



FPF series Filter Fans

Edition ■ 2020/1



Italian Company





Clean cooling air

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virdis
filter fans

Most of our products are available
in the industrial engineering software:



Air flow management

Increasingly often, the causes behind malfunctions or faults in electrical and electronic equipment housed in control panels or fitted as an integral part of a machine, are due to heat problems. In reality, the life span of components depends on the temperature and level of humidity inside the electrical cabinet. The normal recommended average operating temperature inside a cabinet is 35°C with relative humidity of no more than 60%.

Fandis offers a wide range of solutions for efficiently disposing of dissipated heat from electrical components suitable for different applications.



NATURAL CONVECTION

The use of exhaust filter ensures the passage of air and the removal of heat in a natural manner. This solution can be considered for dissipating low level of heat in dusty environments.



FORCED CONVECTION

Forced ventilation is an inexpensive and efficient solution for preventing the formation of air pockets inside electrical cabinets. The best configuration includes fitting a filter fan to an exhaust filter.

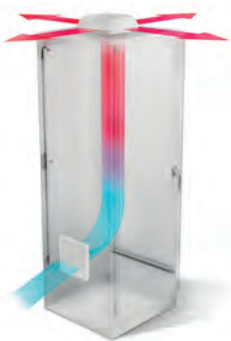
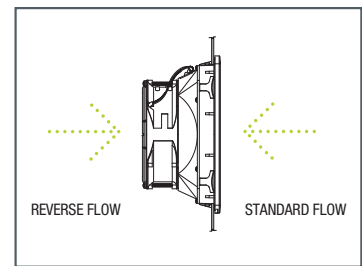
The filter fan positioned at the bottom of the cabinet, conveys filtered cold air from outside (**standard air flow**) while the exhaust filter at the top expels hot air.

The pressure generated inside the enclosure by the ventilation prevents unfiltered air from entering through holes or openings.



An inverted air flow version (**reverse flow**) is also available; filter fan at top and exhaust filter at bottom.

The system can be controlled by a thermostat that turns the fan on when high temperatures are detected.



Hot air can also be expelled from the roof of the cabinet if, for instance, the sides of the cabinet are covered by obstacles, walls or by the sides of other cabinets. In a perfect configuration, an exhaust filter is positioned at the bottom of the cabinet. The lower pressure generated by the roof unit draws in cold air from outside through the exhaust filter to enhance internal air flow and the dissipation of heat.



The use of a swivelling fan is an alternative solution for a better air circulation inside the electrical cabinet. This fan distributes heat to reduce the temperature, cools local hot spots and disperses cold air emitted by cooling units.

EMC shielding



Electromagnetic compatibility, or EMC, relates to the unintentional generation or reception of electromagnetic energy that may lead to electromagnetic interference with a component or item of equipment. By incorporating EMC into electrical component design, electronics engineers can ensure the long-term stability and lifespan of multiple electrical components operating within a given space.

The EMC shielding of an enclosure guarantees both limited radiated emissions and protects internal components from external sources of interference. Fandis EMC filters and filter fans are designed to prevent the weakening of the shielding effect in enclosures with a high level of protection, even with cutouts, and to maintain this status.



How to read the icons

PROTECTION RATINGS



PROTECTION DEGREE



PROTECTION DEGREE



PROTECTION DEGREE



PROTECTION DEGREE



PROTECTION DEGREE



UL PROTECTION DEGREE



FILTRATION CLASS



FILTRATION CLASS

MOUNTING FEATURES



SIDE MOUNTING



TOP MOUNTING



FAST MOUNTING

PRODUCT FEATURES



ELECTROMAGNETIC COMPATIBLY

FILTERS FANS

Filter fans are a practical solution for removing heat from the cabinet. They channel filtered ambient air into the enclosure, expelling warm internal air through an exhaust filter or roof unit to reduce temperatures and protect electronic components from overheating.

PFF SERIES

PFF filter fans are a series of Fandis filtering solutions for enclosures. These units have a low external profile to avoid obstruction and are easy to mount on standard panel cutouts with a fast snap-on assembly. An integrated sealing gasket also provides secure dust and water protection.



QUICK INSTALLATION
Snap-mounting system with elastic hooks



EMC-COMPATIBLE
Metal shielding for electromagnetic protection

IP55 PROTECTION (OPTIONAL)
Ideal for harsh ambient condition in industrial applications

Model numbering system for PPF SERIES

description	FPF 15K P R 230 BE (R) -110	description
FAMILY PPF		SERIES 100... = standard S** = custom
DIMENSION CODE Standard version 08K 12K 13K 15K 20K		OPTIONS () = Type 12 and IP54 protected 5 = IP55 protected R = Reverse flow Type 12 O = Type 1 protected C = EMC shielded
FAN SIZE P = small () = standard M = medium G = large		VERSION B BE
COLOUR R = grey RAL 7032 U = grey RAL 7035 N = black RAL 9005		VOLTAGE G = no voltage 400T = 400 3~ 24 = 24 Va.c. D12 = 12 Vd.c. 115 = 115 Va.c. D24 = 24 Vd.c. 230 = 230 Va.c. D48 = 48 Vd.c.

