

Turn to Hoffman for thermal management solutions that address limited budgets and limited space.

Circulating fans, paired with louvers or vents, can improve heat dissipation in an enclosure by as much as 10 percent. Mounted in the top of an enclosure, fans and blowers can create a “chimney effect.” Air is pulled in via vents and louvers close to the floor and exhausted out the top of the enclosure, sending currents of cooler air over the enclosed components.

For indoor or outdoor installations requiring quiet, reliable cooling in a smaller space, fans and venting are an excellent way to eliminate “hot spots,” including solar gain.





Fans, Blowers, Louvers and Vents

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Fans, Blowers, Louvers, and Vents Sizing and Selection

Fans and Blowers

» Determine the required fan/blower size (volume airflow):

Step 1

Select the product family which best fits your application:

- **Compact Cooling Fans**
(economical fan with no filter)
- **Cooling Fan Packages**
(economical fan package with low-density filter)
- **Type 12 Cooling Fan Package**
- **Filter Fan Packages**
(high-tech fan package with high-density filter, for IP54 rating)
- **Blower Package**
(centrifugal blower package with filter for densely-packed enclosures)

Step 2

Determine the internal heat load in **WATTS**.

1 WATT = 3.413 BTU/Hr.

Step 3

Determine the ΔT ($^{\circ}F$)

Step 4

Plot your application using the selection graph to the right.

- Find **WATTS** (internal heat load) on the vertical scale
- Draw a horizontal line across to the intersection point with the diagonal line representing your ΔT
- Extend a vertical line down to the horizontal scale to determine your CFM requirement
- Continue the vertical line to identify applicable fan or blower

A sample line is shown in red for a 400 watt heat load and a ΔT of $20^{\circ}F$.

Step 5

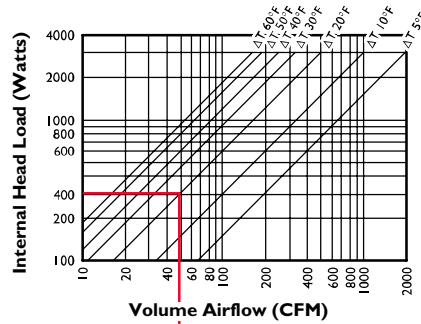
Make sure the line intersects the bar which includes the exhaust grille kit(s) from the product family chosen in **Step 1**. Remember, actual air flow going through your enclosure may be less depending on how densely packed your enclosure is.

Note: CFM is reduced on 50Hz operation.

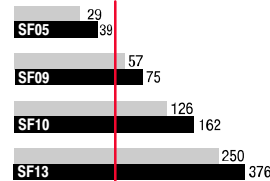
Selection and Sizing Software



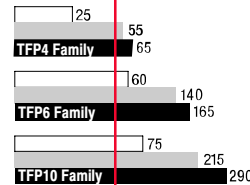
Designed to assist you in determining the most suitable choices of air conditioners, heat exchangers, or fans for your application. Download a free copy of our selection software by visiting our web site: www.hoffmanonline.com.



FILTER FAN PACKAGES



COOLING FAN PACKAGES



BLOWER PACKAGE



TYPE 12

WITH 1 EXHAUST GRILLE

WITH 2 EXHAUST GRILLES

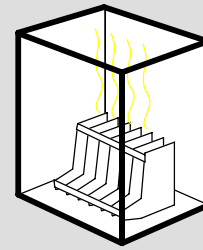
Cooling Fan and Blower Selection

CFM ^a	Filter Fan Packages	Page
29	SF05	48
57	SF09	48
126	SF10	48
250	SF13	48

CFM	Cooling Fan Packages	Page
55	TFP41, TFP42	47
140	TFP61, TFP62	47
215	TFP101, TFP102	47

CFM	Blower Package	Page
260	ADB275	50

^a CFM with one exhaust grille @ 60 Hz

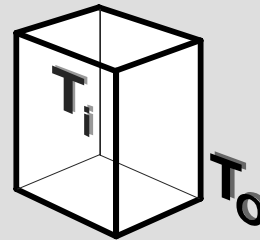


Help Notes:

WATTS

1 WATT = 3.413 BTU/Hr.

Determine the internal heat load produced by equipment as total operating Watts.



Help Notes:

ΔT (Desired Temperature Difference)

1 $^{\circ}K \Delta T = 1.8^{\circ}F \Delta T$ $^{\circ}K \Delta T = ^{\circ}C \Delta T$

Determine the ΔT ($^{\circ}F$), the temperature difference between the maximum temperature outside the enclosure (T_o) and the maximum desired temperature inside the enclosure (T_i), which can be calculated as:

$$T_o - T_i = \Delta T \text{ for heat exchangers and fans.}$$

How to Read Catalog Numbers

Filter Fans

SF - 05 | 6 - 001

1. Filter fan.
2. Approximate size of fan frame (i.e., 05 = 5")
3. 1 = 115 Volt, or 2 = 230 Volt
4. 6 = 50/60 Hz.
5. Standard model.

Exhaust Grille Kit

EG - 0500 - 001

1. Exhaust grille kit.
2. Approximate size of fan frame (i.e., 05 = 5").
3. Standard model.

Fans, Blowers, Louvers, and Vents

Sizing and Selection

■ **Compact Cooling Fans**

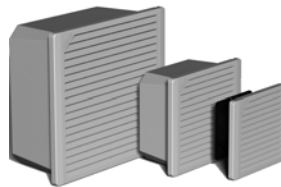


Compact Cooling Fans Page 44

	Diameter	Square	Depth	CFM@ 60Hz (M ³ /Hr.)
A4AXFN	•	4.69	1.52	100
	•	(119)	(39)	(170)
A6AXFN	6.72	•	2.00	240
	(171)	•	(51)	(408)
A10AXFN	10.00	•	3.50	560
	(254)	•	(89)	(951)

Millimeter dimensions are in ().
Note: CFMs lower on quiet fan models

■ **Cooling Fan Packages**

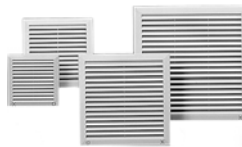


Cooling Fan Packages Page 46

	Diameter	Square	Depth	CFM@ 60Hz (M ³ /Hr.) ^a
TFP41	6.29	7.37	2.65	55
	(160)	(187)	(67)	(95)
TFP61	7.80	8.87	3.75	140
	(198)	(225)	(95)	(238)
TFP101	11.81	12.99	5.25	215
	(300)	(330)	(133)	(370)

Millimeter dimensions are in ().
^a CFM with single exhaust grille installed

■ **Filter Fan Packages**



Filter Fan Packages Page 48

	Diameter	Square	Depth	CFM@ 60Hz (M ³ /Hr.) ^a
SF05	5.83	5.83	2.76	29
	(148)	(148)	(70)	(49)
SF09	8.03	8.03	3.78	57
	(204)	(204)	(96)	(97)
SF10	9.84	9.84	5.20	126
	(250)	(250)	(132)	(214)
SF13	12.72	12.72	6.09	250
	(323)	(323)	(155)	(425)

Millimeter dimensions are in ().
^a CFM with single exhaust grille installed

■ **Blower Package**

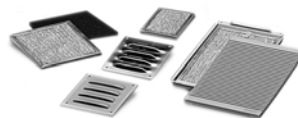


Blower Package Page 50

	Diameter	Square	Depth	CFM@ 60Hz (M ³ /Hr.)
ADB275	5.75	19.00	7.25	230/275
	(146)	(483)	(184)	(135/162)

Millimeter dimensions are in ().

