

Model Series 35FH • High Performance • Performance Data Sound Power Levels for EPIC ECM Motor and NC Level Application Guide

Unit Size	Airflow CFM l/s		Discharge Sound Power Levels							Radiated Sound Power Levels								
			Octave Bands							NC	Octave Bands							NC
			2	3	4	5	6	7	2		3	4	5	6	7			
8	900	425	68	68	68	68	64	62	26	73	65	60	56	50	47	39		
	800	378	66	66	67	65	62	59	24	72	64	59	54	48	45	38		
	700	330	65	64	65	63	59	56	23	69	61	57	52	46	42	34		
	600	283	62	62	63	60	57	53	20	68	59	56	50	43	39	33		
	500	236	60	59	61	58	54	49	-	67	57	54	48	41	36	31		
	400	189	57	57	59	55	52	45	-	64	54	53	45	38	32	28		
16	1600	755	74	72	71	71	68	67	31	77	71	64	61	57	52	44		
	1400	661	71	69	68	67	64	63	28	75	68	60	59	52	48	41		
	1200	566	68	66	65	64	61	59	24	73	65	58	56	49	45	39		
	1000	472	65	63	62	61	57	55	20	70	61	56	51	44	40	35		
	800	378	62	60	60	58	54	50	-	67	58	54	48	41	36	31		
20	2000	944	73	75	74	75	72	71	35	78	71	66	63	59	56	45		
	1800	850	72	73	72	72	70	69	33	77	70	64	62	57	54	44		
	1600	755	71	71	71	70	67	66	30	75	68	62	59	54	51	41		
	1400	661	68	69	69	67	64	63	28	74	66	61	57	51	48	40		
	1200	566	66	65	64	63	60	58	23	72	63	58	54	48	44	38		
	1000	472	64	62	62	60	57	54	-	70	59	56	51	44	40	35		
	800	378	61	59	58	56	53	49	-	66	57	54	48	41	35	30		
24	2550	1204	72	68	69	67	63	62	26	75	71	66	61	57	53	43		
	2400	1133	71	66	67	65	62	60	24	74	69	65	60	56	51	40		
	2200	1038	69	65	65	64	60	58	23	74	69	65	61	56	51	40		
	2000	944	68	63	63	62	58	55	20	73	67	64	59	54	50	39		
	1800	850	66	61	61	60	56	52	-	70	64	60	55	50	44	35		
	1600	755	63	59	60	58	54	49	-	70	62	59	54	48	42	35		
	1400	661	63	57	58	56	51	46	-	67	60	58	51	45	39	33		
	1200	566	59	54	55	53	47	40	-	66	59	56	50	44	36	31		
	1000	472	57	51	52	49	42	34	-	64	57	55	48	41	34	30		

Performance Notes:

- Fan discharge (external) static pressure is 0.25" w.g. (63 Pa).
- Sound power levels 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.
- Data derived from independent tests conducted in accordance with AHRI Standard 880.
- NC levels are calculated from the published raw data and based on procedures outlined in Appendix E, AHRI Standard 885.
- Fan discharge sound attenuation deductions are based on environmental effect, duct lining, branch power division, insulated flexible duct, end reflection and space effect and are as follows:

Discharge attenuation	Octave Band						
	2	3	4	5	6	7	
< 300 cfm	24	28	39	53	58	40	
300 – 700 cfm	27	29	40	51	53	39	
> 700 cfm	29	30	41	51	52	39	
- Radiated sound attenuation deductions are based on a mineral tile ceiling and environmental effect and are as follows:

Radiated attenuation	Octave Band						
	2	3	4	5	6	7	
Total dB reduction	18	19	20	26	31	36	
- Dash (–) in space denotes an NC level of less than 20.

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HORIZONTAL FAN COIL UNITS • DUCTED

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Unit Size	Airflow CFM l/s		Discharge Sound Power Levels							Radiated Sound Power Levels Non-Ducted Return							Radiated Sound Power Levels Ducted Return									
			Octave Bands							NC	Octave Bands							NC	Octave Bands							NC
			2	3	4	5	6	7	2		3	4	5	6	7	2	3		4	5	6	7				
30	3300	1557	76	73	72	72	69	67	33	75	69	62	59	56	53	41	69	61	52	47	42	37	34			
	3000	1416	75	71	70	70	67	65	30	72	67	60	55	52	49	38	68	59	51	45	40	35	33			
	2600	1227	73	68	68	67	64	62	26	71	65	58	53	50	46	36	66	57	49	43	37	32	30			
	2200	1038	71	66	65	64	61	58	24	69	63	56	50	47	43	34	64	54	46	40	34	27	28			
	1800	850	68	62	62	61	57	53	-	68	60	55	49	45	40	33	62	51	44	37	31	23	25			
	1400	661	65	61	60	59	55	49	-	65	58	53	46	41	35	29	60	50	43	35	28	-	23			
	1000	472	64	59	59	57	52	46	-	64	57	51	43	39	32	28	59	49	41	33	26	-	21			
40	4100	1935	79	76	71	72	68	67	36	77	71	63	59	56	52	44	71	62	54	49	43	37	36			
	3800	1793	78	75	71	70	67	65	35	76	70	62	57	54	50	43	70	62	54	49	44	37	35			
	3400	1605	77	73	69	68	65	62	33	75	68	60	55	52	47	41	68	59	51	45	39	33	33			
	3000	1416	75	71	67	65	62	59	30	73	67	59	53	50	45	39	67	57	49	43	37	30	31			
	2600	1227	73	68	64	63	60	55	26	71	64	57	51	47	41	36	64	55	47	40	34	27	28			
	2200	1038	72	66	62	61	57	52	24	69	62	55	49	45	38	34	63	53	45	38	31	22	26			
	1840	868	69	63	60	58	55	48	20	67	60	54	47	43	36	31	60	50	43	36	30	21	23			

Performance Notes:

1. Fan discharge (external) static pressure is 0.25" w.g. (63 Pa).
2. Sound power levels in decibels, dB re 10⁻¹² watts.
3. All sound data listed by octave bands is raw data without any corrections for room absorption or duct attenuation.
4. Data derived from independent tests conducted in accordance with ANSI/ASHRAE Standard 79 and AHRI 260.
5. Ducted return sound levels based on testing with an acoustically isolated (high transmission loss) inlet duct to outside the occupied space.

6. Fan discharge sound attenuation deductions are based on environmental effect, duct lining, branch power division, insulated flexible duct, end reflection and space effect and are as follows:

Discharge attenuation	Octave Band						
	2	3	4	5	6	7	
< 300 cfm	24	28	39	53	58	40	
300 – 700 cfm	27	29	40	51	53	39	
> 700 cfm	29	30	41	51	52	39	

7. Radiated sound attenuation deductions are based on a mineral tile ceiling and environmental effect and are as follows:

Radiated attenuation	Octave Band						
	2	3	4	5	6	7	
Total dB reduction	18	19	20	26	31	36	

8. Dash (–) in space denotes an NC level of less than 20.