PRODUCTS OVERVIEW FPF SERIES					
Model	Dimensions	Cut-out	Voltage	Air Flow	Approvals
	mm	mm	V	m ³ /h	
FPF08	105X105	91.5X91.5			CE; cURus
FPF08K	105X105	91.5X91.5	115/230 Va.c.	23 ÷ 30	CE; cURus
FPF08KD	105X105	91.5X91.5	12/24 Vd.c.	15 ÷ 20	CE; cURus
FPF12	150X150	125X125			CE; cURus
FPF12K	150X150	125X125	24/115/230 Va.c.	57 ÷ 61	CE; cURus
FPF12KD	150X150	125X125	24/48 Vd.c.	60 ÷ 60	CE; cURus
FPF13	204X204	177X177			CE; cURus
FPF13K	204X204	177X177	115/230 Va.c.	120 ÷ 135	CE; cURus
FPF13KP	204X204	177X177	115/230 Va.c.	110 ÷ 120	CE; cURus
FPF13KPD	204X204	177X177	24 Vd.c.	120 ÷ 120	CE; cURus
FPF15	250X250	223X223			CE; cURus
FPF15K	250X250	223X223	115/230 Va.c.	240 ÷ 270	CE; cURus
FPF15KD	250X250	223X223	24/48 Vd.c.	250 ÷ 250	CE; cURus
FPF15KG	250X250	223X223	115/230 Va.c.	360 ÷ 400	CE; cURus
FPF15KM	250X250	223X223	115/230 Va.c.	130 ÷ 150	CE; cURus
FPF15KP	250X250	223X223	115/230 Va.c.	115 ÷ 125	CE; cURus
FPF15KPD	250X250	223X223	24/48 Vd.c.	145 ÷ 145	CE; cURus
FPF20	325X325	291X291			CE; cURus
FPF20K	325X325	291X291	115/230/400 Va.c.	520 ÷ 580	CE; cURus
FPF20KG BE	325X325	291X291	115/230/400 Va.c.	660 ÷ 745	CE; cURus



General specifications

- Mounting without screws in square openings as indicated in the cut-out diagram
- Plate thickness between 1.5 and 2.2mm
- Plastic parts in PC/ABS alloy
- Permanent sealing gasket in polyurethane foam
- Filter media in thermo-linked progressive structure synthetic fibre
 - filter class G3 (optionally filter class G4), according to EN 779
- Filter media can be cleaned, up to 10 times by washing, blowing dry and lightly beating
- IP55, Type1 and EMC versions on request
- UL approval according to UL 508

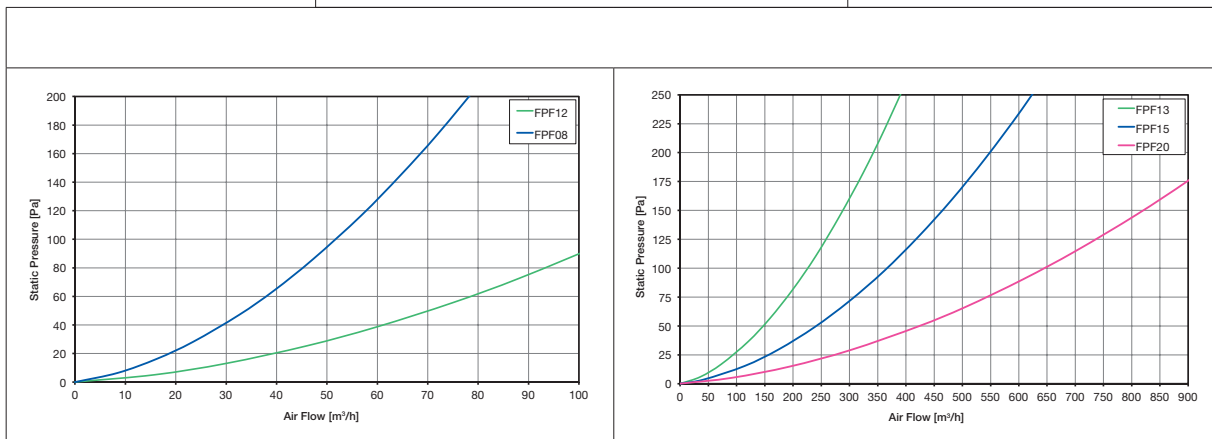
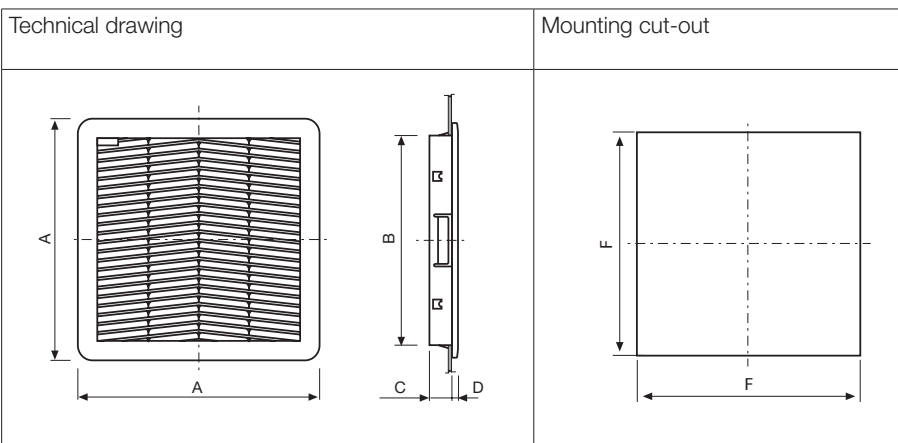