■ **Louvers and Vents**



Louvers and Vents Page 52

Three styles of louvers and vents provide passive cooling.





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Compact Cooling Fans and Accessories



Construction

- Dynamically-balanced impellers molded from polycarbonate material
 - One finger guard is furnished (an additional finger guard is recommended for maximum safety)
 - 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 inch (12 millimeters) or 6 ft. (1.8m) cord with grounded 3-prong 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 Guard
- Temperature Control Switch

Installation

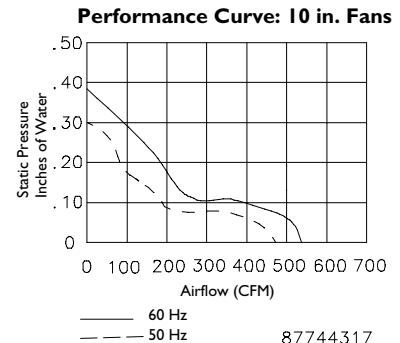
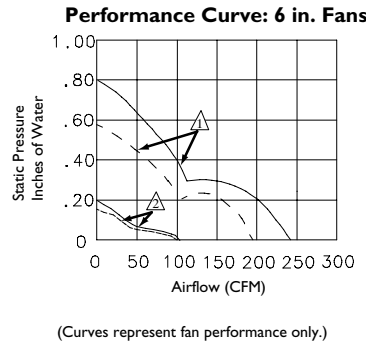
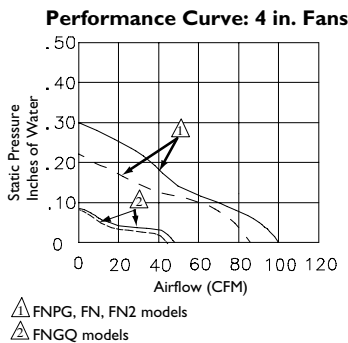
Can be installed on any surface of an enclosure. With the addition of accessory fan brackets, Compact Cooling Fans can also be installed in any position inside the enclosure for spot cooling or air circulation. Enclosure cutout dimensions are given below.

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. Standard models available in three sizes with nominal airflows of 100, 240, and 560 cubic feet per minute (CFM). Extra-quiet models available in two sizes with nominal airflows of 49 and 102 CFM. These fans are ideal for applications where compact and quiet service is desired.

Features

- Rigid housing eliminates breakage and grounding problems
- 4-inch fan is thermally protected and uses permanently lubricated ball bearings
- 6- and 10-inch fans have ball-bearing construction and split-capacitor motors
- Split-capacitor motors are thermally protected to avoid premature failure
- Engineered for 50,000 hours of continuous operation without lubrication or service



Technical/Performance Data

Catalog Number	Fan Dimensions			CFM @ 50/60 Hz ^a	Watts 50/60 Hz	Amps 50/60 Hz	Max. Operating Motor RPM 50/60 Hz	Temperature		Noise SIL (db)	
	Diameter	Square	Depth					°F	°C		
A4AXFNPG, A4AXFN	—	4.69	1.50	85/100	17/15	115	.26/.21	2415/2900	158	70	37/41
A4AXFNGQ	—	4.69	1.50	46/49	6/5	115	.09/.08	1350/1450	158	70	27/28
A4AXFN2	—	4.69	1.50	85/100	16/14	230	.14/.11	2415/2900	158	70	37/41
A6AXFNPG, A6AXFN	6.77	—	1.50	200/240	36/32	115	.45/.36	2670/3200	158	70	50/56
A6AXFNGQ	6.77	—	1.50	85/102	16/18	115	.16/.19	1400/1650	158	70	35/38
A6AXFN2	6.77	—	1.50	200/240	39/35	230	.23/.18	2670/3200	158	70	50/56
A10AXFN	10.00	—	3.50	480/560	36/36	115	1.0/.88	1350/1650	158	70	45.8/49
A10AXFN2	10.00	—	3.50	480/560	36/36	230	.47/.43	1350/1650	158	70	45.8/49

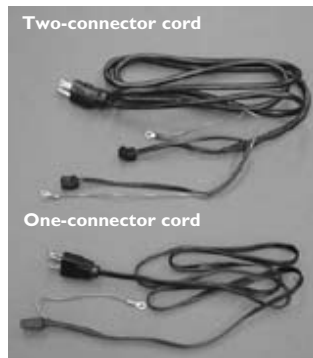
^a CFM without exhaust grille

Compact Cooling Fans and Accessories

Cutout Dimensions Compact Cooling Fans

Catalog Number	Nominal Size	Power Connection	Voltage	A in.	mm	D in.	mm	E in.	mm	J in.	mm	K in.	mm	L in.	mm	M in.	mm
A4AXFNPG	4 inch	Power cord	115	4.62	117	4.12	105	2.06	52	4.12	105	2.06	52	—	—	—	—
A4AXFNQG	4 inch	Power cord/Quiet	115	4.62	117	4.12	105	2.06	52	4.12	105	2.06	52	—	—	—	—
A4AXFN	4 inch	Leadwires	115	4.62	117	4.12	105	2.06	52	4.12	105	2.06	52	—	—	—	—
A4AXFN2	4 inch	Leadwires	230	4.62	117	4.12	105	2.06	52	4.12	105	2.06	52	—	—	—	—
A6AXFNPG	6 inch	Power cord	115	5.88	149	—	—	—	—	—	—	—	—	3.19	81	6.38	162
A6AXFNQG	6 inch	Power cord/Quiet	115	5.88	149	—	—	—	—	—	—	—	—	3.19	81	6.38	162
A6AXFN	6 inch	Leadwires	115	5.88	149	—	—	—	—	—	—	—	—	3.19	81	6.38	162
A6AXFN2	6 inch	Leadwires	230	5.88	149	—	—	—	—	—	—	—	—	3.19	81	6.38	162
A10AXFNPG	10 inch	Power cord	115	9.00	229	6.88	175	3.44	87	6.88	175	3.44	87	—	—	—	—
A10AXFN	10 inch	Leadwires	115	9.00	229	6.88	175	3.44	87	6.88	175	3.44	87	—	—	—	—
A10AXFN2	10 inch	Leadwires	230	9.00	229	6.88	175	3.44	87	6.88	175	3.44	87	—	—	—	—

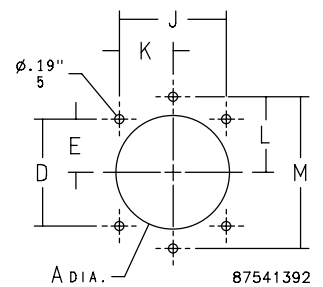
Fan Cord



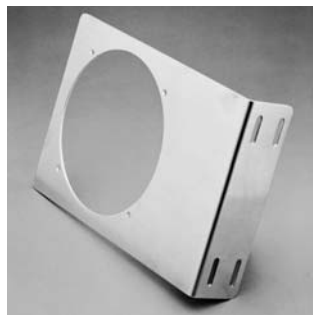
Used to power compact cooling fans when positive ground of the cabinet case is required. Available with connectors for one or two fans. Six-foot (1.8 meter) cord with grounded three-prong plug. Fits A4AXFNPG, A6AXFNPG, A10AXFNPG, A4AXFNQG, and AGAXFNQG.

