

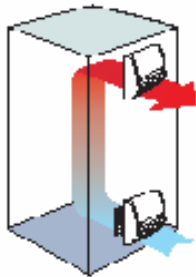


EFFF018 Filter Fan 14 - 69 CFM

- **Very low noise**
- **Minimal mounting depth**
- **Functional design**
- **Time-saving installation**



Filter fans are used to provide an optimum climate in enclosures. The interior temperature of an enclosure can be reduced by channeling cooler filtered outside air into the enclosure thus expelling heated internal air. The resulting air flow prevents formation of localized heat pockets and protects the electronic components from overheating. The plastic used for the hood of this filter fan series is highly weather resistant, as well as impact and UV light resistant.



Enclosure ventilation using a filter fan and exhaust filter

Technical Data

Axial fan, ball bearing	service life min. 50,000h at 77°F (25°C) and 65% RH
	aluminum fan body, plastic rotor
Connection	2 wires w/ cage clamps, AWG 14 (2.5mm ²), length 4" (100mm)
Housing (filter fan and exhaust filter)	Plastic, UL 94V-0, light grey
Hood (filter fan and exhaust filter)	Plastic, UL 94V-0, light grey;
	weather and UV light resistant according to UL 746C (f1)
Mounting frame	with double-sided industrial adhesive for mounting to the
	outside of enclosure; certain operating circumstances may
	make the additional use of screws necessary; cut-out
	template included
Filter media rating	G4 acc. to DIN EN 779, filtering degree 94%
Filter material	synthetic fiber with progressive construction, temperature
	resistant to 212°F, self-extinguishing class F1;
	moisture resistant to 100% RH, reusable - can be cleaned by
	washing or vacuuming
Operating / Storage temperature	-49 to +158°F (-45 to +70°C)
Protection class	I (grounded)
Protection type	IP54*

* Using fine filter media type F5 increases the protection type to IP55, but reduces the air volume

Special features

- The **self-adhesive seal** of the mounting frame prevents dust and water from entering the cabinet.
- **Functional design** of the intake and exhaust fan hoods very effectively prevents direct infiltration of falling water and dust. The advantage is that the filter mat does not rapidly become contaminated with dirt and therefore does not need to be exchanged as often.
- The **air channeling** makes the filter fan particularly quiet in operation.
- All filter fan models are also available with **integrated airflow monitor**.
- The **direction of air flow can easily be switched** by reversing the axial fan.
- EMC versions and other voltages are available upon request.

Part No.	Operating Voltage	Air volume, free blowing	Air volume, free blowing	Power consumption	Average noise level (DIN EN ISO 4871)	Mounting depth	Enclosure cut-out	Weight (approx.)	Approvals
EF12FF018230	230VAC, 50Hz ¹	12 cfm	9 cfm (16m ³ /h)	13W	31dB (A)	1.8" (45mm)	3.8 x 3.8"	1.3 lbs. (0.60kg)	UL File E234324, VDE
EF14FF018120	120VAC, 60Hz	14 cfm	11 cfm (18m ³ /h)	13W	31dB (A)	1.8" (45mm)	3.8 x 3.8"	1.3 lbs. (0.60kg)	UL File E234324
EF32FF018230	230VAC, 50Hz ¹	32 cfm	25 cfm (42m ³ /h)	15W	40dB (A)	2.3" (58mm)	4.9 x 4.9"	2.2 lbs. (1.0kg)	UL File E234324, VDE
EF37FF018120	120VAC, 60Hz	37 cfm	28 cfm (48m ³ /h)	15W	40dB (A)	2.3" (58mm)	4.9 x 4.9"	2.2 lbs. (1.0kg)	UL File E234324
EF60FF018230	230VAC, 50Hz ¹	60 cfm	40 cfm (68m ³ /h)	15W	39dB (A)	3.4" (86mm)	6.9 x 6.9"	2.9 lbs. (1.30kg)	UL File E234324, VDE
EF69FF018120	120VAC, 60Hz	69 cfm	46 cfm (78m ³ /h)	15W	39dB (A)	3.4" (86mm)	6.9 x 6.9"	2.9 lbs. (1.30kg)	UL File E234324

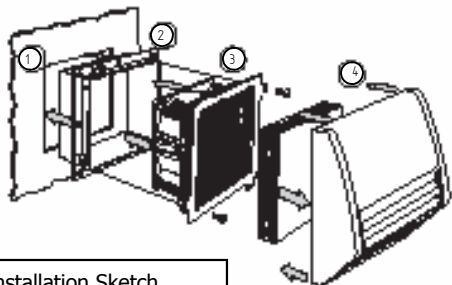
EFFF 018 Filter Fan 14 - 69



Time-saving assembly and maintenance

Our filter fans are easily installed by one person **from outside** the cabinet.

- 1.) Make cut-out in the cabinet wall. The cut edge of the cabinet opening should be free of dirt, filings and grease. A template for the enclosure cut-out is included with the filter fan.
- 2.) Remove protective film from the sealing strips on the mounting frame. Press mounting frame into the cabinet opening. The frame stays permanently in the cabinet.
- 3.) Electrically connect the axial fan using the cage clamp connectors. Push the unit into the mounting frame. Affix using screws if necessary.
- 4.) Insert the filter mat in the hood. Clip on. Finished.

