

## Performance Data • NC Level Application Guide

Model Series 35N • Parallel Flow • 100% Primary Air • Cooling Cycle

Fiberglass Liner

Unit Size	Inlet Size	Airflow		Min. Inlet ΔPs		NC Levels @ Inlet pressure (ΔPs) shown									
						DISCHARGE					RADIATED				
						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)	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)
2	6	500	236	0.49	122	-	-	24	31	36	22	25	32	35	38
		400	189	0.15	37	-	-	24	30	33	20	24	30	33	34
		300	142	0.18	45	-	-	25	29	33	-	23	26	30	32
		200	94	0.08	20	-	-	23	25	26	-	20	23	28	30
		100	47	0.02	5	-	-	-	-	-	-	-	22	26	29
	8	875	413	0.30	75	-	-	25	30	36	-	-	29	31	35
		700	330	0.20	50	-	-	24	31	33	-	-	26	32	34
		525	248	0.11	27	-	-	23	29	33	-	-	23	30	32
		350	165	0.05	12	-	-	20	24	26	-	-	20	26	31
		175	83	0.01	2	-	-	-	-	27	-	-	22	26	28
	10	1375	649	0.40	99	-	-	25	33	36	21	24	29	34	37
		1100	519	0.24	60	-	-	24	30	33	-	20	26	33	36
		825	389	0.15	37	-	-	21	26	30	-	-	25	30	34
		550	260	0.06	15	-	-	20	21	23	-	-	23	26	30
		275	130	0.02	5	-	-	-	-	28	-	-	20	24	26
	12	2000	944	0.45	112	-	-	25	33	36	32	32	35	35	37
		1600	755	0.30	75	-	-	25	31	34	26	29	28	31	34
		1200	566	0.18	45	-	-	24	28	30	-	-	24	29	32
		800	378	0.08	20	-	-	-	24	24	-	-	20	22	25
		400	189	0.02	5	-	-	-	-	27	-	-	-	21	24
3	8	875	413	0.24	60	-	-	26	31	34	20	21	30	33	36
		700	330	0.15	37	-	-	24	30	31	-	20	28	33	34
		525	248	0.08	20	-	-	23	26	30	-	-	22	26	30
		350	165	0.04	10	-	-	-	24	23	-	-	-	23	28
		175	83	0.01	2	-	-	-	-	26	-	-	-	20	23
	10	1375	649	0.25	62	-	-	28	34	37	26	30	33	36	39
		1100	519	0.16	40	-	-	25	31	35	-	26	29	34	36
		825	389	0.09	22	-	-	23	29	31	-	22	26	30	32
		550	260	0.04	10	-	-	20	25	29	-	-	22	26	29
		275	130	0.01	2	-	-	-	-	22	-	-	21	22	23
	12	2000	944	0.34	85	-	-	28	31	36	-	23	29	33	36
		1600	755	0.22	55	-	-	24	31	34	-	-	25	33	35
		1200	566	0.12	30	-	-	23	28	29	-	-	25	29	33
		800	378	0.05	12	-	-	-	22	21	-	-	21	24	26
		400	189	0.01	2	-	-	-	20	29	-	-	-	20	23
14	2625	1239	0.39	97	21	21	28	33	36	22	23	30	33	37	
	2100	991	0.25	62	-	-	25	30	33	-	20	28	31	34	
	1575	743	0.14	35	-	-	21	26	29	-	-	22	29	32	
	1050	495	0.06	15	-	-	-	22	23	-	-	21	26	29	
	525	248	0.02	5	-	-	-	20	28	-	-	-	23	24	
5	10	1375	649	0.26	65	-	-	28	31	35	-	22	26	33	35
		1100	519	0.17	42	-	-	24	29	31	-	24	26	31	34
		825	389	0.11	27	-	-	21	26	29	-	-	23	26	29
		550	260	0.04	10	-	-	20	24	28	-	-	-	25	26
		275	130	0.01	2	-	-	-	-	28	-	-	-	-	21
	12	2000	944	0.24	60	-	-	26	33	35	23	26	35	36	39
		1600	755	0.15	37	-	-	25	30	33	20	26	31	34	36
		1200	566	0.08	20	-	-	21	26	26	-	23	26	30	33
		800	378	0.03	7	-	-	-	21	24	-	20	22	25	28
		400	189	0.01	2	-	-	-	-	21	-	-	21	23	23
	14	2625	1239	0.30	75	-	-	25	30	33	20	22	28	31	34
		2100	991	0.19	47	-	-	23	26	28	-	-	25	28	31
		1575	743	0.10	25	-	-	-	23	24	-	-	22	25	28
		1050	495	0.04	10	-	-	-	21	22	-	-	-	22	25
		525	248	0.01	2	-	-	-	20	28	-	-	-	-	23
6	12	2000	944	0.21	52	-	-	25	30	33	-	20	29	33	35
		1600	755	0.13	32	-	-	23	29	29	-	-	28	30	30
		1200	566	0.07	17	-	-	20	24	24	-	20	21	24	29
		800	378	0.04	10	-	-	-	21	22	-	-	-	21	24
		400	189	0.01	2	-	-	-	-	28	-	-	-	-	20
	14	2625	1239	0.22	55	-	23	29	34	37	28	35	39	40	41
		2100	991	0.14	35	-	-	26	31	35	22	31	35	36	38
		1575	743	0.07	17	-	-	24	30	30	-	26	30	33	34
		1050	495	0.03	7	-	-	20	25	28	-	22	25	28	29
		525	248	0.01	2	-	-	-	22	25	-	-	20	22	24
	16	3425	1616	0.25	62	25	25	28	30	34	25	26	30	31	35
		2750	1298	0.16	40	-	-	23	29	29	-	23	25	29	31
		2050	967	0.08	20	-	-	20	25	26	-	-	23	26	28
		1375	649	0.04	10	-	-	-	23	26	-	22	20	22	24
		700	330	0.01	2	-	-	-	22	26	-	-	-	-	21