Catalog Number	Description
ACORD1	One connector
ACORD2	Two connectors

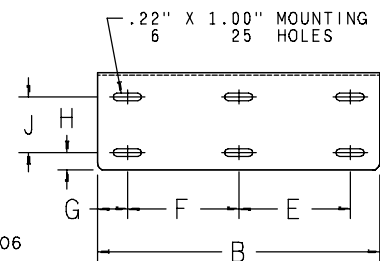
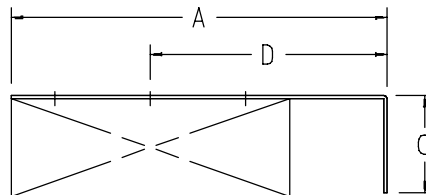
Mounting Cutout Dimensions



Fan Brackets



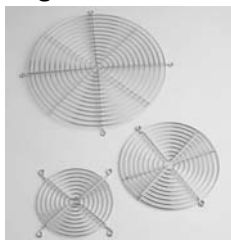
Designed to provide easy mounting of Hoffman cooling fans on enclosure panels. Brackets can be used for general air circulation or to direct air at problem areas. All sizes are .100 inch aluminum. Package quantity of 1 bracket. Fans must be ordered separately.



87541406

Catalog Number	Use with Fan Catalog Number	A in.	mm	B in.	mm	C in.	mm	D in.	mm	E in.	mm	F in.	mm	G in.	mm	H in.	mm	J in.	mm
ABRKT4	A4AXFNPG, A4AXFNQG, A4AXFN, A4AXFN2	6.00	152	5.00	127	1.50	38	3.50	89	—	—	3.00	76	1.00	25	0.38	10	0.62	16
ABRKT6	A6AXFNPG, A6AXFNQG, A6AXFN, A6AXFN2	10.00	254	6.88	175	2.00	51	6.50	51	—	—	5.00	127	0.94	24	0.38	10	1.00	25
ABRKT10	A10AXFNPG, A10AXFN, A10AXFN2	13.50	343	10.12	257	3.50	89	8.50	216	4.00	102	4.00	102	1.06	27	0.62	16	2.00	51

Finger Guards



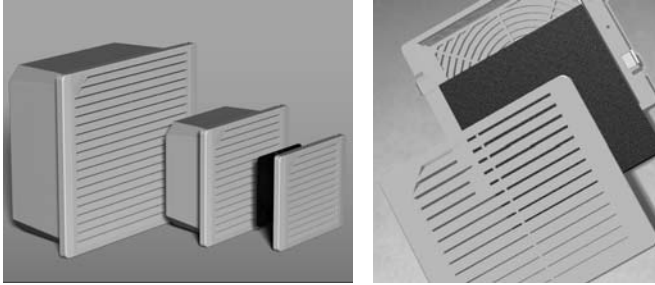
One finger guard is included with each Compact Cooling Fan. Additional finger guards can be mounted on either side of the fan for maximum safety. All guards are chrome-plated and meet UL 507 .25-inch plug gauge test.

Catalog Number	Use on Compact Cooling Fan Catalog Number			
AGARD4	A4AXFNPG	A4AXFNQG	A4AXFN	A4AXFN2
AGARD6	A6AXFNPG	A6AXFNQG	A6AXFN	A6AXFN2
AGARD10	A10AXFNPG	—	A10AXFN	A10AXFN2



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Cooling Fan and Exhaust Packages



Application

Designed for use in enclosures where space is limited and reliable filtered airflow is required. The Cooling Fan Package is the air inlet of a cooling system. It requires at least one Exhaust Package of the same size and type rating to provide the outlet. Where positive air flow through the enclosure is not required, Exhaust Packages can be used on both the inlet and outlet.

Note: Fan and Exhaust Packages must be ordered separately.

The Cooling Fan Package is available for both Type 1 and 12 enclosures. Type 1 is recommended in UL Type 1 environments where the ambient air is cool and clean. Type 12 is recommended in UL Type 12 environments where the ambient air is cool and may contain small amounts of dust, foreign bodies, and splashing water. For both Type 1 and 12 systems a monthly maintenance schedule is recommended to ensure optimal cooling performance.

The cooling fan and exhaust packages come with RAL 7035 composite or brushed stainless steel grilles; replacement black ABS composite and brushed stainless steel grilles are available separately.

The optional EMC Upgrade Kit prepares the fan and exhaust packages for use where EMC protection is required.

Features

- Cooling Fan Package includes fan, air filter, composite air plenum, finger guard, and grille
- Exhaust Package includes air filter, filter retainer with integral finger guard, and grille
- EMC Upgrade Kit includes a grille standoff collar and a special EMC shielding grille. It can be used with either the Fan or the Exhaust Package
- Optional grille, available in both brushed stainless steel and black ABS plastic, can be used with either the fan or exhaust package
- Washable foam (Type 1) or disposable (Type 12) filter in both fan and exhaust packages provides good arrestment of airborne dirt with minimal pressure drop. Optional washable aluminum air filter is also available for Type 1 applications.
- Durable composite air plenum and grille takes up minimal enclosure space. Plenum permits even airflow through the filter for maximum filtering efficiency. An integral and removable finger guard on either side of the plenum adds safety and convenience.
- Air filters can be accessed for cleaning from outside the enclosure
- Rigid fan housing eliminates breakage and grounding problems
- Engineered for 50,000 hours of continuous operation without lubrication or service

Construction

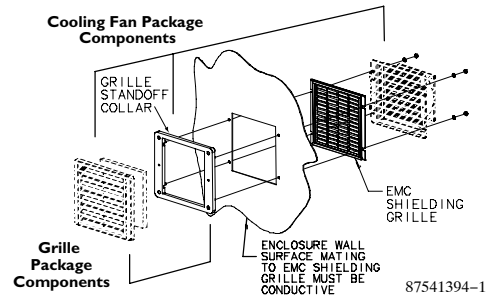
- Dynamically-balanced fan impellers molded from polycarbonate material
- 4-inch fan is thermally protected and uses permanently-lubricated ball bearings
- 6- and 10-inch fans have ball-bearing construction and split-capacitor motors that are thermally protected to avoid premature failure
- Fans have leadwires for power connection with ends stripped 1/2-inch (12 millimeters)
- All mounting hardware and installation instructions are furnished

EMC Upgrade Kit

With the addition of this kit, the cooling fan and exhaust packages are upgraded to provide EMC (electromagnetic compatibility) protection. Consult Hoffman for shielding effectiveness (dB attenuation vs. frequency).

Note: Separate kits must be installed on both the inlet and outlet. Cooling fan and exhaust package must be ordered separately. EMC Upgrade Kit will not work with stainless steel grille option.

Catalog Number	Fits Fan and Exhaust Nominal Size
T4EMC	4 in.
T6EMC	6 in.
T10EMC	10 in.



Finish

Fan housing, composite plenum, and grille are RAL 7035 light gray. Stainless steel grilles have brushed finish. ABS composite grille is black.

Filters

Standard Hi-Density Type 1 air filters are washable foam. Note: Type 12 air filters are not washable.

Industry Standards

UL 508/508A Component Recognized, File Number E61997
CSA certified (fan only)
CE

Accessories

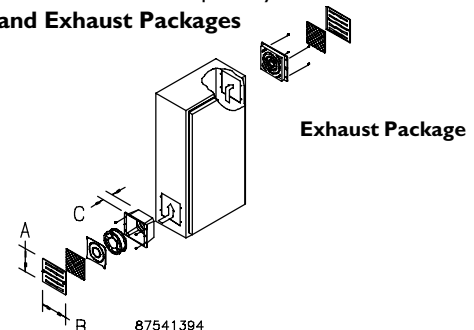
Temperature Control Switch
Grille Options: Stainless Steel and Black Grille
Aluminum and Hi-Density Type 12 Filters
EMC Upgrade Kit

Installation

Fan and exhaust packages can be installed on any surface of an enclosure. They are most effective when the fan assembly is located on a lower panel of the enclosure and the exhaust grille is positioned near the top on the opposite side. This installation assists heat transfer by causing slightly more turbulence and also prolongs the working life of the fan since it is located in the path of the cooler air entering the enclosure.

