

**ADCC**

Discharge and Radiated (NC) Noise Criteria

Inlet Size (Inches)	CFM	Minimum Pressure Drop (Damper Full Open)				Discharge and Radiated (NC) Noise Criteria															
		Min. Δ P <sub>s</sub>		Min. Δ P <sub>t</sub>		Min. Δ P <sub>s</sub> (Damper Full Open)				1.0" Δ P <sub>s</sub>			1.5" Δ P <sub>s</sub>			3.0" Δ P <sub>s</sub>					
		Base Unit	With Atten.	Base Unit	With Atten.	Δ P <sub>t</sub>	Discharge NC		Rad. NC	Δ P <sub>t</sub>	Discharge NC		Rad. NC	Δ P <sub>t</sub>	Discharge NC		Rad. NC	Δ P <sub>t</sub>	Discharge NC		Rad. NC
5	75	.02	.02	.04	.04	.04	—	—	—	1.02	—	—	23	1.52	—	—	27	3.02	—	—	35
	100	.03	.04	.07	.08	.07	—	—	12	1.04	—	—	34	1.54	—	—	37	3.04	—	—	43
	200	.15	.17	.29	.32	.29	—	—	21	1.14	11	—	40	1.64	15	—	43	3.14	19	11	49
	300	.35	.39	.67	.71	.67	10	—	30	1.33	17	—	46	1.83	19	10	49	3.33	24	15	56
	350	.48	.53	.92	.97	.92	14	—	33	1.44	19	11	48	1.94	22	14	52	3.44	27	17	58
6	110	.02	.03	.04	.05	.04	—	—	—	1.02	—	—	—	1.52	—	—	11	3.02	10	—	17
	200	.08	.09	.13	.16	.13	—	—	—	1.07	11	—	14	1.57	14	—	17	3.07	18	11	22
	300	.16	.21	.31	.36	.31	—	—	10	1.15	16	—	19	1.65	18	10	22	3.15	23	15	27
	400	.30	.38	.57	.65	.57	—	—	15	1.27	21	13	23	1.77	23	15	25	3.27	28	19	30
	500	.48	.61	.90	1.02	.90	14	—	17	1.42	24	15	27	1.92	27	18	29	3.42	31	23	34
7	140	.02	.02	.04	.04	.04	—	—	—	1.02	—	—	—	1.52	—	—	12	3.02	10	—	19
	200	.04	.05	.07	.08	.07	—	—	—	1.03	—	—	12	1.53	11	—	16	3.03	16	—	22
	400	.14	.21	.27	.34	.27	—	—	11	1.14	17	—	22	1.64	21	11	25	3.14	25	16	30
	600	.31	.49	.62	.79	.62	12	—	17	1.30	24	15	28	1.80	27	18	31	3.30	31	22	36
	700	.43	.67	.85	1.09	.85	16	10	19	1.41	27	18	30	1.91	29	20	34	3.41	34	24	38
8	185	.02	.03	.04	.05	.04	—	—	—	1.02	—	—	12	1.52	—	—	15	3.02	12	—	21
	400	.09	.15	.16	.23	.16	—	—	—	1.07	16	—	23	1.57	18	10	25	3.07	24	16	30
	600	.19	.35	.36	.51	.36	—	—	16	1.16	22	15	28	1.66	25	18	31	3.16	31	22	36
	800	.34	.63	.63	.92	.63	11	—	21	1.29	27	18	33	1.79	29	21	35	3.29	35	25	41
	1000	.54	1.00	1.00	1.45	1.00	16	14	24	1.45	30	22	36	1.95	33	24	38	3.45	38	29	43
10	300	.02	.02	.03	.04	.03	—	—	—	1.02	—	—	13	1.52	—	—	16	3.02	—	—	22
	500	.05	.07	.09	.11	.09	—	—	—	1.04	—	—	16	1.54	10	—	20	3.04	15	—	25
	800	.12	.19	.23	.31	.23	—	—	—	1.11	14	—	20	1.61	16	—	23	3.11	17	10	28
	1200	.26	.47	.51	.72	.51	—	—	15	1.25	18	—	24	1.75	21	11	27	3.25	25	15	32
	1500	.39	.75	.79	1.15	.79	12	—	20	1.40	22	13	28	1.90	24	14	31	3.40	29	18	35
12	430	.02	.03	.04	.04	.04	—	—	—	1.02	—	—	13	1.52	6	—	18	3.02	11	—	23
	800	.07	.10	.12	.15	.12	—	—	—	1.05	11	—	20	1.55	15	10	23	3.05	21	14	30
	1200	.15	.22	.27	.33	.27	—	—	14	1.12	18	14	24	1.62	21	17	27	3.12	27	22	33
	1800	.32	.49	.58	.76	.58	11	13	22	1.27	24	20	30	1.77	28	24	33	3.27	33	30	37
	2300	.50	.80	.94	1.24	.94	16	18	26	1.43	28	26	32	1.93	31	28	35	3.43	37	33	41
14	600	.02	.02	.04	.04	.04	—	—	—	1.02	—	—	16	1.52	11	—	20	3.02	17	14	26
	1000	.05	.16	.10	.11	.10	—	—	—	1.05	14	—	21	1.55	17	14	24	3.05	24	19	31
	1600	.12	.16	.24	.27	.24	—	—	11	1.12	21	16	27	1.62	24	19	34	3.12	31	27	36
	2400	.25	.34	.51	.61	.51	11	11	20	1.26	27	23	31	1.76	31	26	35	3.26	37	33	41
	3100	.42	.57	.86	1.01	.86	17	16	26	1.44	31	27	35	1.94	35	31	39	3.44	41	37	45
16	780	.02	.02	.03	.01	.03	—	—	—	1.02	10	—	18	1.52	14	—	22	3.02	19	13	29
	1600	.07	.09	.14	.16	.14	—	—	—	1.07	21	15	25	1.57	24	19	29	3.07	30	26	36
	2400	.15	.21	.30	.36	.30	—	—	18	1.15	27	23	30	1.65	30	27	34	3.15	36	33	41
	3600	.32	.46	.65	.79	.65	16	17	27	1.33	33	30	35	1.83	36	33	39	3.33	42	40	46
	4200	.43	.63	.88	1.08	.88	19	20	31	1.45	35	32	37	1.95	38	36	41	3.45	44	43	49

