

## 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 ball bearings
- 6- and 10-in. fans have ball-bearing construction and split-capacitor 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

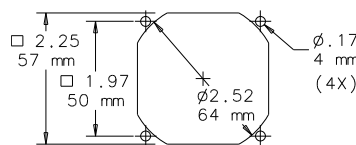
- Fan housing is black.

### ACCESSORIES

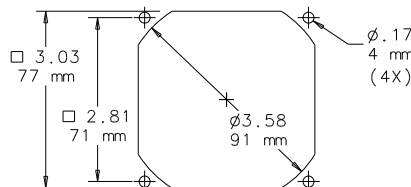
Fan Cords  
Fan Cords With Inline Thermostat  
Fan Filter and Finger Guard Kit  
Fan Brackets  
Finger Guards

### Design Data Compact Axial Fans

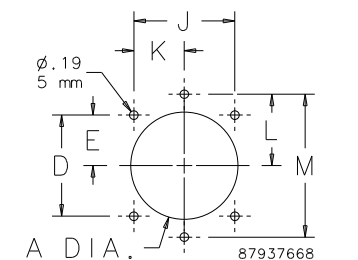
| CATALOG NUMBERS    | Nominal Size | Voltage | A<br>in./mm | D<br>in./mm | E<br>in./mm | J<br>in./mm | K<br>in./mm | L<br>in./mm | M<br>in./mm |
|--------------------|--------------|---------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| A2AXFN24           | 2            | 24 VDC  | —           | 1.97/50     | .98/25      | 1.97/50     | .98/25      | —           | —           |
| <b>3-in. Fans</b>  |              |         |             |             |             |             |             |             |             |
| 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     | —           | —           |
| <b>4-in. Fans</b>  |              |         |             |             |             |             |             |             |             |
| A4AXFNQG           | 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     | —           | —           |
| <b>6-in. Fans</b>  |              |         |             |             |             |             |             |             |             |
| A6AXFNQG           | 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    |
| <b>10-in. Fans</b> |              |         |             |             |             |             |             |             |             |
| 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



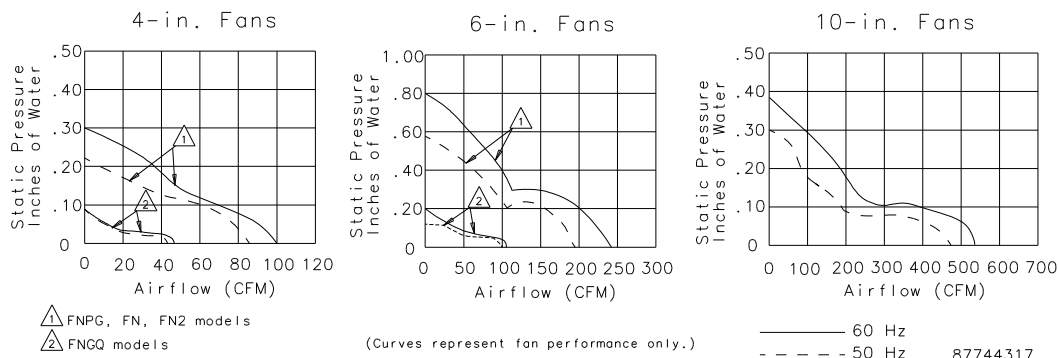
MOUNTING CUTOUT  
DIMENSIONS 4, 6, 10 INCH

Performance Data **Compact Axial Fans**

| ELECTRICAL DATA                                |            |                       |                                    |                       |                       |
|------------------------------------------------|------------|-----------------------|------------------------------------|-----------------------|-----------------------|
| Rated Voltage                                  | 24 VDC     | 115 VAC<br>Lead Wires | 115 VAC<br>Power Cord<br>Quiet Fan | 115 VAC<br>Power Cord | 230 VAC<br>Lead Wires |
| Frequency (Hz)                                 | —          | 50/60                 | 50/60                              | 50/60                 | 50/60                 |
| Power Connection                               | Lead Wires | Lead Wires            | Power Cord                         | Power Cord            | Lead Wires            |
| <b>2 inch Nominal-Size Fans</b>                |            |                       |                                    |                       |                       |
| 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       | —                     | —                                  | —                     | —                     |
| Fan Size Diameter (in.)                        | 2.36       | —                     | —                                  | —                     | —                     |
| Fan Depth (in.)                                | .98        | —                     | —                                  | —                     | —                     |
| <b>3 inch Nominal-Size Fans</b>                |            |                       |                                    |                       |                       |
| 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                  | —                                  | —                     | —                     |
| <b>4 inch Nominal-Size Fans</b>                |            |                       |                                    |                       |                       |
| 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                  |
| Fan Depth (in.)                                | 1.52       | 1.52                  | 1.52                               | 1.52                  | 1.52                  |
| <b>6 inch Nominal-Size Fans</b>                |            |                       |                                    |                       |                       |
| 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             | 2670/3200             |
| Fan 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                  |
| <b>10 inch Nominal-Size Fans</b>               |            |                       |                                    |                       |                       |
| Catalog Number                                 | —          | A10AXFN               | —                                  | A10AXFNPG             | A10AXFN2              |
| Nominal Current Maximum @50/60 Hz (Amps)       | —          | 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                  |