Cooling fans and exhaust grilles can be turned 90° for mounting on narrow enclosures. Allow adequate clearance for servicing the fan when equipment is installed inside the enclosure and for replacing filters on both the fan and the exhaust. Cutout dimensions for both the fan and the exhaust are shown in the order table. The fan and exhaust packages must be ordered separately.

Cooling Fan and Exhaust Packages



Cooling Fan and Exhaust Packages

Standard Sizes and Cutout Dimensions Cooling Fan and Exhaust Packages

Catalog Number Composite Grille UL 508 Type 1		Stainless Grille UL 508 Type 1		Composite Grille UL 508 Type 12		Nominal Fan Size	A in.	B mm	C in.	F mm	H in.	T mm	W in.	mm						
Fan ^a	Exhaust	Fan ^a	Exhaust	Fan ^a	Exhaust															
TFP41	TEP4	TFP41SS	TEP4SS	TFP41UL12	TEP4UL12	4 inch	6.29	160	7.37	187	2.65	67	5.66	144	0.77	20	4.12	105	6.39	162
TFP42	TEP4	TFP42SS	TEP4SS	TFP42UL12	TEP4UL12	4 inch	6.29	160	7.37	187	2.65	67	5.66	144	0.77	20	4.12	105	6.39	162
TFP61	TEP6	TFP61SS	TEP6SS	TFP61UL12	TEP6UL12	6 inch	7.80	198	8.87	225	3.75	95	7.16	182	1.33	34	4.50	114	7.89	200
TFP62	TEP6	TFP62SS	TEP6SS	TFP62UL12	TEP6UL12	6 inch	7.80	198	8.87	225	3.75	95	7.16	182	1.33	34	4.50	114	7.89	200
TFP101	TEP10	TFP101SS	TEP10SS	TFP101UL12	TEP10UL12	10 inch	11.81	300	12.99	330	5.25	133	11.16	283	2.14	54	6.88	175	11.89	302
TFP102	TEP10	TFP102SS	TEP10SS	TFP102UL12	TEP10UL12	10 inch	11.81	300	12.99	330	5.25	133	11.16	283	2.14	54	6.88	175	11.89	302

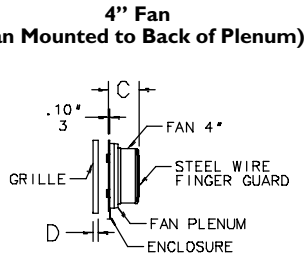
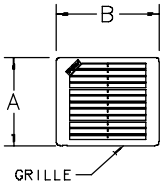
^a An intake grille and filter are included with each Cooling Fan Package. At least one Exhaust Package is normally required for each installation. Must be ordered separately. Optional grilles and replacement filters are also available.

Technical Performance Data for Cooling Fan Packages

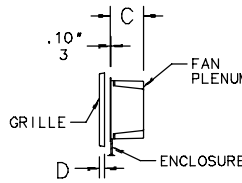
Catalog Number Composite Grille UL Type 1	Stainless Grille UL Type 1	CFM ^a 50/60Hz	Composite Grille UL Type 12	CFM ^a 50/60 Hz	Watts			Amps			Maximum Operating		Weight	
					50/60 Hz	Voltage	Hz	50/60 Hz	50/60 Hz	Temperature °F °C	Noise SIL dB	lb	kg	
TFP41	TFP41SS	46/55	TFP41UL12	21/25	17/15	115	50/60	.26/.21	156	70	37/41	4.2	1.90	
TFP42	TFP42SS	46/55	TFP42UL12	21/25	16/14	230	50/60	.14/.11	158	70	37/41	4.3	1.95	
TFP61	TFP61SS	117/140	TFP61UL12	50/60	36/32	115	50/60	.45/.36	158	70	50/56	5.3	2.40	
TFP62	TFP62SS	117/140	TFP62UL12	50/60	39/35	230	50/60	.23/.18	158	70	50/56	5.4	2.45	
TFP101	TFP101SS	180/215	TFP101UL12	63/75	64/80	115	50/60	.58/.70	167	75	54/61	12.0	5.45	
TFP102	TFP102SS	180/215	TFP102UL12	63/75	64/80	230	50/60	.29/.35	167	75	54/61	11.4	5.17	

^a CFM with single exhaust grille installed.

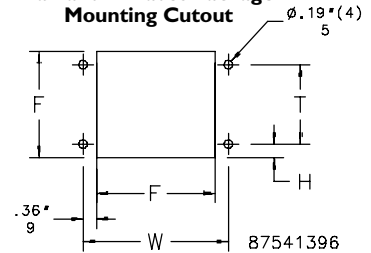
4" Fan
Fan and Exhaust Grille (Fan Mounted to Back of Plenum)



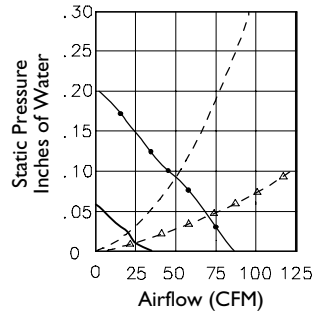
6" and 10" Fan
(Box Style Plenum)



Fan and Exhaust Package
Mounting Cutout

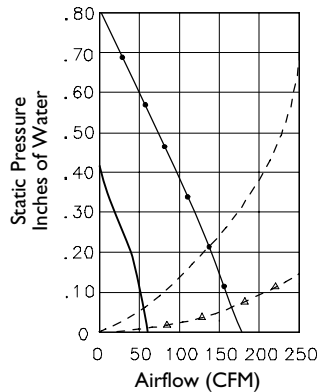


■ Performance Curve for a 4" Cooling Fan Package @ 60 Hz



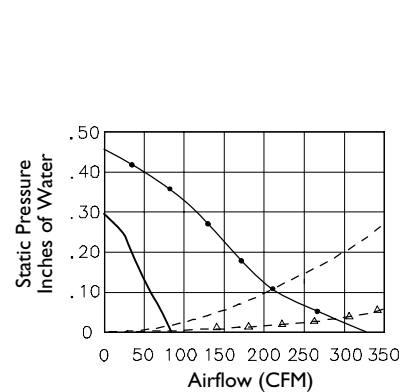
—●— 4 in. Cooling Fan Package
- - - □ - - - 4 in. Exhaust Package
- - - △ - - - Two 4 in. Exhaust Packages
—◇— 4 in. Type 12 Cooling Fan Package

■ Performance Curve for a 6" Cooling Fan Package @ 60 Hz



—●— 6 in. Cooling Fan Package
- - - □ - - - 6 in. Exhaust Package
- - - △ - - - Two 6 in. Exhaust Packages
—◇— 6 in. Type 12 Cooling Fan Package

■ Performance Curve for a 10" Cooling Fan Package @ 60 Hz



—●— 10 in. Cooling Fan Package
- - - □ - - - 10 in. Exhaust Package
- - - △ - - - Two 10 in. Exhaust Packages
—◇— 10 in. Type 12 Cooling Fan Package



A Pentair Company

Filter Fan Packages



Application

Permits densely-filtered ambient air to pressurize enclosure so that ambient air cannot be drawn in through poorly-sealed doors, panels, and wireways. Positive airflow provides a simple and effective way to protect enclosed electronics from heat and condensation. Ideal for clean environments.

