

CFP SOUND POWER LEVELS



MODEL CFP-SS (Standard Speed Motor)

Measured at 30Pa Ext SP > Re 10⁻¹² Watts (dBr)

FAN SPEED	UNIT SIZE	Octave Band Frequencies, Hz)							
		63	125	250	500	1000	2000	4000	8000
H	300 SS	34	46	41	43	43	38	34	23
	400 SS	35	47	45	46	44	39	31	26
	600 SS	38	50	45	46	45	41	32	25
	800 SS	40	52	47	49	48	44	36	31
	1000 SS	38	51	46	48	47	42	33	27
	1200 SS	40	52	46	49	47	42	36	30
	1400 SS	42	54	49	52	51	48	39	34
M	300 SS	34	44	36	37	37	30	22	-
	400 SS	31	42	39	40	39	33	24	-
	600 SS	31	44	39	41	39	34	25	-
	800 SS	34	47	43	45	41	37	26	22
	1000 SS	35	46	42	44	42	36	27	21
	1200 SS	37	48	43	46	42	37	28	23
	1400SS	38	51	46	48	44	40	31	26

MODEL CFP-HS (High Static Motor)

Measured at 30Pa Ext SP > Re 10⁻¹² Watts (dBr)

FAN SPEED	UNIT SIZE	Octave Band Frequencies, Hz)							
		63	125	250	500	1000	2000	4000	8000
H	300 HS	38	52	47	49	48	44	36	30
	400 HS	38	50	46	48	48	43	35	30
	600 HS	40	53	49	52	50	47	38	31
	800 HS	43	57	53	55	53	50	41	34
	1000 HS	42	55	51	54	52	48	39	34
	1200 HS	45	57	53	55	53	50	42	34
	1400 HS	47	59	55	57	55	52	43	38
M	300 HS	34	46	41	43	43	38	34	23
	400 HS	35	47	45	46	44	39	31	26
	600 HS	38	50	45	46	45	41	32	25
	800 HS	40	52	47	49	48	44	36	31
	1000 HS	38	51	46	48	47	42	33	27
	1200 HS	40	52	46	49	47	42	36	30
	1400 HS	42	54	49	52	51	48	39	34

ROOM ABSORPTION EFFECT

ROOM TYPE	Octave Band							
	2	3	4	5	6	7	8	
	Centre Frequency Hz							
	125	250	500	1000	2000	4000	8000	
Soft (Exec. Off	4	8	11	11	11	11	11	
Medium (Apts & Motel)	3	7	8	9	9	9	9	
Hard (Hospital)	0	1	3	4	4	5	6	

Note: Occupant at least 1.5 meters (5 ft.) from sound source.

Since engineers design for sound requirements based on Noise Criteria (NC) levels, it is necessary to convert the sound power levels shown above to NC levels. Sound energy is absorbed by room surfaces and furnishings and is further dissipated by diffusion into the space. The room absorption effects as calculated in accordance with the procedure outlined in the ASHRAE Guide provides a method of determining the sound pressure levels necessary to obtain NC levels. Typical room absorption effects are given on this page. To determine the NC level of a unit, subtract the room absorption effects from the sound power levels for all octave bands and plot the resulting sound pressure values on an NC curve. The NC level is determined by the octave band yielding the highest NC value.