69	63	55	48	45				
	4500	.33	62	61	57	42	34	33	67	62	57	45	38	35	70	65	60	49	42	75	70	65	55	49	46				
	5500	.52	64	66	63	46	37	35	69	63	58	45	38	35	71	66	61	49	42	76	71	66	56	49	46				
24	1480	.01	36	22	18	13	15	12	60	53	48	43	39	37	63	58	53	49	45	70	65	62	58	55	53				
	3200	.04	53	44	37	24	27	23	65	57	51	45	42	38	69	61	56	51	48	75	68	65	60	57	55				
	4800	.09	61	56	47	30	33	29	68	58	52	46	43	39	71	63	57	52	49	78	70	66	61	59	56				
	6000	.17	66	62	53	33	36	32	69	59	53	47	44	40	73	64	58	52	50	79	71	67	62	60	56				
	7300	.29	70	67	58	36	39	35	71	60	54	47	45	40	74	64	59	53	51	81	72	68	62	60	57				

- NOTES: 1. Based on tests conducted in accordance with ARI Standard 880-98.
 2. ΔP_s static pressure difference from inlet to discharge.
 3. ΔP_s is the minimum pressure required to deliver CFM shown with primary damper in wide open position.
 4. Dash (—) indicates db level less than 10.



A Participating Member
in the ARI 880
Certification Program

MODEL NUMBERING SYSTEM – Model AVC



- CONTROL TYPE**
- CA - Pneumatic Actuator with Mechanical Max./Min. Stops by Carnes
 - CM - Pneumatic Actuator by Carnes
 - CE - Pneumatic Actuator by Carnes, Reset Controller by Carnes
 - CX - Pneumatic Actuator by Carnes (Multi-function) Reset Controller by Carnes
 - EA - Electric Actuator by Carnes
 - EB - Electric Actuator by Carnes, Changeover Thermostat by Carnes
 - ET - Analog Electronic Velocity Controller with Integral Damper Actuator (Enclosure Included)
 - DO - DDC Provided by Others, Mounted and Wired by Carnes, w/Carnes Inlet Sensor, w/ 3/8" Damper Shaft, w/Enclosure
 - DE - DDC Enclosure with Carnes Inlet Sensor, w/Bare 3/8" Damper Shaft
 - MA - Manual Damper by Carnes
 - NS - No Damper Controls, w/Carnes Inlet Sensor, w/Bare 3/8" Damper Shaft (No Enclosure)

- CONTROLS, DAMPERS AND COIL ARRANGEMENTS**
- * 1 - Normally Open - Right Hand Controls
(All Electric/Electronic/Manual Control Types/DO, DE, NS)
(All Pneumatic Control Types for Reverse Acting Thermostat)
 - * 2 - Normally Open - Left Hand Controls
(All Electric/Electronic/Manual Control Types/DO, DE, NS)
(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)

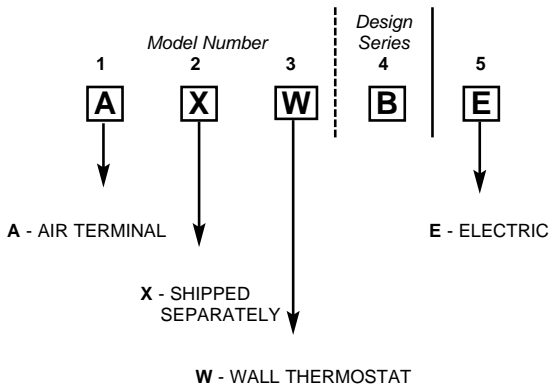
- ACTUATOR VENDOR**
- C - CARNES OEM (Pneu. or Elec.)
 - D - DDC ACTUATOR (DO Option Only)
 - N - NOT APPLICABLE (NS, DE Option Only)

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.

* Electric, Electronic and DDC Units **DO NOT** fail open. '1' or '2' is used for Right or Left Hand Only. Electric/Electronic Units are shipped with the Damper in the Open Position.

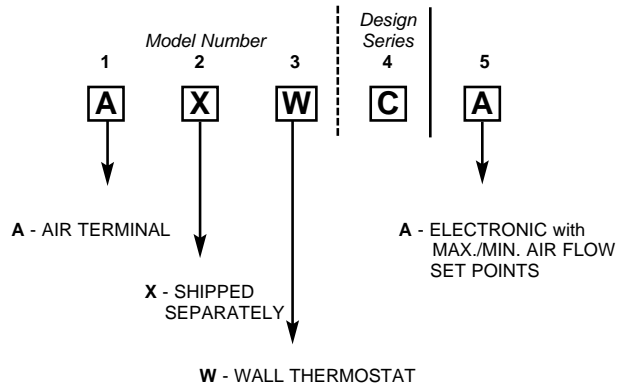
• Minimum setting cannot be zero with these controls. Duct sensor needs at least 20% of maximum rated CFM to sense duct air temperature.