Construction

- Simple, snap-in mounting
- Slim fan grille protrudes only .25" or less from enclosure mount
- Fan is completely installed inside plastic housing
- Housings are made of heat-resistant, self-extinguishing ABS; color RAL 7042 gray (grille only)
- Air filter is accessible for cleaning or replacement from outside the enclosure by simply removing the grille cover
- Easy to install. Mounting hardware, full-size mounting template, drawings, and installation instructions furnished.
- Filter Fan Package includes the fan with grille and filter. Exhaust Grille Kits are offered for each Filter Fan Package and must be ordered separately. Filter Sealing Gaskets are standard on filter fan package and exhaust grille kit to achieve an IP54 rating.

Industry Standards

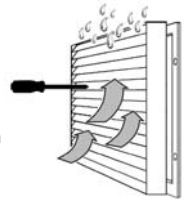
UL Component Recognized, UL File. No. SF165154
CSA certified (fan only)
CE

Installation

Fan Package should be mounted near bottom of enclosure with the exhaust near the top of the opposite side. This will ensure complete airflow distribution through the entire enclosure.

Added Protection

With the addition of a filter sealing gasket installed on both the filter fan package and the exhaust grille kit, an IP54 rating can be maintained according to DIN 40050. This rating is defined as protecting internal electronics from dust, foreign bodies, and splashing water.



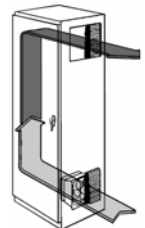
Replacement Filter Sealing Gasket and Filters

Filter Sealing Gasket Catalog Number	Replacement Filter	To Fit Fan Packages and Exhaust Grille Kits
G050000	10100060	SF0516002 SF0526002 SG0500002
G090000	10100061	SF0916002 SF0926002 SF0900002
G100000	10100062	SF1016002 SF1026002 SG1000002
G130000	10100063	SF1316002 SF1326002 SG1300002

Filtered Cooling

Filter fan packages are appropriate for applications in which:

- The electronic controls can operate at a temperature differential slightly above the ambient temperature
- Humidity is not a factor
- The quality of filtered ambient air is acceptable to be drawn into the enclosure for cooling



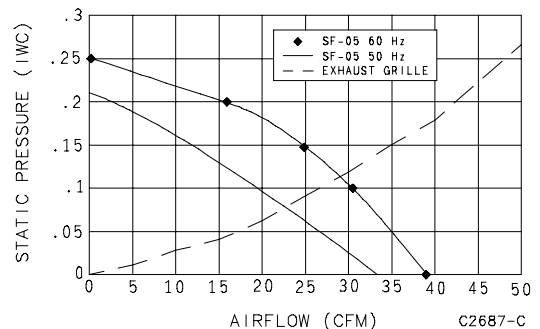
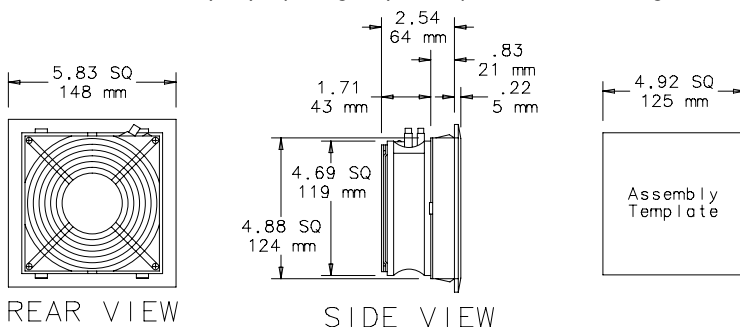
Series SF-05 Filter Fan Package (39 CFM^a) 5.83" x 5.83" x 2.76" (148 x 148 x 70) Replacement filter No. 10100060

Catalog Number	Voltage	Hz	Phase	Full Load Amps	Motor RON	Service Temperature		Noise dB (A)	Shipping		Exhaust Grill Kit ^b Model No.
						Low °F °C	High °F °C		Lbs.	Kgs	
SF0516002	115	50/60	1	.22	2650/3100	14 10	131 55	42	1.87	.85	SG0500002
SF0526002	230	50/60	1	.11	2650/3100	14 10	131 55	42	1.87	.85	SG0500002

Airflow CFM ^a	Hz	Free Air	With 1 Exhaust Grille Kit SG0500002
		60	39

^a Note: Actual airflow may vary depending on system impedance

^b Exhaust grille kit must be ordered separately



Filter Fan Packages

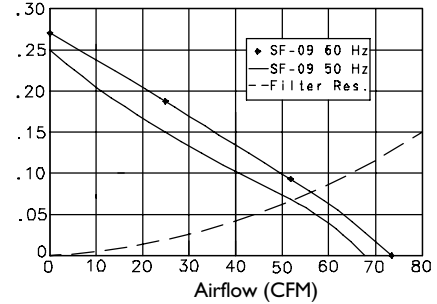
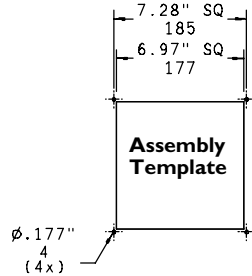
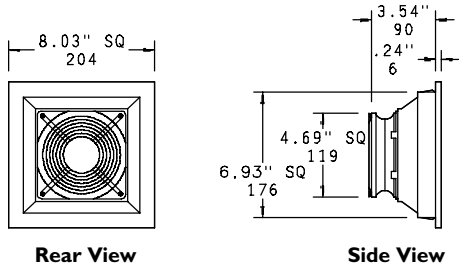
Series SF-09 Filter Fan Package (75 CFM^a) 8.03" x 8.03" x 3.78" (204 x 204 x 96) Replacement filter No. 10100061

Catalog Number	Voltage	Hz	Phase	Full Load Amps	Motor RON	Service Temperature		Noise dB (A)	Shipping Weight		Exhaust Grill Kit ^b Model No.
						Low °F °C	High °F °C		Lbs.	Kgs	
SF0916002	115	50/60	1	.22	2650/3100	14 10	131 55	51	2.56	1.16	SG0900002
SF0926002	230	50/60	1	.11	2650/3100	14 10	131 55	51	2.56	1.16	SG0900002

	Hz	Free Air	With 1 Exhaust Grille Kit SG0900002
Airflow CFM ^a	60	75	57

^a Note: Actual airflow may vary depending on system impedance

^b Exhaust grille kit must be ordered separately



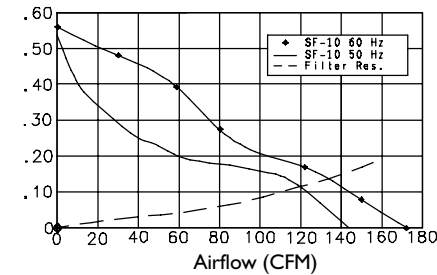
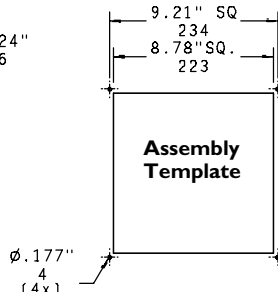
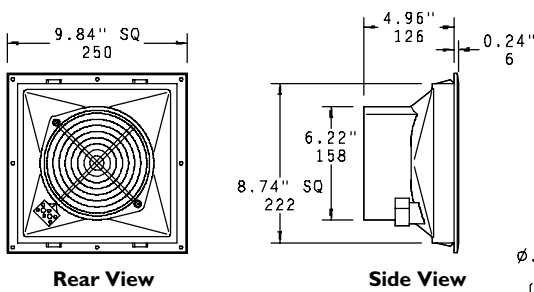
Series SF-10 Filter Fan Package (162 CFM^a) 9.84" x 9.84" x 5.20" (250 x 250 x 132) Replacement filter No. 10100062