- ▶ Clip mounting system
- ▶ Low profile

Technical data

Model	A	B	C	D	E	F	G	Weight	Approvals
	mm	mm	mm	mm	mm	mm	mm	Kg	
FPF08KUG-101	105	91	14	7	95	91.5	1.8	0.09	CE; cURus;
FPF12KUG-100	150	124	21	7	131	125	4.5	0.22	CE; cURus;
FPF13KUG-100	204	175	20	8	185	177	4.5	0.33	CE; cURus;
FPF15KUG-100	250	220	23	8	230	223	4.5	0.57	CE; cURus;
FPF20KUG-100	325	288	24	9	302	291	4.5	0.94	CE; cURus;

Technical specifications





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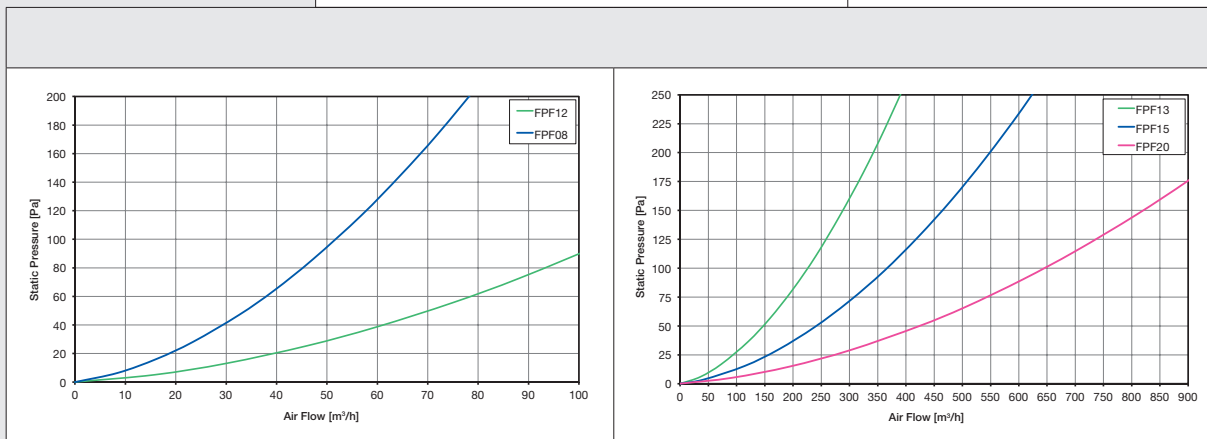
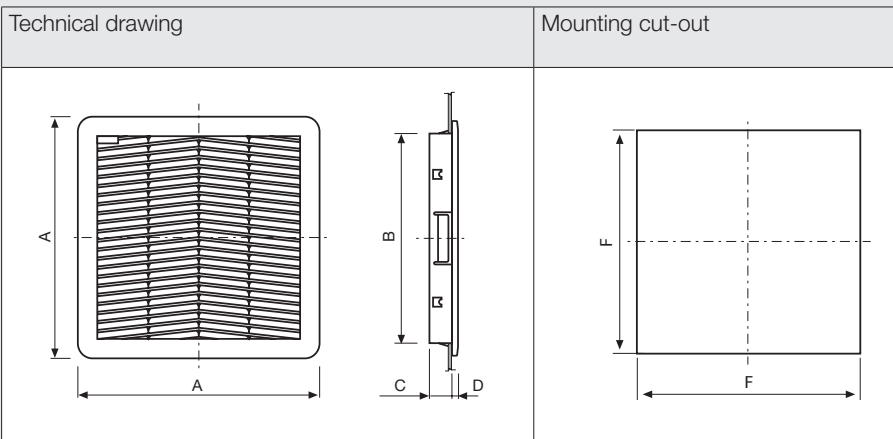