**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.



Performance Data • Radiated Sound Power Levels
Model Series 35N • Parallel Flow • 100% Primary Air • Cooling Cycle
Fiberglass Liner

Table with columns: Unit Size, Inlet Size, Airflow (cfm, l/s), Min. inlet ΔPs, and 100% Primary Air - Sound Power Octave Bands @ Inlet pressure (ΔPs) shown (Minimum ΔPs, 0.5" w.g. (125Pa) ΔPs, 1.0" w.g. (249Pa) ΔPs, 1.5" w.g. (375Pa) ΔPs, 2.0" w.g. (500Pa) ΔPs).

For performance table notes, see page C142.

Performance Data • NC Level Application Guide

Model Series 35N • Parallel Flow • Fan Only • Heating Cycle  
Fiberglass Liner

PSC Motor

Unit Size	Inlet Size	Airflow		Discharge ΔPs		NC Level	
		cfm	l/s	"w.g.	Pa	Discharge	Radiated
2	ALL	600	283	0.25	62	25	41
		500	236	0.25	62	20	35
		400	189	0.25	62	-	33
		300	142	0.25	62	-	32
3	ALL	1000	472	0.25	62	20	39
		850	401	0.25	62	-	36
		700	330	0.25	62	-	34
		550	260	0.25	62	-	33
5	ALL	1850	873	0.25	62	25	46
		1600	755	0.25	62	24	45
		1400	661	0.25	62	21	44
		1200	566	0.25	62	-	40
		1000	472	0.25	62	-	38
		800	378	0.25	62	-	34
6	ALL	2100	991	0.25	62	27	46
		1900	897	0.25	62	28	48
		1700	802	0.25	62	25	45
		1500	708	0.25	62	22	44
		1200	566	0.25	62	-	40

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.

