

#### **COMPACT AXIAL FANS**



#### **INDUSTRY STANDARDS**

UL Component Recognized

#### APPLICATION

Compact Cooling Fans are ideal for applications where enclosure space is limited and quiet, reliable cooling is required. Engineered for 50,000 hours of continuous operation without lubrication or service.

#### 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.

#### **FEATURES**

- Maximum operating temperature is 158 F (70 C)
- 4-in. fan is thermally protected and uses permanently lubricated
- 6- and 10-in, fans have ball-bearing construction and splitcapacitor motors
- Split-capacitor motors are thermally protected to avoid premature failure
- Dynamically balanced impellers molded from polycarbonate material
- One finger guard is furnished (additional finger guards are available)
- All mounting hardware is provided 240 and 560 CFM fans have ball bearing construction and split capacitor motors
- Fans have leadwires with ends stripped 1/2-in. (12-mm) or 6-ft. (1.8-m) cord with polarized plug for power connections

#### Fan bracket and additional finger guards must be purchased separately

#### **FINISH**

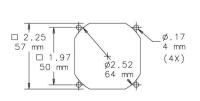
Fan housing is black.

#### **ACCESSORIES**

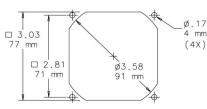
Fan Cords Fan Cords With Inline Thermostat Fan Filter and Finger Guard Kit Fan Brackets **Finger Guards** 

### Design Data Compact Axial Fans

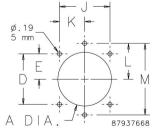
	Nominal		Α	D	E	J	K	L	М
CATALOG NUMBERS	Size	Voltage	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm
A2AXFN24	2	24 VDC	_	1.97/50	.98/25	1.97/50	.98/25	-	_
3-in. Fans									
A3AXFN	3	115 VAC	-	2.81/71	1.40/36	2.81/71	1.40/36	_	_
A3AXFN24	3	24 VDC	_	2.81/71	1.40/36	2.81/71	1.40/36	_	_
4-in. Fans									
A4AXFNGQ	4	115 VAC	4.62/117	4.12/105	2.06/52	4.12/105	2.06/52	_	
A4AXFNPG	4	115 VAC	4.62/117	4.12/105	2.06/52	4.12/105	2.06/52	_	_
A4AXFN	4	115 VAC	4.62/117	4.12/105	2.06/52	4.12/105	2.06/52	_	_
A4AXFN2	4	230 VAC	4.62/117	4.12/105	2.06/52	4.12/105	2.06/52	_	
A4AXFN24	4	24 VDC	4.62/117	4.12/105	2.06/52	4.12/105	2.06/52	-	
6-in. Fans									
A6AXFNGQ	6	115 VAC	5.88/149	-	-	-	_	3.19/81	6.38/162
A6AXFNPG	6	115 VAC	5.88/149	-	_	_	_	3.19/81	6.38/162
A6AXFN	6	115 VAC	5.88/149	_	_	_	_	3.19/81	6.38/162
A6AXFN2	6	230 VAC	5.88/149	_	-	_	_	3.19/81	6.38/162
A6AXFN24	6	24 VDC	5.88/149	_	_	_	_	3.19/81	6.38/162
10-in. Fans									
A10AXFNPG	10	115 VAC	9.00/229	6.85/174	3.44/87	6.85/174	3.44/87	-	
A10AXFN	10	115 VAC	9.00/229	6.85/174	3.44/87	6.85/174	3.44/87	_	_
A10AXFN2	10	230 VAC	9.00/229	6.85/174	3.44/87	6.85/174	3.44/87	-	_