- ▶ Electromagnetic radiation protection
- ▶ Clip mounting system
- ▶ Low profile

Technical data

Model	A	B	C	D	E	F	G	Weight	Approvals
	mm	mm	mm	mm	mm	mm	mm	Kg	
FPF12KUGC-110	150	124	21	7	131	125	4.5	0.24	CE;
FPF13KUGC-110	204	175	20	8	185	177	4.5	0.34	CE;
FPF15KRGC-110	250	220	23	8	230	223	4.5	0.61	CE;
FPF15KUGC-110	250	220	23	8	230	223	4.5	0.61	CE;
FPF20KRGC-110	325	288	24	9	302	291	4.5	1	CE;
FPF20KUGC-110	325	288	24	9	302	291	4.5	0.98	CE;

Technical specifications





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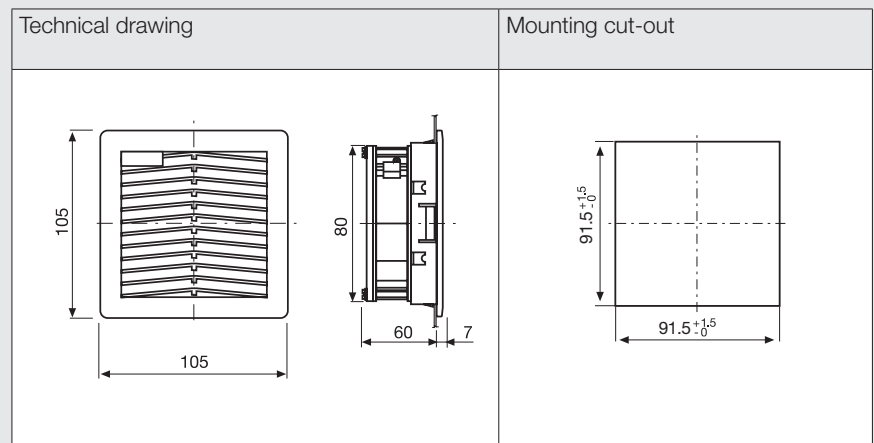


- ▶ Clip mounting system
- ▶ Low profile

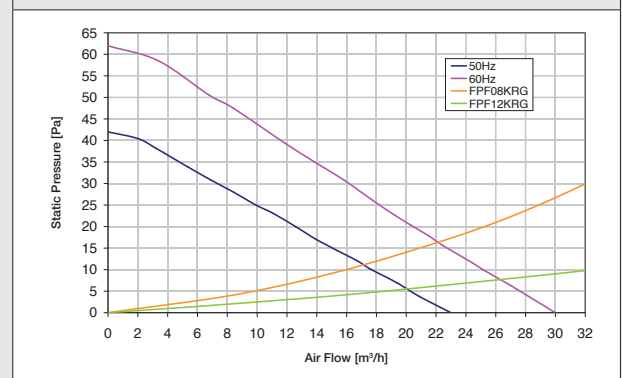
Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF08KU115B-110	115 V a.c.	50/60	0.115/0.092	9.0/7.0	23/30	42/62	33.0/38.0	0.49	-10 ÷ +50	CE; cURus;
FPF08KU115BR-110	115 V a.c.	50/60	0.115/0.092	9.0/7.0	23/30	42/62	33.0/38.0	0.49	-10 ÷ +50	CE; cURus;
FPF08KU230B-110	230 V a.c.	50/60	0.07/0.055	10/8.0	23/30	42/62	33.0/38.0	0.45	-10 ÷ +50	CE; cURus;
FPF08KU230BR-110	230 V a.c.	50/60	0.07/0.055	10/8.0	23/30	42/62	32.0/36.0	0.45	-10 ÷ +50	CE; cURus;