- NOTES:**
1. Δ P<sub>s</sub> static pressure difference from inlet to discharge.
  2. Δ P<sub>s</sub> is the minimum pressure required to deliver CFM shown with the primary damper in wide open position.
  3. Δ P<sub>t</sub> 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 AHRI Standard 880-2008 and are calculated in accordance with AHRI Standard 885-2008 as application data based on the following:

- Discharge NC levels are based on —
- a) 5 foot rectangular duct lined with 1" fiberglass insulation.
  - b) 5 foot lined flex duct (8" diameter).
  - c) Flow division.
  - d) Space effect factor (2400 ft<sup>3</sup>) at 5 feet from outlet.
  - e) End reflection.
  - f) Environmental adjustment factor.
- Radiated NC levels are based on —
- a) Plenum / ceiling effect - 5/8" mineral fiber tile, 35 lb / ft<sup>2</sup> - 3 foot plenum.
  - b) Environmental adjustment factor.

NC is not part of the AHRI 880 Certification Program.

**Sound Data (Sound Power by Octave Band)**

**Discharge Sound Power**

Inlet Size (Inches)	CFM	Minimum Δ P <sub>s</sub>							1.0" Δ P <sub>s</sub>							1.5" Δ P <sub>s</sub>							3.0" Δ P <sub>s</sub>							
		Δ P <sub>s</sub>	Sound Power (db) by Octave Band							Sound Power (db) by Octave Band							Sound Power (db) by Octave Band							Sound Power (db) by Octave Band						
			(2)	(3)	(4)	(5)	(6)	(7)	(7)	(2)	(3)	(4)	(5)	(6)	(7)	(7)	(2)	(3)	(4)	(5)	(6)	(7)	(7)	(2)	(3)	(4)	(5)	(6)	(7)	(7)
5	75	.02	34	25	24	10	10	15	41	42	37	33	33	31	43	44	40	36	37	35	46	48	45	41	42	43				
	100	.03	38	31	29	16	15	17	45	45	41	36	35	32	46	48	44	39	38	36	49	52	48	44	44	44				
	200	.15	48	45	40	32	27	22	53	54	49	44	39	33	55	57	52	46	42	38	58	61	57	51	48	45				
	300	.35	54	54	46	41	34	26	59	60	54	48	42	34	60	62	57	51	45	39	63	66	62	56	51	46				
	350	.48	56	57	49	45	37	27	61	62	56	49	42	35	62	64	59	52	46	39	65	68	64	57	51	47				
6	110	.02	40	31	20	17	17	18	45	46	41	37	33	28	47	49	44	40	36	31	50	53	49	45	41	37				
	200	.07	46	41	32	28	25	22	53	54	48	43	38	32	55	56	51	46	41	36	58	60	55	51	46	42				
	300	.16	50	48	41	35	30	25	58	59	52	47	41	35	60	61	55	50	44	39	63	65	60	55	49	45				
	400	.30	53	53	47	40	33	27	62	63	56	50	43	37	64	65	59	53	46	41	67	69	63	58	52	47				
	500	.48	56	57	51	44	36	28	65	66	58	52	45	39	67	68	61	55	48	42	70	72	66	60	54	48				
7	140	.02	37	26	15	11	12	17	46	46	41	38	33	30	48	49	44	42	37	34	51	53	49	48	43	41				
	200	.03	42	33	23	19	18	20	51	51	45	41	36	33	53	54	48	45	40	37	56	58	53	51	46	44				