Electric Thermostat



A Carnes Electric Thermostat **must be ordered** with the Electric EA and EB Control Options

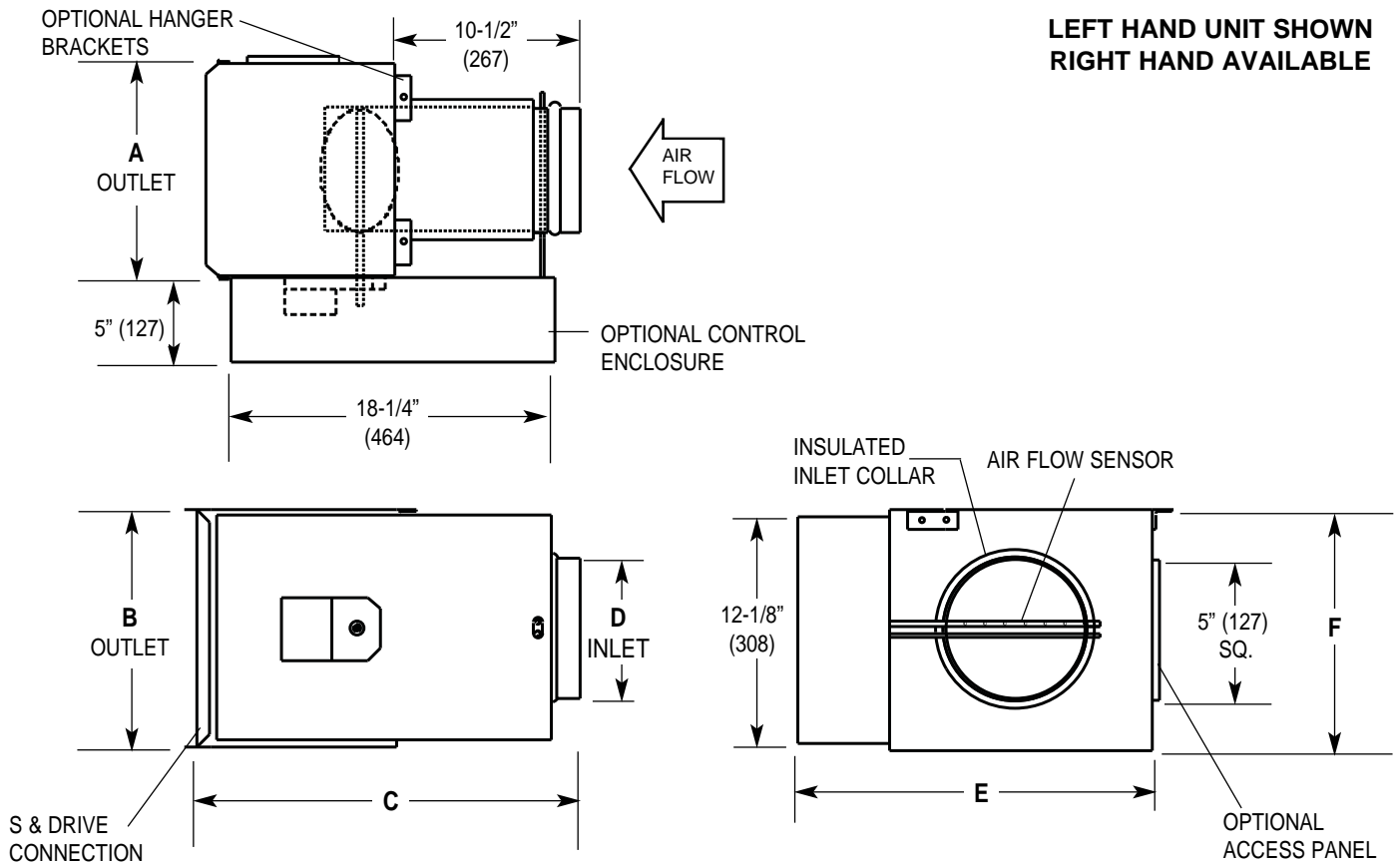
Electronic Thermostat



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

DIMENSIONAL DATA – Model AVC

NON FAN POWERED UNITS



DIMENSIONS LISTED IN INCHES (Millimeters)							
Unit Size	CFM (L/s) Range	OUTLET		C	INLET		F
		A	B		D	E	
05	0-350	12	7-1/2	20-1/2	4-7/8	17	7-5/8
	(0-165)	(305)	(191)	(521)	(124)	(432)	(194)
06	0-500	12	7-1/2	20-1/2	5-7/8	17	7-5/8
	(0-236)	(305)	(191)	(521)	(149)	(432)	(194)
07	0-700	12	10	20-1/2	6-7/8	17	10-1/8
	(0-330)	(305)	(254)	(521)	(175)	(432)	(257)
08	0-1000	12	10	20-1/2	7-7/8	17	10-1/8
	(0-472)	(305)	(254)	(521)	(200)	(432)	(257)
10	0-1500	14	12-1/2	20-1/2	9-7/8	19	12-5/8
	(0-708)	(356)	(318)	(521)	(251)	(483)	(320)
12	0-2300	16	15	20-1/2	11-7/8	21	15-1/8
	(0-1085)	(406)	(381)	(521)	(302)	(533)	(381)
14	0-3100	20	17-1/2	20-1/2	13-7/8	25	17-5/8
	(0-1463)	(508)	(445)	(521)	(352)	(635)	(447)
16	0-4200	24	17-1/2	21-1/2	15-7/8	29	17-5/8
	(0-1982)	(610)	(445)	(546)	(403)	(737)	(447)
18	0-5500	32	17-1/2	23-1/2	15-7/8x17-7/8	37	17-5/8
	(0-2596)	(813)	(445)	(597)	(403x454)	(940)	(447)
24	0-7300	32	17-1/2	23-1/2	15-7/8x23-7/8	37	17-5/8
	(0-3445)	(813)	(445)	(597)	(403x607)	(940)	(447)