Technical specifications



Standard flow / Reverse flow





General specifications

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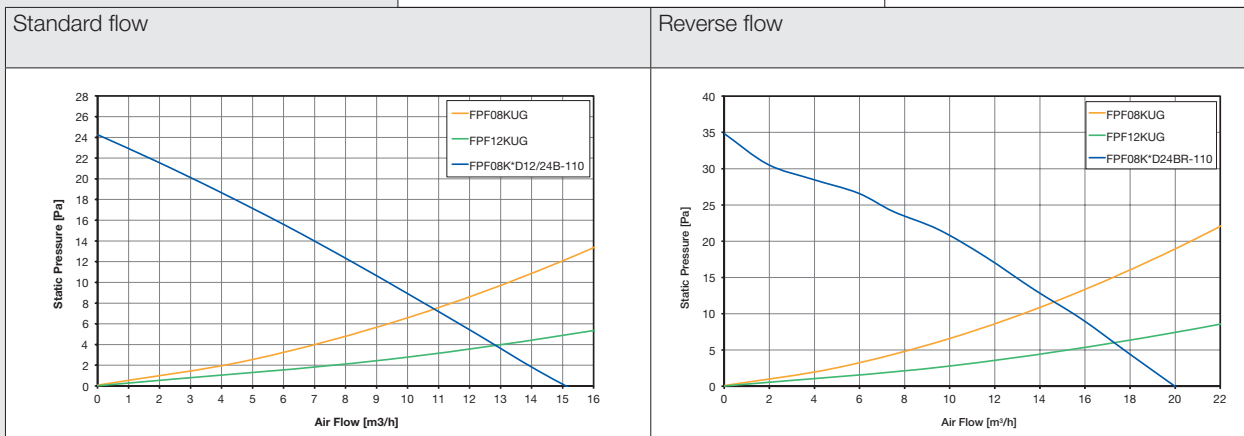
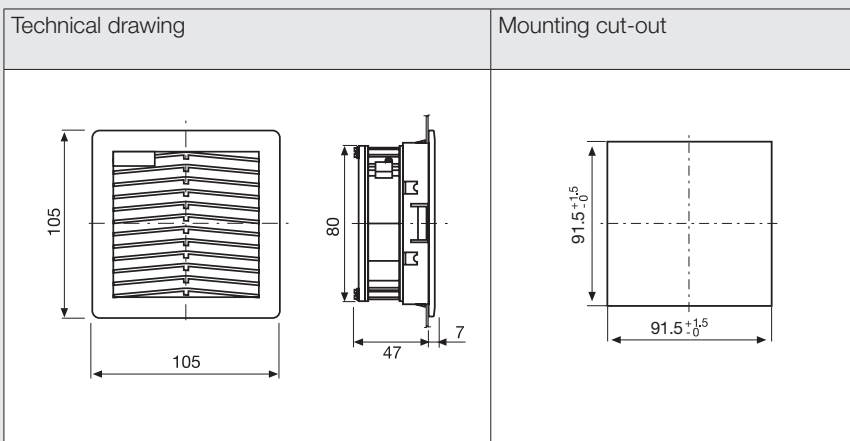


- ▶ Clip mounting system
- ▶ Low profile

Technical data

Model	Rated Voltage	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF08KUD12B-110	12 V d.c.	0.183	2.2	15	24	32.5	0.23	-10 ÷ +70	CE;
FPF08KUD24B-110	24 V d.c.	0.150	3.6	15	24	32.5	0.23	-10 ÷ +50	CE; cURus;
FPF08KUD24BR-110	24 V d.c.	0.150	3.6	20	35	32.5	0.23	-10 ÷ +50	CE; cURus;

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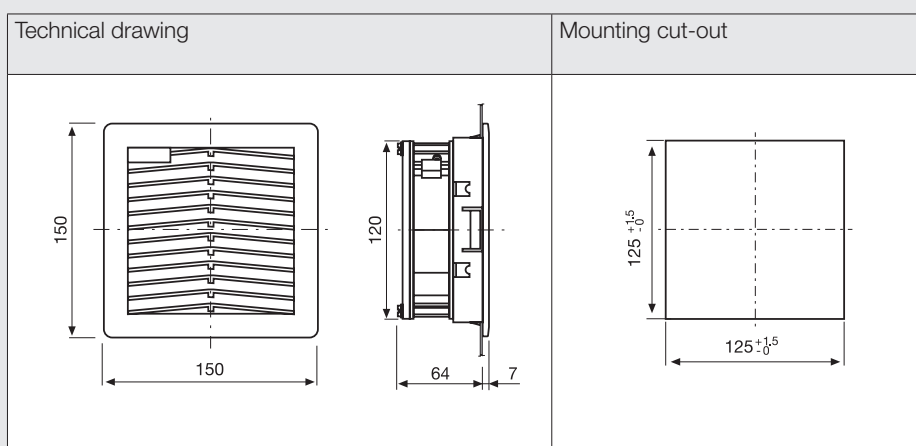