MOUNTING CUTOUT DIMENSIONS 2 INCH



MOUNTING CUTOUT DIMENSIONS 3 INCH



MOUNTING CUTOUT DIMENSIONS 4,6,10 INCH

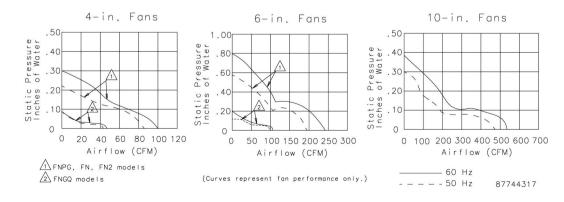


# Performance Data Compact Axial Fans

Rated Voltage	24 VDC	115 VAC Lead Wires	115 VAC Power Cord	115 VAC Power Cord	230 VAC Lead Wires
		Lead Wires	Ouiet Fan	Power Cora	Lead Wires
Frequency (Hz)	_	50/60	50/60	50/60	50/60
Power Connection	Lead Wires	Lead Wires	Power Cord	Power Cord	Lead Wires
2 inch Nominal-Size Fans					
Catalog Number	A2AXFN24	_	-	-	_
Nominal Current Maximum @50/60 Hz (Amps)	.09	-	_	_	_
Power Consumption Maximum @ 50/60 Hz (Watts)	2.16	_	_	_	_
Free Airflow @ 50/60 Hz (CFM)*	21.5	-	=	=	=
Free Airflow @ 50/60 Hz (m <sup>3</sup> /hr.)*	36.5	-	=		-
Noise SIL @ 50/60 Hz (dBA)	65	-	=	=	-
Maximum RPM @50/60 Hz (RPM)	4550	-	=	-	-
an Size Diameter (in.)	2.36	_	_	-	_
an Depth (in.)	.98	_	=	=	_
3 inch Nominal-Size Fans					
Catalog Number	A3AXFN24	A3AXFN	-	_	_
Nominal Current Maximum @50/60 Hz (Amps)	.14	.09	=	=	_
Power Consumption Maximum @ 50/60 Hz (Watts)	3.36	7	-	-	_
Free Airflow @ 50/60 Hz (CFM)*	40	27		_	_
Free Airflow @ 50/60 Hz (m <sup>3</sup> /hr.)*	68	46	-	-	_
Noise SIL @ 50/60 Hz (dBA)	35	40	-	_	_
Maximum RPM @50/60 Hz (RPM)	3400	2700	_	_	_
Fan Size Diameter (in.)	3.15	3.15	-	-	_
Fan Depth (in.)	.98	1.50	-	-	-
4 inch Nominal-Size Fans					
Catalog Number	A4AXFN24	A4AXFN	A4AXFNGQ	A4AXFNPG	A4AXFN2
Nominal Current Maximum @50/60 Hz (Amps)	.35	.26/.21	.09/.08	.26/.21	.14/.11
Power Consumption Maximum @ 50/60 Hz (Watts)	84	17/15	6/5	17/15	16/14
Free Airflow @ 50/60 Hz (CFM)*	118	85/100	46/49	85/100	85/100
Free Airflow @ 50/60 Hz (m <sup>3</sup> /hr.)*	200	144/170	78/83	144/170	144/170
Noise SIL @ 50/60 Hz (dBA)	46.5	37/41	27/28	37/41	37/41
Maximum RPM @50/60 Hz (RPM)	3200	2415/2900	1350/1450	2415/2900	2415/2900
Fan Size Diameter (in.)	4.69	4.69	4.69	4.69	4.69
an Depth (in.)	1.52	1.52	1.52	1.52	1.52
6 inch Nominal-Size Fans					
Catalog Number	A6AXFN24	A6AXFN	A6AXFNGQ	A6AXFNPG	A6AXFN2
Nominal Current Maximum @50/60 Hz (Amps)	.88	.45/.36	.16/.19	.45/.36	.23/.18
Power Consumption Maximum @ 50/60 Hz (Watts)	21.1	36/32	16/18	36/32	39/35
Free Airflow @ 50/60 Hz (CFM)*	280	200/240	85/102	200/240	200/240
Free Airflow @ 50/60 Hz (m <sup>3</sup> /hr.)*	476	340/408	144/173	340/408	340/408
Noise SIL @ 50/60 Hz (dBA)	62.5	50/56	35/38	50/56	50/56
Maximum RPM @50/60 Hz (RPM)	3750	2670/3200	1400/1650	2670/3200	2670/320
an Size Diameter (in.)	6.77	6.77	6.77	6.77	6.77
Fan Depth (in.)	2.00	1.50	1.50	1.50	1.50
10 inch Nominal-Size Fans		A40AVEN		AAOAWENDO	4404)(=:::
Catalog Number	_	A10AXFN		A10AXFNPG	A10AXFN2
Nominal Current Maximum @50/60 Hz (Amps)	1—1	1.0/.88	_	1.0/.88	.47/.43
Power Consumption Maximum @ 50/60 Hz (Watts)		36/36		36/36	36/36
Free Airflow @ 50/60 Hz (CFM)*		480/560		480/560	480/560
Free Airflow @ 50/60 Hz (m <sup>3</sup> /hr.)*		816/951		816/951	816/951
Noise SIL @ 50/60 Hz (dBA)	_	46/49	-	46/49	46/49
Maximum RPM @50/60 Hz (RPM)	_	1350/1650		1350/1650	1350/1650
Fan Size Diameter (in.)	_	10.00	_	10.00	10.00
Fan Depth (in.)	_	3.50		3.50	3.50