Performance Data • Sound Power Levels

Model Series 35N • Parallel Flow • Fan Only • Heating Cycle  
Fiberglass Liner

Unit Size	Inlet Size	Airflow		Discharge ΔPs		Sound Power Octave Bands													
		cfm	l/s	"w.g.	Pa	Discharge							Radiated						
						2	3	4	5	6	7	2	3	4	5	6	7		
2	ALL	600	283	0.25	62	71	63	61	58	54	53	75	67	62	58	53	51		
		500	236	0.25	62	67	60	59	56	53	52	68	62	60	55	49	47		
		400	189	0.25	62	62	55	54	50	47	46	67	60	58	52	45	43		
		300	142	0.25	62	60	52	52	47	44	41	63	57	57	50	43	38		
3	ALL	1000	472	0.25	62	69	61	60	59	57	54	73	66	63	61	56	53		
		850	401	0.25	62	64	58	59	57	54	52	70	64	61	58	53	50		
		700	330	0.25	62	62	56	56	53	50	47	67	61	59	55	49	45		
		550	260	0.25	62	61	53	53	50	46	42	65	59	58	52	45	41		
5	ALL	1850	873	0.25	62	72	67	66	65	62	61	79	71	66	63	60	58		
		1600	755	0.25	62	72	66	64	63	60	59	78	70	64	61	58	56		
		1400	661	0.25	62	70	64	62	60	57	56	77	68	62	59	55	53		
		1200	566	0.25	62	68	60	59	56	54	52	74	65	60	56	52	49		
		1000	472	0.25	62	67	58	57	54	51	49	72	63	58	54	49	46		
		800	378	0.25	62	64	55	54	51	47	44	69	60	56	51	45	41		
6	ALL	2100	991	0.25	62	72	68	68	67	64	63	79	71	68	66	63	61		
		1900	897	0.25	62	72	69	67	67	64	63	80	71	66	65	62	60		
		1700	802	0.25	62	69	67	65	64	61	61	78	69	65	63	60	58		
		1500	708	0.25	62	67	64	63	62	59	58	77	67	63	61	58	55		
		1200	566	0.25	62	64	62	61	59	55	54	74	65	61	58	55	51		



For performance table notes, see page C142; highlighted numbers indicate embedded AHRI certification points.

## Performance Data • AHRI Certification and Performance Notes

### Model Series 35N • Parallel Flow • AHRI Certification Rating Points

#### Fiberglass Liner

Unit Size	Inlet Size	Primary Airflow		Min. Inlet ΔPs		100% Primary @ 1.5" w.g. (375 Pa) ΔPs w/ .25" w.g. (62 Pa) Discharge ΔPs														Fan Airflow		Fan† Watts	Fan Only* @ 25" w.g. (62 Pa) ΔPs													
						Discharge							Radiated										Discharge							Radiated						
						cfm	l/s	"w.g.	Pa	2	3	4	5	6	7	2	3	4	5				6	7	cfm	l/s	2	3	4	5	6	7	2	3	4	5
2	6	400	189	0.15	37	72	70	63	56	54	57	66	62	58	48	42	40	600	283	254	71	63	61	58	54	53	75	67	62	58	53	51				
3	10	1100	519	0.16	40	71	72	65	57	59	62	67	63	57	48	43	41	1000	472	385	69	61	60	59	57	54	73	66	63	61	56	53				
5	12	1600	755	0.15	37	71	71	65	56	57	60	69	63	56	47	45	46	1850	873	995	72	67	66	65	62	61	79	71	66	63	60	58				
6	14	2100	991	0.14	35	75	72	66	59	61	65	71	65	60	51	48	49	2100	991	814	72	68	68	67	64	63	79	71	68	66	63	61				

† Motor = PSC.

\*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 sound power is the noise emitted from the unit discharge into the downstream duct. 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<sup>-12</sup> 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.
- Minimum inlet ΔPs is the minimum operating pressure requirement of the unit (damper full open) to achieve rated primary CFM.
- 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.
- 100% primary air sound power levels are cooling cycle (fan turned off).
- Fan airflow is rated fan volume at .25" w.g. (62 Pa) downstream static pressure.
- Fan only sound power levels are 100% recirculated air; fan only; in heating cycle.
- Fan Watts are the maximum electrical power input at rated fan volume.