

Fans, Blowers, Louvers, and Vents Bulletin D85



Application

Designed for use in enclosures where space is limited and reliable cooling is required. Powered by 115 volt or 230 volt AC, 60/50 Hz single-phase motors and available in three sizes with nominal airflows of 100, 240, and 560 cubic feet per minute (CFM). These fans are ideal for applications where compact and quiet service is desired.

Features

- · Rigid housing eliminates breakage and grounding problems
- Maximum operating temperature is 158°F (70°C)
- 4-inch fan is thermally protected and uses permanently lubricated ball bearings
- 6- and 10-inch fans have ball-bearing construction and splitcapacitor motors
- Split-capacitor motors are thermally protected to avoid premature failure
- Engineered for 50,000 hours of continuous operation without lubrication or service

Construction

- Dynamically balanced impellers molded from polycarbonate material
- One finger guard is furnished (additional finger guards are available)
- All mounting hardware is provided NOTE: Fan bracket and additional finger guards must be purchased separately.
- 240 and 560 CFM fans have ball bearing construction and split capacitor motors
- Fans have lead wires with ends stripped 1/2 inch (12 millimeters) or 6 ft. (1.83m) cord with polarized plug for power connections.

Consult your local Hoffman sales office for information on modifications to this product.

Finish

Fan housing is black.

Industry Standards

UL Component Recognized CSA certified

Accessories

Fan Brackets Finger Guards Temperature Control Switch

Installation

Can be installed on any surface of an enclosure. With the addition of accessory fan brackets, Compact Cooling Fans can also be installed in any position inside the enclosure for spot cooling or air circulation.



1.00

.80

.60

.40

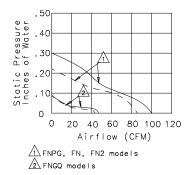
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Static Pressure Inches of Water

Performance Curve: 4 in. Fans





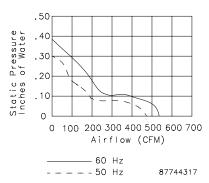
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50 100 150 200 250 300

Airflow (CFM)

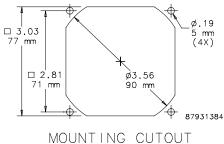
(Curves represent fan performance only.)

Performance Curve: 10 in. Fans

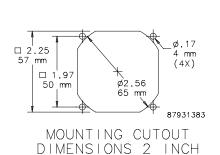


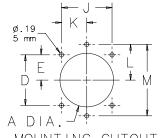
Technical/Performance Data for Compact Cooling Fans

Catalog Number	Nominal Size (in.)	Power Connection	Voltage (VAC)	Amps @ 50/60 Hz	Watts @ 50/60 Hz	CFM @ 50/60 Hz	Fan Size	Fan Depth (in.)	Max. Motor Operating RPM @ 50/60 Hz	Noise SIL (db)
A2AXFN24	2	Lead wires	24 VDC	.09	2.16	21.5	2.36 in. square	.98	4550	65
A3AXFN	3	Lead wires	115 VAC	.09	7	27	3.15 in. square	1.50	2700	40
A3AXFN24	3	Lead wires	24 VDC	.14	3.36	40	3.15 in. square	.98	3400	35
A4AXFNGQ	4 (Quiet Fan)	Power cord	115 VAC	.09/.08	6/5	46/49	4.69 in. square	1.52	1350/1450	27/28
A4AXFNPG	4	Power cord	115 VAC	.26/.21	17/15	85/100	4.69 in. square	1.52	2415/2900	37/41
A4AXFN	4	Lead wires	115 VAC	.26/.21	17/15	85/100	4.69 in. square	1.52	2415/2900	37/41
A4AXFN2	4	Lead wires	230 VAC	.14/.11	16/14	85/100	4.69 in. square	1.52	2415/2900	37/41
A4AXFN24	4	Lead wires	24 VDC	.35	84	118	4.69 in. square	1.50	3200	46.5
A6AXFNGQ	6 (Quiet Fan)	Power cord	115 VAC	.16/.19	16/18	85/102	6.77 in. diameter	1.50	1400/1650	35/38
A6AXFNPG	6	Power cord	115 VAC	.45/36	36/32	200/240	6.77 in. diameter	1.50	2670/3200	50/56
A6AXFN	6	Lead wires	115 VAC	.45/.36	36/32	200/240	6.77 in. diameter	1.50	2670/3200	50/56
A6AXFN2	6	Lead wires	230 VAC	.23/.18	39/35	200/240	6.77 in. diameter	1.50	2670/3200	50/56
A6AXFN24	6	Lead wires	24 VDC	.88	21.1	280	6.77 in. diameter	2.00	3750	62.5
A10AXFNPG	10	Power cord	115 VAC	1.0/.88	36/36	480/560	10.00 in. diameter	3.50	1350/1650	45.8/49
A10AXFN	10	Lead wires	115 VAC	1.0/.88	36/36	480/560	10.00 in. diameter	3.50	1350/1650	45.8/49
A10AXFN2	10	Lead wires	230 VAC	.47/.43	36/36	480/560	10.00 in. diameter	3.50	1350/1650	45.8/49