Catalog Number	Voltage	Hz	Phase	Full Load Amps	Motor RON	Service Temperature		Noise dB (A)	Shipping Weight		Exhaust Grill Kit ^b Model No.
						Low °F °C	High °F °C		Lbs.	Kgs	
SF1016002	115	50/60	1	.53	2760/3030	14 10	131 55	52	4.39	1.99	SG1000002
SF1026002	230	50/60	1	.30	2760/3030	14 10	131 55	52	4.39	1.99	SG1000002

	Hz	Free Air	With 1 Exhaust Grille Kit SG1000002
Airflow CFM ^a	60	162	126

^a Note: Actual airflow may vary depending on system impedance

^b Exhaust grille kit must be ordered separately



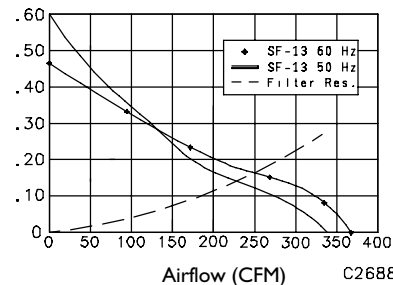
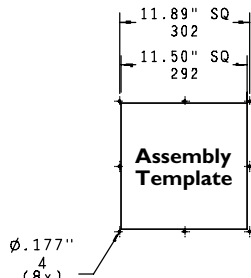
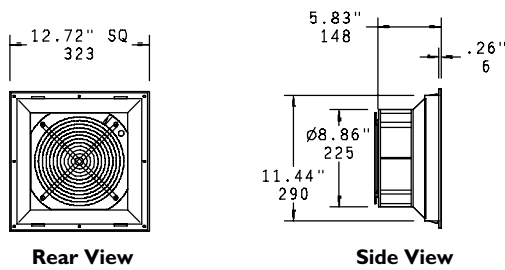
Series SF-13 Filter Fan Package (376 CFM^a) 12.72" x 12.72" x 6.09" (323 x 323 x 155) Replacement filter No. 10100063

Catalog Number	Voltage	Hz	Phase	Full Load Amps	Motor RON	Service Temperature		Noise dB (A)	Shipping Weight		Exhaust Grill Kit ^b Model No.
						Low °F °C	High °F °C		Lbs.	Kgs	
SF1316002	115	50/60	1	.89	2550/2800	14 10	131 55	61	8.38	3.80	SG1300002
SF1326002	230	50/60	1	.45	2550/2800	14 10	131 55	61	8.38	3.80	SG1300002

	Hz	Free Air	With 1 Exhaust Grille Kit SG1300002
Airflow CFM ^a	60	376	250

^a Note: Actual airflow may vary depending on system impedance

^b Exhaust grille kit must be ordered separately





A Pentair Company

Blower Fan Package; Fan and Blower Accessories

Bulletin
D85



- Rotating components are suspended on neoprene shock-mounts to minimize noise and vibration
- Three-conductor power cord (five feet long) with molded plug is internally grounded and strain relieved to the body of the fan
- Engineered for 20,000 hours of continuous operation when properly powered
- Consult your local Hoffman sales office for information on modifications to this product

Finish

Blower housing is black enamel. Grille is brushed stainless steel.

Industry Standards

UL Component Recognized, UL File No. E61997
EIA RS-310-D
CSA certified (blower motor only)



Accessories

- Exhaust Grille and Filters
- Filter Adhesive
- Temperature Control Switch

Installation

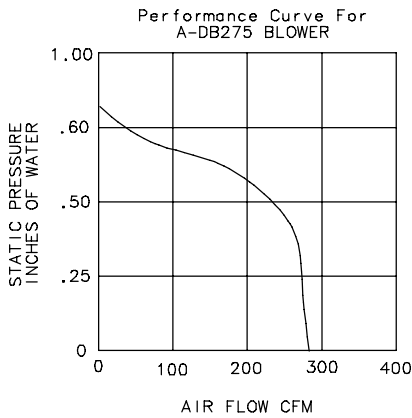
Can be mounted as shown below or installed on standard 19.00 inch (483mm) racks. The unit is self-supporting with 16 gauge steel flanges notched per EIA RS-310-D. Two openings are required in the enclosure for air to flow in and out. Refer to drawings for size and location of openings.

Blower Package

Application

Provides a maximum amount of cooling air while occupying a minimum of space. Cool air enters through the intake grille and filter and is discharged into the enclosure. Blower operates on 115 volt AC, 60/50 Hertz, single-phase input power. The unit delivers 275 cubic feet per minute (CFM) of air at zero static pressure.

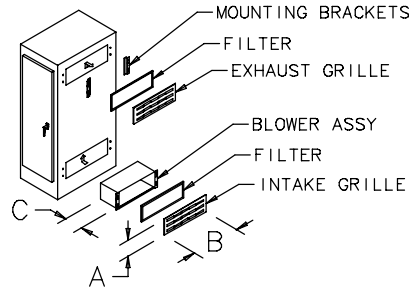
Performance Curve for ADB275 Blower



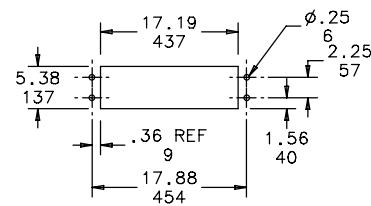
Construction

- 16 gauge steel housing
- Attractive stainless steel intake grille is easily removed with two captive thumbnuts
- Washable aluminum filter provides good arrestment of airborne dirt with minimal pressure drop. Filter has 12 layers of expanded aluminum which provides hundreds of adhesive-coated baffle surfaces for trapping dirt and dust particles. (To achieve best results, Hoffman Filter Adhesive is recommended.)
- Single-phase motor powers the statically-balanced blower. Motor is thermally protected and cooled by incoming forced air.
- Direct-drive induction motor contains permanently-lubricated ball bearings. Lubricant protects from -20°F to 298°F (-29°C to 148°C).

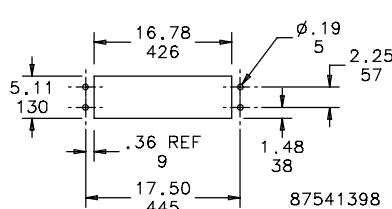
Mounting Cut-Out Dimensions



Blower Cut-Out



Exhaust Grille Cut-Out



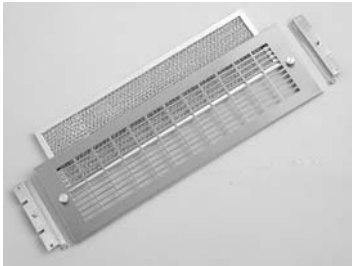
Standard Sizes Standard Size and Technical/Performance Data

Catalog Number	Dimensions A x B x C	Free Air CFM	Watts	Voltage	Hz	Amps	Motor RPM	Noise SIL (dB)	Weight lb.	kg.
ADB275	5.75 x 19.00 x 7.25 (146 x 483 x 184)	230/275	84	115	50/60	1.2	2580/3100	56	15.00	7.00

Millimeter dimensions are in ().
For replacement filter see exhaust grilles, page 51.