- ▶ Clip mounting system
- ▶ Low profile

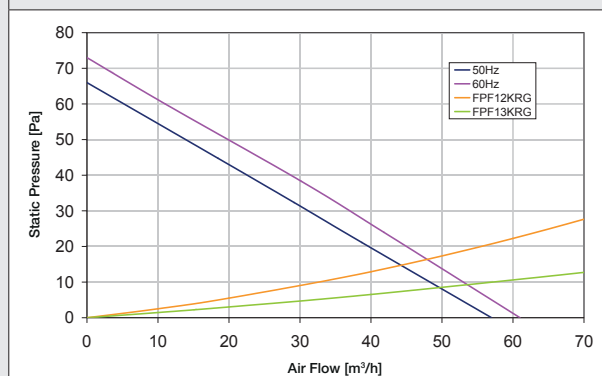
Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF12KU115BE-110	115 V a.c.	50/60	0.210/0.180	20/18	57/61	66/73	46.0/49.0	0.78	-10 ÷ +50	CE; cURus;
FPF12KU115BER-110	115 V a.c.	50/60	0.210/0.180	20/18	57/61	66/73	46.0/49.0	0.79	-10 ÷ +50	CE; cURus;
FPF12KU230BE-110	230 V a.c.	50/60	0.125/0.110	20/19	57/61	66/73	46.0/49.0	0.78	-10 ÷ +50	CE; cURus;
FPF12KU230BER-110	230 V a.c.	50/60	0.125/0.110	20/19	57/61	66/73	46.0/49.0	0.78	-10 ÷ +50	CE; cURus;
FPF12KR24BE-110	24 V a.c.	50/60	0.810/0.850	15/16	57/61	66/73	46.0/49.0	0.78	-10 ÷ +50	CE;
FPF12KU24BER-110	24 V a.c.	50/60	0.810/0.850	15/16	57/61	66/73	46.0/49.0	0.78	-10 ÷ +50	CE;

Technical specifications



Standard flow / Reverse flow





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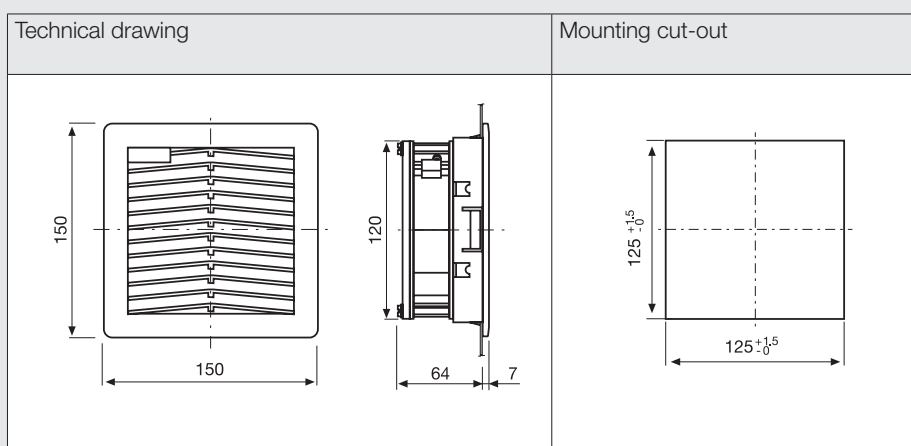


- ▶ Clip mounting system
- ▶ Low profile

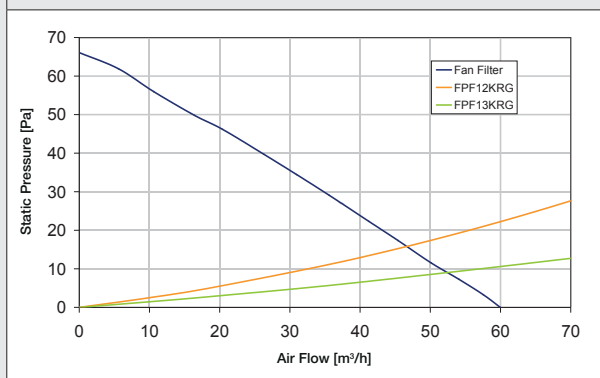
Technical data

Model	Rated Voltage	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF12KUD24B-110	24 V d.c.	0.400	9.6	60	66	42.5	0.55	-10 ÷ +50	CE; cURus;
FPF12KUD24BR-110	24 V d.c.	0.400	9.6	60	66	42.5	0.55	-10 ÷ +50	CE; cURus;
FPF12KUD48B-110	48 V d.c.	0.160	7.7	60	66	42.5	0.55	-10 ÷ +55	CE;