	400	.14	52	48	39	34	29	27	61	60	53	47	42	38	63	63	56	51	45	42	66	67	61	57	51	49				
	600	.31	58	56	48	42	36	31	67	66	57	51	45	41	69	68	61	55	49	45	72	72	66	61	55	52				
	700	.43	60	59	52	46	38	32	69	68	59	52	47	42	71	70	62	56	50	46	74	74	68	62	56	53				
8	185	.02	40	29	17	15	14	15	50	48	43	43	36	30	52	50	47	47	39	35	56	55	52	53	46	42				
	400	.08	50	43	34	30	27	24	60	59	52	49	42	36	63	61	56	53	46	40	67	66	61	60	52	48				
	600	.19	55	51	43	38	34	28	66	64	57	52	45	39	68	67	61	56	49	43	72	72	66	63	56	51				
	800	.34	58	56	49	44	38	32	70	69	61	55	48	41	72	71	64	59	51	45	76	76	70	66	58	53				
	1000	.54	61	60	54	49	42	34	73	72	63	56	49	43	75	74	67	60	53	47	79	79	72	67	60	54				
10	300	.02	40	29	20	16	15	17	47	46	45	42	34	28	49	48	48	46	37	31	52	52	54	53	43	38				
	500	.04	46	38	30	25	23	22	53	52	49	45	38	32	55	54	53	49	41	36	59	58	58	56	47	42				
	800	.11	52	46	39	34	31	27	59	58	53	48	42	36	61	60	56	52	45	40	65	63	62	59	51	46				
	1200	.25	57	53	47	42	37	31	65	62	57	51	45	39	67	64	60	55	49	43	70	68	65	61	54	49				
	1500	.39	60	57	52	46	41	34	68	65	59	52	47	41	70	67	62	56	51	45	73	71	67	62	56	51				
12	430	.02	41	31	21	18	18	17	51	48	46	42	37	31	53	51	49	46	41	35	58	55	55	53	47	42				
	800	.06	50	42	34	30	27	24	60	56	53	48	43	36	62	59	56	52	46	40	66	64	62	58	53	47				
	1200	.13	55	49	42	37	33	28	65	62	57	51	47	39	68	64	60	55	50	43	72	69	66	62	56	50				
	1800	.30	61	56	51	45	40	33	71	67	61	55	50	43	74	70	65	59	54	47	78	74	71	65	60	54				
	2300	.49	64	60	56	49	44	35	75	70	64	57	52	45	77	73	67	61	56	49	81	78	73	67	62	56				
14	600	.01	38	31	19	17	15	17	54	52	48	44	39	34	56	55	52	48	43	39	61	60	58	55	49	46				
	1000	.04	47	40	30	26	24	23	61	58	53	48	43	38	64	61	56	52	47	42	69	67	63	59	53	50				
	1600	.11	55	49	40	35	32	28	68	64	57	51	47	41	71	67	61	55	51	46	76	73	67	62	57	54				
	2400	.25	61	56	49	42	39	33	74	69	61	54	50	45	77	73	65	58	54	49	81	78	71	65	60	57				
	3100	.42	65	61	54	47	44	36	78	73	63	56	52	47	80	76	67	60	56	51	85	81	73	66	62	59				
16	780	.02	41	33	22	19	15	17	57	55	49	46	42	36	60	58	53	49	46	40	65	63	60	56	52	48				
	1600	.06	52	46	37	32	28	26	67	64	57	51	47	42	70	67	60	55	51	46	75	72	67	61	57	53				
	2400	.14	58	53	46	40	35	31	72	69	61	54	50	45	75	72	65	58	54	49	80	77	71	64	60	57				
	3600	.32	65	60	55	47	43	37	78	74	65	57	53	48	81	77	69	61	57	53	86	82	75	67	63	60				
	4200	.43	67	63	58	50	45	39	80	76	67	58	55	49	83	79	71	62	58	54	88	84	77	68	65	61				