Blower Fan Package; Fan and Blower Accessories

Bulletin
D85

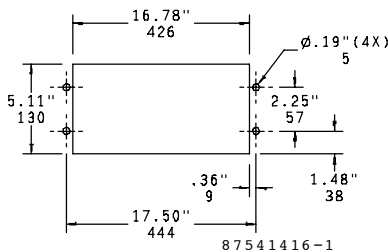


Exhaust Grille and Filters for Blower Package

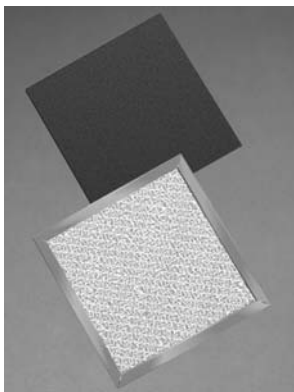
Located at air discharge side of an enclosure using Blower Package ADB275. Polished stainless steel grille is 65% open and offers low resistance to airflow. Expanded aluminum filter (included with each grille) is easily removed for cleaning from outside the enclosure. Mounting hardware is furnished.

Catalog Number	Dimensions A x B		Filter Size	
	in.	mm	in.	mm
AEXGR275	5.75 x 19.00	146 x 483	4.98 x 16.56	126 x 421
AFLTR275AL	Aluminum Filter Replacement (5/pkg.)			

Mounting Cutout Dimensions



Optional Grilles and Replacement Filters



Optional grilles offer the choice of stainless steel or black ABS plastic grilles to replace the standard RAL 7035 gray composite or stainless steel grilles on both fan and exhaust packages.

Standard replacement filters are washable foam (Type I) or disposable (Type I2). To maintain UL Type I2 rating on the enclosure, UL Type I2 filters must be used on both the inlet and outlet. Washable aluminum filters are also available. Aluminum filters are compatible with Type I systems only.

Catalog Number	Description	Fits Fan and Exhaust	
		Nominal Size	Grille Size
TG4SS	Brushed stainless steel grille	4 in.	6.29 x 7.31 x .31 (160 x 186 x 8)
TG4B	Black ABS plastic grille	4 in.	6.29 x 7.37 x .45 (160 x 187 x 11)
AFLTR4	Type 1 filter replacement (5/package)	4 in.	n/a
AFLTR4AL	Aluminum filter replacement (5/package)	4 in.	n/a
TFLT4UL12	Type 12 filter replacement (5/package)	4 in.	n/a
TG6SS	Brushed stainless steel grille	6 in.	7.80 x 8.81 x .31 (198 x 224 x 8)
TG6B	Black ABS plastic grille	6 in.	7.8 x 8.87 x .49 (198 x 225 x 12)
AFLTR6	Foam filter replacement (5/package)	6 in.	n/a
AFLTR6AL	Aluminum filter replacement (5/package)	6 in.	n/a
TFLT6UL12	UL 12 filter replacement for (5/package)	6 in.	n/a
TG10SS	Brushed stainless steel grille	10 in.	11.81 x 12.92 x .31 (300 x 328 x 8)
TG10B	Black ABS plastic grille	10 in.	11.81 x 12.99 x .55 (300 x 330 x 14)
AFLTR10	Foam filter replacement (5/package)	10 in.	n/a
AFLTR10AL	Aluminum filter replacement (5/package)	10 in.	n/a
TFLT10UL12	UL 12 filter replacement (5/package)	10 in.	n/a

Millimeter dimensions are in ().



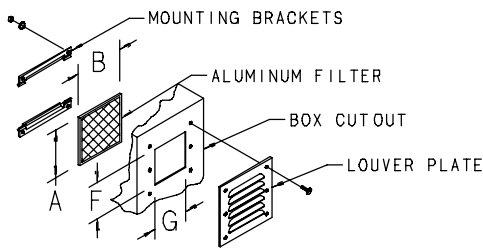
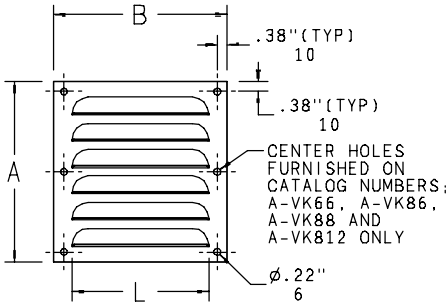


A Pentair Company

Louvers and Vents

Louver Plate Kits

Designed to provide ventilation in enclosures where excessive internal heat or excessive moisture is a problem. Although louvers cannot keep all moisture out of an enclosure, gasketing or sealing the perimeter of the louver plate reduces problems associated with moisture intrusion. These kits may be easily installed in the field by making a cutout of the proper size and attaching the louver plate in place. Louver plates are made from 14 gauge steel with an ANSI 61 gray polyester powder finish over phosphatized surfaces or 316 stainless steel. Hardware is furnished for mounting. Custom sizes, materials, finishes, etc., can be provided on special order.



87541404

Catalog Number	Catalog Number	Dimensions A x B	Number of Louvers	Louver Depth D	Louver Length L	Opening Area Sq. In./Cm ²	Cutout Size F	Cutout Size G
AVK23	AVK23SS6	3.25 x 3.25 (83 x 83)	3	0.19 (5)	2.00 (51)	.86/5.54	2.00 (51)	1.75 (44)
AVK33	AVK33SS6	3.88 x 4.50 (98 x 114)	3	0.25 (6)	3.00 (76)	1.32/8.52	2.62 (67)	3.00 (76)
AVK34	AVK34SS6	4.75 x 4.50 (121 x 114)	4	0.25 (6)	3.00 (76)	1.76/11.35	3.50 (89)	3.00 (76)
AVK43	AVK43SS6	4.50 x 5.50 (114 x 140)	3	0.25 (6)	4.00 (102)	1.88/12.10	3.25 (83)	4.00 (102)
AVK44	AVK44SS6	5.62 x 5.50 (143 x 140)	4	0.25 (6)	4.00 (102)	2.50/16.13	4.38 (111)	4.00 (102)
AVK64	AVK64SS6	5.62 x 7.50 (143 x 191)	4	0.31 (8)	6.00 (152)	5.21/33.61	4.38 (111)	6.00 (152)
AVK66	AVK66SS6	7.88 x 7.50 (200 x 191)	6	0.31 (8)	6.00 (152)	7.82/50.45	6.62 (168)	6.00 (152)
AVK84	AVK84SS6	5.81 x 9.50 (148 x 241)	4	0.31 (8)	8.00 (203)	8.08/52.12	4.56 (116)	8.00 (203)
AVK86	AVK86SS6	8.19 x 9.50 (208 x 241)	6	0.31 (8)	8.00 (203)	12.11/78.13	6.94 (176)	8.00 (203)
AVK88	AVK88SS6	10.56 x 9.50 (268 x 241)	8	0.31 (8)	8.00 (203)	16.15/104.19	9.31 (236)	8.00 (203)
AVK812	AVK812SS6	15.31 x 9.50 (389 x 241)	12	0.31 (8)	8.00 (203)	24.22/156.26	14.06 (357)	8.00 (203)

Millimeter dimensions are in ().