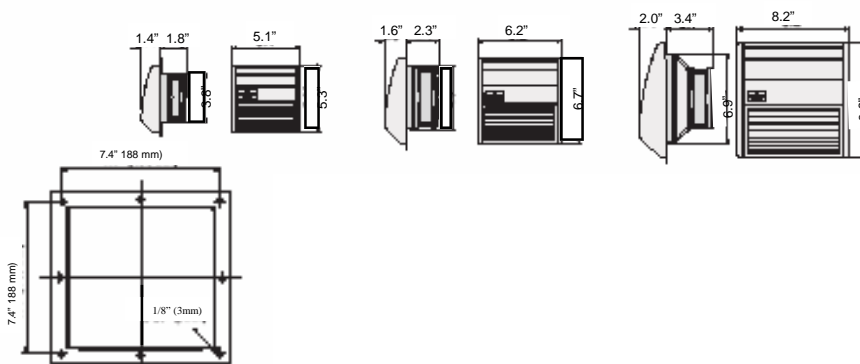
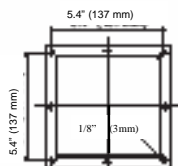
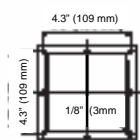


To change the filter mat, simply remove the filter hood, insert the new mat and snap the hood back again. No tools are required. Maintenance of the fan can easily be performed without removing the mounting frame (2).

Dimensional Drawing

Installation Sketch

Drilling template for mounting frame



EFFE 118 Exhaust Filter

Part No.	Mounting depth	Enclosure cut out	Weight (approx.)	Filter mat	Protection Type	Approvals
EF3.8FF018	0.6" (16mm)	3.8 x 3.8"	0.6 lbs. (0.30kg)	G4 acc. to DIN EN 779, filtering degree 94%	IP54*	UL File No. E234324
EF4.9FF018	0.6" (16mm)	4.9 x 4.9"	0.8 lbs. (0.40kg)	G4 acc. to DIN EN 779, filtering degree 94%	IP54*	UL File No. E234324
EF6.9FF018	0.6" (16mm)	6.9 x 6.9"	1.3 lbs. (0.60kg)	G4 acc. to DIN EN 779, filtering degree 94%	IP54*	UL File No. E234324

*using fine filter mats type F5 increases the protection type to IP55, but reduces the air volume.

Filter Mats

Filter mat	3.5 x 3.5" (89 x 89mm)	4.6 x 4.6" (118 x 118mm)	6.6 x 6.6" (168 x 168mm)
G4 (1 packing unit = 3 pcs.)	EFFM0863.5X3.5	EFFM0864.6X4.6	EFFM086.6X6.6
F5 (1 packing unit = 3 pcs.)	EFFFM0863.5X3.5	EFFFM086.4X4.6	EFFFM086.6X6.6

FFLC 218 Filter Fan with Airflow Monitor (Normally Closed)



Airflow monitor integrated in finger guard of filter fan

Part No.	Operating voltage	Air volume, free blowing	Air volume with exhaust filter	Power consumption	Average noise level (DIN EN ISO 4871)	Depth in enclosure	Enclosure cut—out	Weight (approx.)
EF12FF018230AM	230VAC, 50Hz ¹	12 cfm (21m ³ /h)	9 cfm (16m ³ /h)	13W	31dB (A)	1.8 (45mm)	3.8 x 3.8"	1.3 lbs. (0.60kg)
EF14FF018120AM	120VAC, 60Hz	14 cfm (24m ³ /h)	11 cfm (18m ³ /h)	13W	31dB (A)	1.8" (45mm)	3.8 x 3.8"	1.3 lbs. (0.60kg)
EF32FF018230AM	230VAC, 50Hz ¹	32 cfm (55m ³ /h)	25 cfm (42m ³ /h)	15W	40dB (A)	2.3" (58mm)	4.9 x 4.9"	2.2 lbs. (1.0kg)
EF37FF018120AM	120VAC, 60Hz	37 cfm (63m ³ /h)	28 cfm (48m ³ /h)	15W	40dB (A)	2.3" (58mm)	4.9 x 4.9"	2.2 lbs. (1.0kg)
EF60FF018230AM	230VAC, 50Hz ¹	60 cfm (102m ³ /h)	40 cfm (68m ³ /h)	15W	39dB (A)	3.4" (86mm)	6.9 x 6.9"	2.9 lbs. (1.30kg)
EF69FF018120AM	120VAC, 60Hz	69 cfm (117m ³ /h)	46 cfm (78m ³ /h)	15W	39dB (A)	3.4" (86mm)	6.9 x 6.9"	2.9 lbs. (1.30kg)

¹ air volume increases by 15% when operating 230VAC filter fans at 60Hz

Specifications are subject to change without notice. Suitability of this product for its intended use and any associated risks must be determined by the end customer/ buyer in its final application.