- NOTES:**
1. Based on tests conducted in accordance with AHRI Standard 880-2008.
  2. Δ P<sub>s</sub> static pressure difference from inlet to discharge.
  3. Δ P<sub>s</sub> 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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Sound Data (Sound Power by Octave Band)

Radiated Sound Power

Inlet Size (Inches)	CFM	Minimum Δ P <sub>s</sub>							1.0" Δ P <sub>s</sub>							1.5" Δ P <sub>s</sub>							3.0" Δ P <sub>s</sub>							
		Δ P <sub>s</sub>	Sound Power (db) by Octave Band							Sound Power (db) by Octave Band							Sound Power (db) by Octave Band							Sound Power (db) by Octave Band						
			(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	16	12	13	17	43	38	35	35	36	35	44	40	37	38	41	41	46	43	41	43	49	50				
	100	.03	41	31	21	16	17	19	46	42	37	36	37	36	47	43	40	39	42	42	49	46	44	45	50	51				
	200	.13	48	42	32	27	26	24	54	50	43	40	39	37	55	51	46	43	44	43	57	54	50	49	52	52				
	300	.30	51	48	39	34	31	26	58	54	47	42	40	38	59	56	49	46	45	44	61	59	53	51	53	53				
	350	.41	52	51	42	36	33	27	60	56	48	43	41	38	61	58	51	46	45	44	63	60	55	52	53	53				
6	110	.02	41	32	19	15	17	19	44	41	35	33	34	32	46	43	38	36	39	38	48	47	42	42	47	48				
	200	.08	46	39	28	24	22	22	52	47	41	37	36	34	53	50	43	41	41	40	55	53	48	46	49	50				
	300	.16	49	44	34	29	26	24	56	52	45	40	38	36	58	54	47	44	42	41	60	58	52	49	51	51				
	400	.28	51	48	39	33	28	25	60	55	47	42	39	37	61	57	50	46	44	42	63	61	55	52	52	52				
	500	.43	53	50	42	37	30	26	62	58	49	44	40	37	64	60	52	47	44	43	66	64	57	53	53	53				
7	140	.02	37	31	18	19	18	18	45	41	36	33	34	32	46	44	39	37	38	38	49	48	45	43	46	48				
	200	.04	41	36	23	22	20	20	49	46	39	36	35	33	50	48	43	39	40	39	53	52	48	45	48	49				
	400	.14	49	45	33	29	25	22	57	54	46	40	38	35	59	57	49	44	43	41	62	61	54	50	50	51				
	600	.29	54	50	39	33	27	24	62	59	49	43	40	37	64	62	53	47	44	42	67	66	58	53	52	52				
	700	.39	56	52	42	37	28	24	64	61	51	44	40	37	66	64	54	48	45	43	69	68	59	54	53	53				
8	185	.02	39	32	20	20	18	17	47	45	39	36	34	33	49	48	42	40	39	38	53	52	47	46	47	47				
	400	.09	48	43	33	31	26	23	57	55	47	41	38	35	59	57	50	45	42	41	63	61	55	51	50	50				
	600	.19	52	49	40	37	31	26	61	59	51	44	40	37	64	62	54	48	44	42	68	66	59	54	52	51				