Technical specifications



Standard flow / Reverse flow





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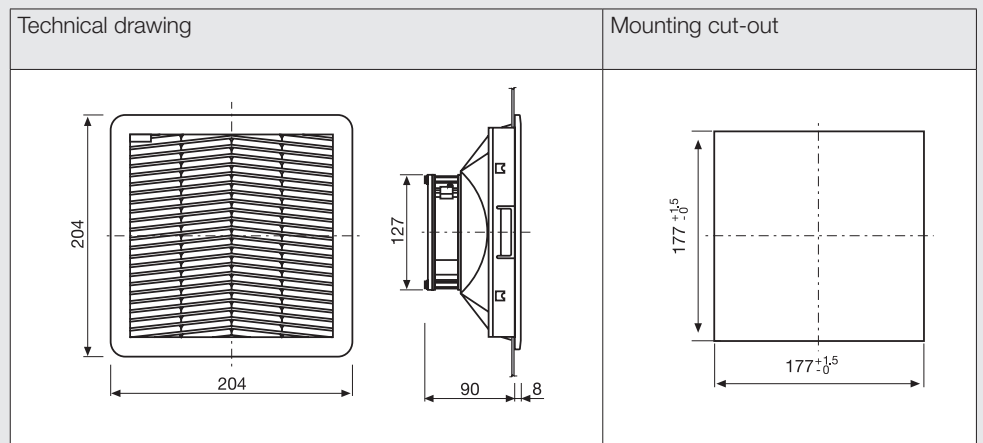


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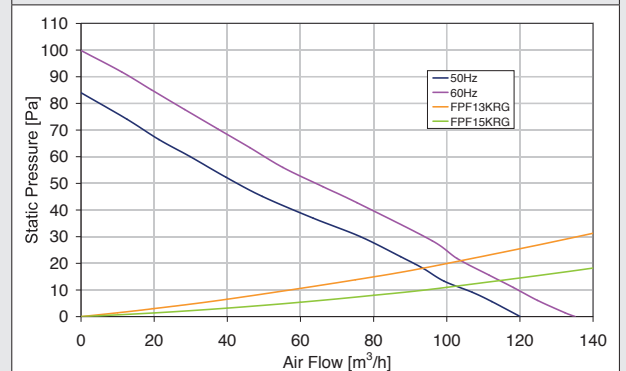
Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF13KU115BE-110	115 V a.c.	50/60	0.200/0.160	22/20	120/135	84/100	46.0/50.0	1.11	-10 ÷ +50	CE; cURus;
FPF13KU115BER-110	115 V a.c.	50/60	0.200/0.160	22/20	120/135	84/100	46.0/50.0	1.11	-10 ÷ +50	CE; cURus;
FPF13KU230BE-110	230 V a.c.	50/60	0.100/0.090	23/21	120/135	84/100	46.0/50.0	1.09	-10 ÷ +50	CE; cURus;
FPF13KU230BER-110	230 V a.c.	50/60	0.100/0.090	23/21	120/135	84/100	46.0/50.0	1.09	-10 ÷ +50	CE; cURus;

Technical specifications



Standard flow / Reverse flow





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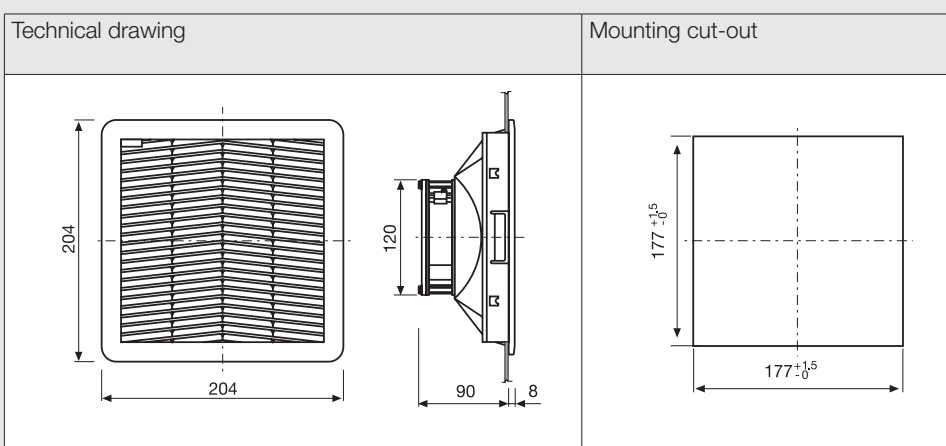


- ▶ Clip mounting system
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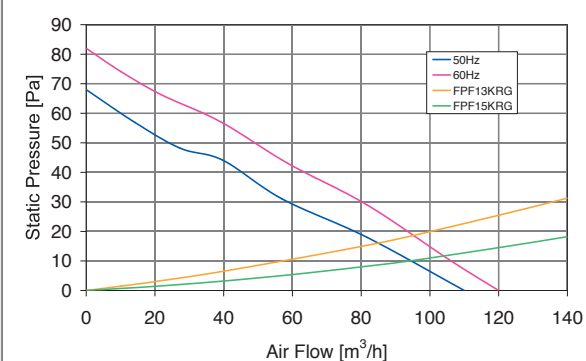
Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF13KPU115BE-110	115 V a.c.	50/60	0.210/0.180	20/18	110/120	68/82	46.0/50.0	1.05	-10 ÷ +50	CE; cURus;
FPF13KPU115BER-110	115 V a.c.	50/60	0.210/0.180	20/18	110/120	68/82	46.0/50.0	1.05	-10 ÷ +50	CE; cURus;
FPF13KPU230BE-110	230 V a.c.	50/60	0.125/0.110	20/19	110/120	68/82	46.0/50.0	1.04	-10 ÷ +50	CE; cURus;
FPF13KPU230BER-110	230 V a.c.	50/60	0.125/0.110	20/19	110/120	68/82	46.0/50.0	1.04	-10 ÷ +50	CE; cURus;