<sup>\*</sup> CFM without exhaust grille

# Performance Curves for Compact Axial Fans





### **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 A10AXFNGQ.

CATALOG NUMBERS		
	ACORD1	ACORD2
DESIGN DATA		
Description	One connector	Two connectors

### **FAN CORDS WITH INLINE THERMOSTAT**



Use to power 120 VAC Compact Cooling Fans; replaces existing supplied power cord. Fan cord includes inline thermostat. The cord automatically activates up to two fans. Fan(s) will turn on when the inline thermostat reaches 86F (30C). Fan(s) will run only when temperature is above 86F (30C). Use with 110-120 VAC fans with power cords only. One or two fans can be used with power cord.

ELECTRICAL DATA	
Rated Voltage	110-120 VAC
Maximum Current (Amps)	10
Fan Activation Temperature (°F/°C)	86/30
CATALOG NUMBERS	
	ACORD2T

# **FAN FILTER AND FINGER GUARD KIT**



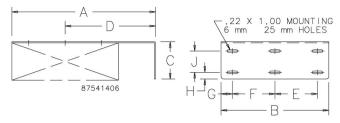
AFLTR4LD	AFLTR6LD
Fan Filter and F	inger Guard Kit
4-in. fans	6-in. fans
	Fan Filter and F



### **FAN BRACKETS**

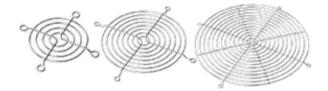


Designed to provide easy mounting of compact axial fans on enclosure panels. Brackets can be used for general air circulation or to direct air at problem areas. All sizes are .100-in. aluminum. Package quantity of 1 bracket. Fans must be ordered separately.



CATALOG NUMBERS	AxBxC in./mm	Used with Fan Catalog Number	D in./mm	E in./mm	F in./mm	G in./mm	H in./mm	J in./mm
ABRKT2	3.75x2.75x1.50 95x70x38	A2AXFN24	2.38/60	_	1.75/44	.50/13	.37/9	.62/16
ABRKT3	4.50x3.50x1.50 114x89x38	A3AXFN, A3AXFN24	2.75/70	) <b>—</b> (	2.50/64	.50/13	.37/9	.62/16
ABRKT4	6.00x5.00x1.50 152x127x38	A4AXFNPG, A4AXFNGQ, A4AXFN or A4AXFN2	3.50/89	-	3.00/76	1.00/25	.38/10	.62/16
ABRKT6	10.00x6.88x2.00 254x175x51	A6AXFNPG, A6AXFNGQ, A6AXFN or A6AXFN2	6.50/51	7—1	5.00/127	.94/24	.38/10	1.00/25
ABRKT10	13.50x10.12x3.50 343x257x89	A10AXFNPG, A10AXFNGQ, A10AXFN or A10AXFN2	8.50/216	4.00/102	4.00/102	1.06/27	.62/16	2.00/51

### **FINGER GUARDS**



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

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

THERMAL MANAGEMENT

Spec-00036 S

PH 763.422.2211

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