

Performance Data • NC Level Application Guide

Model Series 35S • Series Flow • Basic Unit

Fiberglass Liner

Unit Size	Inlet Size	Airflow		Min. inlet ΔPs		NC Levels @ Inlet Pressure (ΔPs) shown												
						DISCHARGE						RADIATED						
						Fan Only	Min. ΔPs	0.5 w.g. (125 Pa)	1.0" w.g. (250 Pa)	1.5" w.g. (375 Pa)	2.0" w.g. (500 Pa)	Fan Only	Min. ΔPs	0.5" w.g. (125 Pa)	1.0" w.g. (250 Pa)	1.5" w.g. (375 Pa)	2.0" w.g. (500 Pa)	
1	6	550	260	0.22	54	37	36	36	39	39	36	36	35	36	37	37		
		400	189	0.12	30	30	26	26	29	30	30	30	30	31	33	33		
		300	142	0.07	17	20	-	20	25	29	29	25	25	26	28	29	30	
		200	94	0.04	9	-	-	-	20	20	20	-	-	-	22	24	25	
		100	47	0.01	3	-	-	-	-	-	-	-	-	-	-	-	21	
	8	550	260	0.06	15	37	35	35	35	38	38	36	36	35	36	37	37	
		400	189	0.03	8	30	26	26	28	29	31	30	30	30	31	33	33	
		300	142	0.02	5	20	-	-	24	26	28	25	24	25	28	29	30	
		200	94	0.01	2	-	-	-	-	-	-	-	-	-	21	23	24	
		100	47	0.01	1	-	-	-	-	-	-	-	-	-	-	-	20	
2	6	550	260	0.20	50	23	25	28	29	31	33	24	23	25	29	32	33	
		400	189	0.11	27	-	-	-	24	28	29	-	-	21	24	29	30	
		200	94	0.04	10	-	-	-	-	-	-	-	-	-	22	25	28	
	8	850	401	0.11	28	31	34	36	34	35	36	35	33	34	35	36	36	
		700	330	0.08	19	28	30	34	31	34	35	28	30	30	33	34	35	
		550	260	0.05	12	23	24	26	26	30	31	24	23	24	28	31	33	
		400	189	0.02	6	-	-	-	21	25	26	-	-	20	24	28	30	
		200	94	0.01	2	-	-	-	-	-	-	-	-	-	21	24	26	
	3	6	550	260	0.20	50	23	25	25	28	30	31	26	28	29	32	34	34
			400	189	0.11	27	-	-	-	21	23	24	21	22	23	25	29	29
8		1100	519	0.12	30	31	31	31	33	35	36	34	34	34	36	38	38	
		900	425	0.08	20	26	28	28	30	33	34	30	31	32	34	36	36	
		700	330	0.05	12	23	24	24	26	30	30	26	28	29	31	34	34	
		400	189	0.02	5	-	-	-	-	20	21	21	22	23	25	29	29	
10		1215	573	0.03	7	34	34	34	35	36	36	35	34	35	37	38	38	
		1100	519	0.03	7	31	30	31	33	34	35	34	33	34	36	37	37	
		900	425	0.02	4	26	25	26	28	30	33	30	30	31	33	35	35	
		700	330	0.01	2	23	21	23	24	28	28	26	26	28	31	33	33	
400	189	0.01	1	-	-	-	-	-	-	21	21	22	24	28	28			
4	10	1550	731	0.10	25	39	37	39	41	43	44	35	35	37	39	41	43	
		1400	661	0.08	19	35	34	36	38	39	41	33	33	35	37	40	41	
		1200	566	0.05	13	31	29	33	35	37	38	30	30	33	36	39	40	
		900	425	0.03	7	25	25	28	29	30	31	25	25	30	32	35	36	
		700	330	0.02	4	21	23	25	24	26	28	22	22	26	30	33	34	
	12	1550	731	0.05	12	39	36	38	40	41	43	35	35	37	39	41	43	
		1400	661	0.03	8	35	33	35	37	38	40	33	33	35	37	40	41	
		1200	566	0.02	5	31	29	33	35	36	38	30	30	33	35	38	39	
		900	425	0.01	3	25	23	26	26	29	30	25	25	29	32	34	36	
		700	330	0.01	2	21	21	23	23	24	25	22	21	26	29	32	33	
5	12	2050	967	0.06	15	39	38	39	41	43	43	40	38	39	40	41	43	
		1850	873	0.05	12	36	35	36	38	39	40	38	36	37	38	39	40	
		1600	755	0.04	10	33	31	34	35	37	38	34	34	35	36	38	38	
		1350	637	0.03	7	28	26	30	31	34	35	29	30	31	34	36	37	
		1100	519	0.02	5	23	24	26	29	30	30	26	25	28	30	33	34	
	14	2050	967	0.04	10	39	37	38	40	41	41	40	38	39	40	41	43	
		1850	873	0.03	8	36	34	36	37	38	39	38	36	37	38	39	40	
		1600	755	0.03	7	33	30	33	35	36	37	34	34	35	36	38	38	
		1350	637	0.02	5	28	26	29	30	33	34	29	29	30	34	36	37	
		1100	519	0.01	3	23	21	25	26	28	28	26	25	28	30	33	34	
6	14	2400	1133	0.08	20	40	38	39	41	43	43	43	39	41	44	46	46	
		2100	991	0.06	15	37	36	37	39	40	40	40	37	38	41	44	44	
		1700	802	0.04	10	31	29	33	34	36	36	36	33	34	37	40	40	
		1400	661	0.03	6	26	25	27	29	30	30	33	28	29	34	37	37	
7	16	4000	1888	0.15	38	40	38	39	41	43	44	46	44	44	45	46	47	
		3500	1652	0.12	29	37	35	36	38	40	41	43	40	41	43	45	45	
		2800	1321	0.08	19	31	30	33	35	37	35	38	36	37	39	41	43	
		2100	991	0.04	11	25	24	26	29	29	30	34	33	33	35	38	40	
		1600	755	0.03	6	21	-	23	24	24	26	30	28	30	33	36	38	
	18	4000	1888	0.10	25	40	38	38	40	41	43	46	44	44	45	46	47	
		3500	1652	0.07	18	37	35	35	38	39	40	43	40	41	43	45	45	
		2800	1321	0.05	11	31	29	31	34	36	35	38	36	37	39	41	41	
		2100	991	0.02	5	25	21	25	28	28	28	34	33	33	35	38	39	
		1600	755	0.02	4	21	-	20	21	21	24	30	28	29	32	36	37	