DIMENSIONS 3 INCH





MOUNTING CUTOUT DIMENSIONS 4,6,10 INCH 87541392

Cutout Dimensions Compact Cooling Fans

Standard Fan	Quiet Fan																	
Catalog	Catalog	Nominal	Power		Α	Α	D	D	E	E	J	J	K	K	L	L	M	М
Number	Number	Size (in.)	Connection	Voltage	(in.)	(mm)												
A2AXFN24	—	2	Lead wires	24 VDC	—	—	1.97	50	.98	25	1.97	50	.98	25	—	—	—	—
A3AXFN	_	3	Power cord	115 VAC	_	_	2.81	71	1.40	36	2.81	71	1.40	36	_	_	_	_
A3AXFN24	_	3	Lead wires	24 VDC	—	_	2.81	71	1.40	36	2.81	71	1.40	36	—	_	_	—
A4AXFN24	_	4	Lead wires	24 VDC	4.62		4.12	105	2.06	52	4.12	105	2.06	52	_	_	_	_
A4AXFNPG	A4AXFNGQ	4	Power cord	115 VAC	4.62	117	4.12	105	2.06	52	4.12	105	2.06	52	—	_	_	—
A4AXFN	_	4	Lead wires	115 VAC	4.62	117	4.12	105	2.06	52	4.12	105	2.06	52	—	_	_	—
A4AXFN2	_	4	Lead wires	230 VAC	4.62	117	4.12	105	2.06	52	4.12	105	2.06	52	_	_	_	_
A6AXFN24	_	6	Lead wires	24 VDC	5.88	149	_	_	_	_	_	_	_	_	3.19	81	6.38	162
A6AXFNPG	A6AXFNGQ	6	Power cord	115 VAC	5.88	149	—	_	_	—	—	—	—	_	3.19	81	6.38	162
A6AXFN	_	6	Lead wires	115 VAC	5.88	149	_	_	_	_	_	_	_	_	3.19	81	6.38	162
A6AXFN2	_	6	Lead wires	230 VAC	5.88	149	_	_	_	_	_	_	—	_	3.19	81	6.38	162
A10AXFNPG	_	10	Power cord	115 VAC	9.00	229	6.88	175	3.44	87	6.88	175	3.4	87	_	_	_	_
A10AXFN	_	10	Lead wires	115 VAC	9.00	229	6.88	175	3.44	87	6.88	175	3.44	87	—	_	_	—
A10AXFN2	_	10 inch	Lead wires	230 VAC	9.00	229	6.88	175	3.44	87	6.88	175	3.44	87	—	_	—	_

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Fan Cords



Used to power compact cooling fans when positive ground of the cabinet case is required. Available with connectors for one or two fans. Five-foot (1.52 meter) cord with grounded three-prong plug. Fits A4AXFNPG, A6AXFNPG, A10AXFNPG, A4AXFNGQ, and AGAXFNGQ.

Catalog Number	Description
ACORD1	One connector
ACORD2	Two connectors

Fan Filter and Finger Guard Kits

Low density filter kits for 4 in. (102mm) and 6 in. (152mm) fans. Can also be used as vents. Filter is removable and can be cleaned and reused. Mounting hardware included.



Catalog Number	Description	Fits
AFLTR4LD	Fan Filter and Finger Guard Kit	4 in. fans
AFLTR6LD	Fan Filter and Finger Guard Kit	6 in. fans

Finger Guards



One finger guard is included with each Compact Cooling Fan and Cooling Fan Package. Additional finger guards can be mounted on either side of the fan for maximum safety. All guards are chrome-plated and meet UL 507 .25-inch plug gauge test.

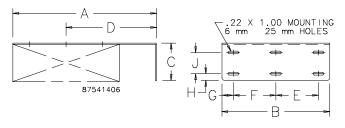
	Use on
Catalog Number	Compact Cooling Fan Catalog Numbers
AGARD2	A2AXFN24
AGARD3	A3AXFN, A3AXFN24
AGARD4	A4AXFNPG, A4XFNGQ, A4AXFN, A4AXFN2
AGARD6	A6AXFNPG, A6AXFNGQ, A6AXFN, A6AXFN2
AGARD10	A10AXFNPG, A10AXFNQR, A10AXFN, A10AXFN2



Fan Brackets



Designed to provide easy mounting of Hoffman cooling fans on enclosure panels. Brackets can be used for general air circulation or to direct air at problem areas. All sizes are .100-in. aluminum. Package quantity of I bracket. Fans must be ordered separately.



Catalog	Used with	A x B x C	D	D	E	E	F	F	G	G	H	H	J	J
Number	Fan Catalog Number	in. (mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)
ABRKT2	A2AXFN24	3.75 x 2.75 x 1.50 (95 x 70 x 38)	2.38	60	—	—	1.75	44	.50	13	.37	9	.62	16
ABRKT3	A3AXFN, A3AXFN24	4.50 x 3.50 x 1.50 (114 x 89 x 38)	2.75	70	_	—	2.50	64	.50	13	.37	9	.62	16
ABRKT4	A4AXFNPG, A4AXFNGQ, A4AXFN, or A4AXFN2	6.00 x 5.00 x 1.50 (152 x 127 x 38)	3.50	89	_	_	3.00	76	1.00	25	0.38	10	0.62	16
ABRKT6	A6AXFNPG, A6AXFNGQ, A6AXFN, or A6AXFN2	10.00 x 6.88 x 2.00 (254 x 175 x 51)	6.50	51	_	—	5.00	127	0.94	24	0.38	10	1.00	25
ABRKT10	A10AXFNPG, A10AXFNGQ, A10AXFN, or A10AXFN2	13.50 x 10.12 x 3.50 (343 x 257 x 89)	8.50	216	4.00	102	4.00	102	1.06	27	0.62	16	2.00	51



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