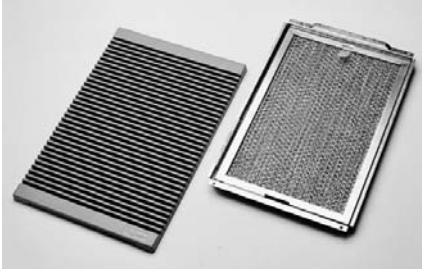


Filters for Louver Plate Kits

Designed for use with Louver Plate Kit. Mounting holes on filter bracket align with louver mounting holes. Hardware supplied with louvers also secure filter brackets in place. Aluminum air filters provide good arrestment of airborne dust and dirt. Filter media is composed of layers of slit and expanded aluminum providing hundreds of adhesive coated baffle surfaces for trapping impurities. Impurities are held throughout the depth of the filter. Washing with warm water will keep the filter clean. To achieve best results, Hoffman Filter Adhesive is recommended.

Catalog Number	Dimensions A x B in.	Dimensions A x B mm	Use with Louver	Catalog Number
AFLT33	3.22 x 3.25	82 x 83	AVK33	AVK33SS6
AFLT34	4.09 x 3.25	104 x 83	AVK34	AVK34SS6
AFLT43	3.84 x 4.25	98 x 108	AVK43	AVK43SS6
AFLT44	4.97 x 4.25	126 x 108	AVK44	AVK44SS6
AFLT64	4.45 x 6.25	113 x 159	AVK64	AVK64SS6
AFLT66	6.72 x 6.25	171 x 159	AVK66	AVK66SS6
AFLT84	4.64 x 8.25	118 x 210	AVK84	AVK84SS6
AFLT86	7.02 x 8.25	178 x 210	AVK86	AVK86SS6
AFLT88	9.39 x 8.25	239 x 210	AVK88	AVK88SS6
AFLT812	14.14 x 8.25	359 x 210	AVK812	AVK812SS6

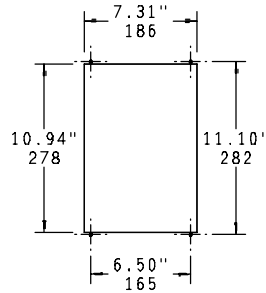
Louvers and Vents



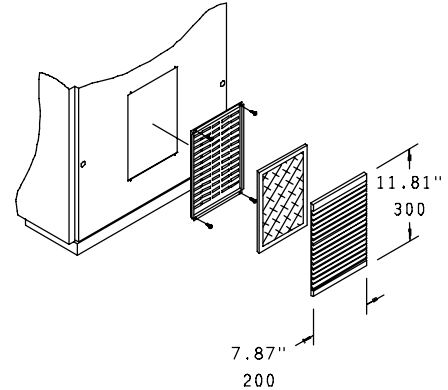
Vent Kit

Includes a stylized louvered cover and filter package. Use as an air inlet when a cooling fan is mounted in an enclosure or use two vent kits to allow passive airflow. Mounting hardware included. Vent Kit requires cutout shown below. Available in gray (RAL 7042) or black.

Catalog Number		H x W x D	
Gray	Black	inch	mm
XPV32	PPV32B	11.81x7.88x1.03	300 x 200 x 26



Cutout Dimensions

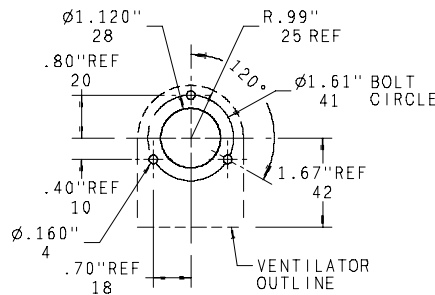


Ventilators

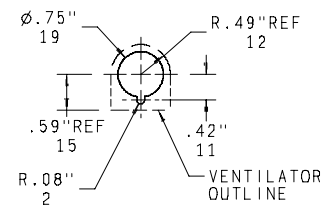
Designed to fit any metallic and non-metallic enclosure. Proper installation will provide rainproof ventilation but will not meet Type 4 or 12 requirements. Kit includes a ventilator made of fire-retardant thermoplastic material, mounting hardware, and instructions.

Note: Supplied screws are 13mm (.515 inch) long. Some applications may require longer screws.

Catalog Number	Description
ANMV6	Large nonmetallic vent
ANMV3	Small nonmetallic vent



Large Ventilator



Small Ventilator

87541390-2

Filter Adhesive

Designed to maximize the efficiency of all expanded aluminum air filters. Use of Filter Adhesive doubles the dust retention capacity of the filter. Adhesive contains a low-viscosity water-soluble oil which absorbs dirt particles trapped on the surface of the filter. Through the circulation of the oil, a renewed impurity-absorbing surface is constantly established. Washing with water will remove dust, dirt, and other impurities. Once the filter is dry, re-coat with adhesive.

Catalog Number	Description
AFLTAD	Spray adhesive





A Pentair Company

DataCom Fan Speed Controls



Application

These Hoffman Fan Speed Controls provide a means to optimize airflow in a cabinet or rack, balancing air volume requirements with noise level and power use. The AFANTSC Panel Mount Fan Speed Control adjusts fan speed automatically based on remote temperature sensor inputs. The A19FANSC 19 inch Rack Mount Fan Speed Control allows manual control over fan speed. Both units are designed to work with Hoffman 3-, 6-, and 10-inch Compact Cooling Fans and with 19 inch fan trays, as well as door and top mount fan trays. These fan speed controls are ideal for offices, classrooms and other acoustic-noise-sensitive areas.

Construction

AFANTSC Panel Mount Fan Speed Control

- Automatically adjusts fan speed depending on remote temperature sensor input
- Temperature sensitivity is field adjustable; preset at 35°C (95°F)
- Idle speed and temperature slope are field adjustable
- Push-to-reset thermal circuit breaker inside control housing
- Compact polycarbonate control housing can be mounted in any position
- NEMA 5-15R outlet provides power to fan
- Six foot (1.83m) power cord plugs into standard 120V, 50 or 60 Hz outlet
- Remote probe with 10 ft (3.05m) lead mounts in airflow
- Mounting brackets included

A19FANSC 19 inch Rack Mount Fan Speed Control

- Continuously variable fan speed control knob with minimum speed adjustment
- Uses 1 RU rack space
- Steel construction
- Two NEMA 5-15R outlets provide power to fan
- Six foot (1.83m) power cord plugs into standard 120V 60 Hz outlet

Industry Standards (Both Controls)

UL 508, File No. E249700
cUL C22.2 No. 14, File No. E249700

Finish

- AFANTSC: Light gray polycarbonate control housing
- A19FANSC: RAL 9005 black polyester powder paint

Technical Specifications

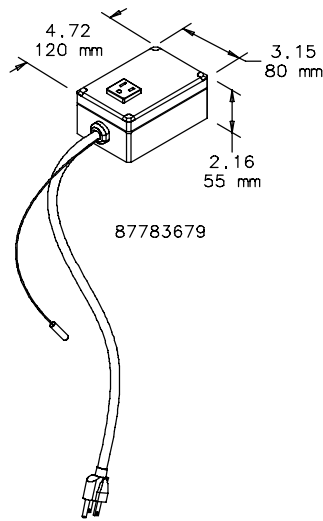
Catalog Number	Voltage and Frequency	Current Draw	Temperature Settings	
			°C	°F
AFANTSC	120V, 50/60 Hz	2A max.	30, 35, 40, 45	86, 95, 104, 113
A19FANSC	120V, 60 Hz	4A max.	Continuously variable	

DataCom Fan Speed Controls

Standard Sizes Fan Speed Controls

Catalog Number	Description	Application
AFANTSC	Panel Mount Fan Speed Control	Fan speed controlled automatically with remote temperature sensor
A19FANSC	19 in. Rack Mount Fan Speed Control	Fan speed adjusted manually

Panel Mount Fan Speed Control



19 inch Rack Mount Fan Speed Control