\* CFM without exhaust grille

## Performance Curves for Compact Axial Fans



## FAN FILTER AND FINGER GUARD KIT



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

| CATALOG NUMBERS |                                 |            |
|-----------------|---------------------------------|------------|
|                 | AFLTR4LD                        | AFLTR6LD   |
| DESIGN DATA     |                                 |            |
| Description     | Fan Filter and Finger Guard Kit |            |
| Fits            | 4-in. fans                      | 6-in. 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



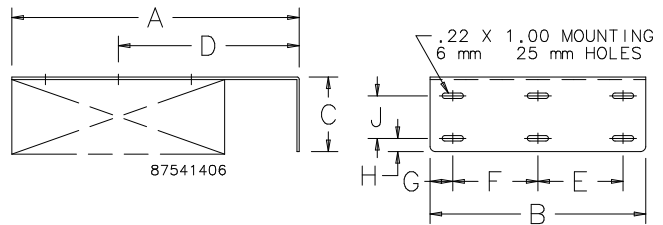
Use to power 120 VAC Compact Cooling Fans; replaces existing supplied power cord. Fan cord includes inline thermostat. The cord automatically activates up to two fans. Fan(s) will turn on when the inline thermostat reaches 86F (30C) and off when the inline thermostat reaches 75F (24C). Use with 110-120 VAC fans with power cords only. One or two fans can be used with power cord.

| CATALOG NUMBERS                      |             |
|--------------------------------------|-------------|
|                                      | ACORD2T     |
| ELECTRICAL DATA                      |             |
| Nominal Voltage (V)                  | 115         |
| Rated Voltage (VAC)                  | 110-120 VAC |
| Maximum Current (A)                  | 10          |
| Fan Activation Temperature (°F/°C)   | 86/30       |
| Fan Deactivation Temperature (°F/°C) | 75/24       |
| Length (ft./m)                       | 6/1.8       |

FAN BRACKETS

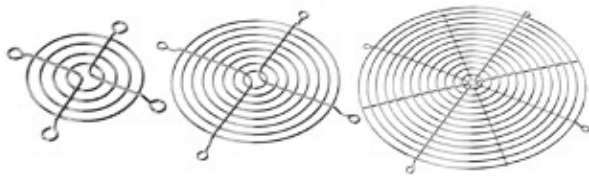


Designed to provide easy mounting of compact axial fans on enclosure panels. Brackets can be used for general air circulation or to direct air at problem areas. All sizes are .100-in. aluminum. Package quantity of 1 bracket. Fans must be ordered separately.



| CATALOG NUMBERS | AxBxC<br>in./mm                | Used with Fan Catalog Number                 | D<br>in./mm | E<br>in./mm | F<br>in./mm | G<br>in./mm | H<br>in./mm | J<br>in./mm |
|-----------------|--------------------------------|----------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| ABRKT2          | 3.75x2.75x1.50<br>95x70x38     | A2AXFN24                                     | 2.38/60     | —           | 1.75/44     | .50/13      | .37/9       | .62/16      |
| ABRKT3          | 4.50x3.50x1.50<br>114x89x38    | A3AXFN, A3AXFN24                             | 2.75/70     | —           | 2.50/64     | .50/13      | .37/9       | .62/16      |
| ABRKT4          | 6.00x5.00x1.50<br>152x127x38   | A4AXFNPG, A4AXFNGQ, A4AXFN<br>or A4AXFN2     | 3.50/89     | —           | 3.00/76     | 1.00/25     | .38/10      | .62/16      |
| ABRKT6          | 10.00x6.88x2.00<br>254x175x51  | A6AXFNPG, A6AXFNGQ, A6AXFN<br>or A6AXFN2     | 6.50/51     | —           | 5.00/127    | .94/24      | .38/10      | 1.00/25     |
| ABRKT10         | 13.50x10.12x3.50<br>343x257x89 | A10AXFNPG, A10AXFNGQ, A10AXFN<br>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 chrome-plated 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, A4AXFNGQ, A4AXFN, A4AXFN2      |
| AGARD6          | A6AXFNPG, A6AXFNGQ, A6AXFN, A6AXFN2      |
| AGARD10         | A10AXFNPG, A10AXFNQR, A10AXFN, A10AXFN2  |