	800	.33	55	53	45	42	34	28	65	63	54	46	41	38	67	65	57	50	46	43	71	70	62	56	53	52				
	1000	.51	58	56	49	45	36	30	68	66	56	48	42	38	70	68	59	51	47	44	74	72	64	57	55	53				
10	300	.02	38	32	18	14	15	18	47	42	40	34	32	31	49	44	43	38	36	36	52	48	48	43	44	45				
	500	.05	44	37	27	23	21	21	52	47	43	37	35	33	55	49	46	41	39	38	58	53	51	47	46	47				
	800	.12	49	43	35	31	27	25	58	52	46	40	38	35	60	54	49	44	42	40	63	58	54	49	49	49				
	1200	.26	53	47	42	38	32	27	62	56	49	43	40	37	64	58	52	46	44	42	68	62	57	52	51	51				
	1500	.39	56	50	46	41	35	29	65	58	50	44	41	37	67	61	53	48	45	43	70	64	59	53	52	51				
12	430	.02	45	37	23	18	16	18	53	45	40	35	34	32	55	48	44	39	38	37	59	52	49	45	45	46				
	800	.07	50	43	34	27	23	22	58	51	46	40	37	35	61	54	49	43	41	40	64	59	55	50	48	49				
	1200	.15	53	47	41	33	28	25	62	56	49	42	39	36	64	58	53	46	43	41	68	63	58	53	51	50				
	1800	.32	56	51	48	39	33	28	66	60	53	45	41	38	68	63	56	49	45	43	72	67	62	56	53	52				
	2300	.50	58	53	52	43	36	30	68	62	55	47	43	39	70	65	58	51	47	44	74	70	64	57	54	53				
14	600	.02	37	30	19	14	14	16	51	47	43	38	34	31	54	50	46	41	38	36	60	55	52	48	46	45				
	1000	.05	44	38	29	23	22	21	57	53	46	41	37	33	60	56	50	45	41	38	65	61	56	51	49	47				
	1600	.12	50	44	38	31	29	25	62	58	50	44	40	35	66	61	53	48	44	40	71	66	59	54	51	49				
	2400	.25	55	50	46	38	35	28	67	62	53	47	42	37	70	65	57	50	47	42	75	70	62	57	54	51				
	3100	.40	58	53	52	42	39	30	70	65	55	49	44	38	73	68	58	52	48	43	78	73	64	58	55	52				
16	780	.02	37	30	19	13	14	16	54	51	44	41	35	31	57	54	47	45	39	36	63	60	54	51	47	45				
	1600	.07	47	42	35	27	24	22	61	57	49	45	39	34	65	60	53	48	43	40	70	66	59	55	51	49				
	2400	.15	52	48	44	34	30	26	66	60	52	47	41	36	69	64	56	51	45	41	75	70	62	57	53	50				
	3600	.31	58	55	53	42	36	29	70	64	55	49	43	38	73	67	59	53	48	43	79	73	65	59	55	52				
	4200	.41	60	57	56	45	39	31	72	65	57	50	44	39	75	69	60	53	48	44	81	75	66	60	56	53				

- NOTES: 1. Based on tests conducted in accordance with AHRI Standard 880-2008.  
 2. Δ P<sub>s</sub> static pressure difference from inlet to discharge.  
 3. Δ P<sub>s</sub> 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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