Performance Notes: 1. NC Levels are calculated based on procedures as outlined on page C160.

2. Dash (-) in space indicates a NC less than 20.

FAN POWERED TERMINAL UNITS

Performance Data • Radiated Sound Power Levels

Model Series 35S • Series Flow • Basic Unit

Fiberglass Liner



Table with columns: Unit Size, Inlet Size, Airflow (cfm, l/s), Min. inlet ΔPs (w.g., l/s), Fan Only (2-7), and Fan and 100% Primary Air-Sound Power Octave Bands @ Inlet pressure (ΔPs) shown (Minimum ΔPs, 0.5" w.g., 1.0" w.g., 1.5" w.g., 2.0" w.g.).

FAN POWERED TERMINAL UNITS

For performance table notes, see page C61; highlighted numbers indicate embedded AHRI certification points.

Performance Data • AHRI Certification and Performance Notes

Model Series 35S • Series Flow • Basic Unit • AHRI Certification Rating Points
Fiberglass Liner

Unit Size	Inlet Size	Fan Airflow		Fan ^Σ Watts	Fan Only* @ .25" w.g. (62 Pa) ΔPs														Primary Airflow		Min. Inlet ΔPs		Fan + 100% Primary @ 1.5" w.g. (375 Pa) ΔPs w/ .25" w.g. (62 Pa) Discharge ΔPs						
					Discharge							Radiated											Radiated						
					2	3	4	5	6	7	2	3	4	5	6	7	cfm	l/s					"w.g.	Pa	2	3	4	5	6
1	6	400	189	105	74	70	66	64	60	57	64	60	55	48	44	40	400	189	0.12	30	67	62	57	54	57	58			
2	8	700	330	155	70	68	64	63	60	57	62	58	53	51	44	40	700	330	0.08	19	68	63	58	56	57	61			
3	10	1100	519	270	73	72	71	69	65	63	65	62	59	56	52	48	1100	519	0.03	7	68	65	62	62	61	62			
4	12	1550	731	430	80	79	74	74	70	69	68	64	58	57	55	53	1550	731	0.05	12	73	70	66	65	62	63			
5	14	2050	967	800	82	79	74	75	72	71	74	69	62	60	57	54	2050	967	0.04	10	73	70	65	62	62	63			
6	14	2100	991	790	77	77	75	77	74	73	72	69	62	60	59	57	2100	991	0.06	15	77	72	65	63	63	64			
7	16	2800	1321	760	76	72	70	69	66	64	70	67	61	55	50	49	2800	1321	0.08	19	71	69	66	61	58	59			

^Σ Motor = ECM.

* Primary air valve is closed and therefore primary cfm is zero.



Ratings are certified in accordance with AHRI Standards.

Performance Notes for Sound Power Levels:

- Discharge (external) static pressure is 0.25" w.g. (63 Pa) in all cases, which is the difference (ΔPs) in static pressure from terminal discharge to the room.
Discharge Sound Power Levels (SWL) now include duct end reflection energy as part of the standard rating. Including the duct end correction provides sound power levels that would normally be transmitted into an acoustically, non-reflective duct. The effect of including the energy correction to the discharge SWL, is higher sound power levels when compared to previous AHRI certified data. For more information on duct end reflection calculations see AHRI Standard 880.
- Radiated sound power is the breakout noise transmitted through the unit casing walls.

- Sound power levels are in decibels, dB re 10⁻¹² watts.
- All sound data listed by octave bands is raw data without any corrections for room absorption or duct attenuation. Dash (-) in space indicates sound power level is less than 20 dB or equal to background.
- Min. inlet ΔPs is the minimum operating pressure of the primary air valve section.
- Asterisk (*) in space indicates that the minimum inlet static pressure requirement is greater than 0.5" w.g. (125 Pa) at rated airflow.
- Data derived from independent tests conducted in accordance with ANSI / ASHRAE Standard 130 and AHRI Standard 880.