Technical specifications



Standard flow / Reverse flow





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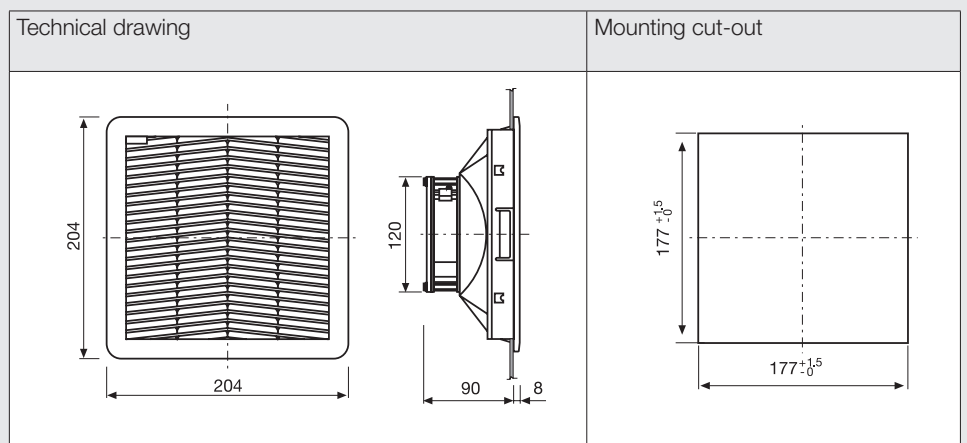


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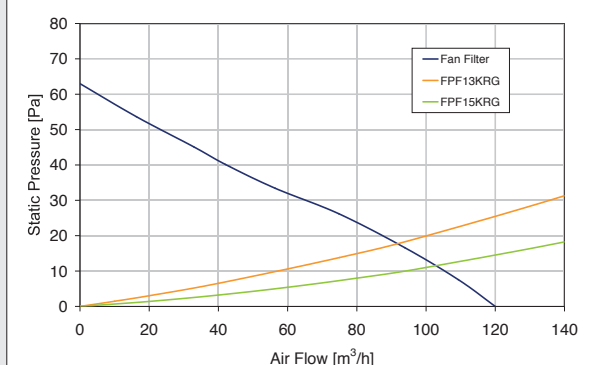
Technical data

Model	Rated Voltage	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF13KPRD24B-110	24 V d.c.	0.400	9.6	120	63	42.5	0.81	-10 ÷ +50	CE; cURus;
FPF13KPRD24BR-110	24 V d.c.	0.400	9.6	120	63	42.5	0.81	-10 ÷ +50	CE; cURus;

Technical specifications



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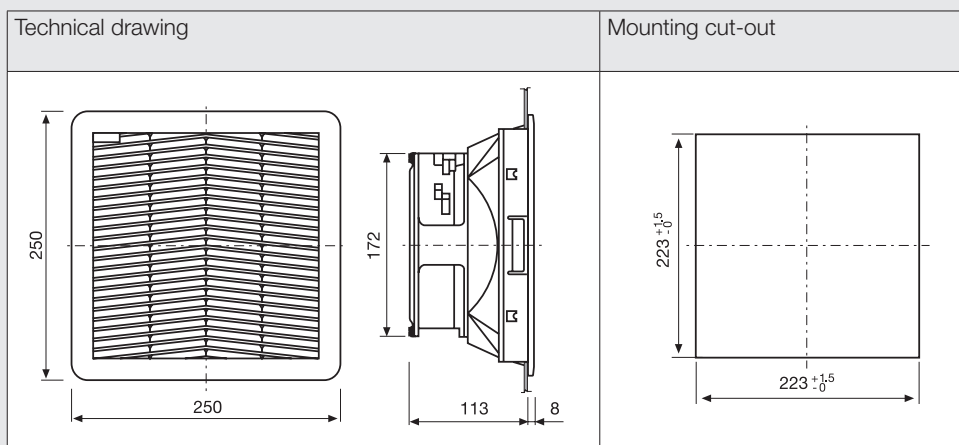


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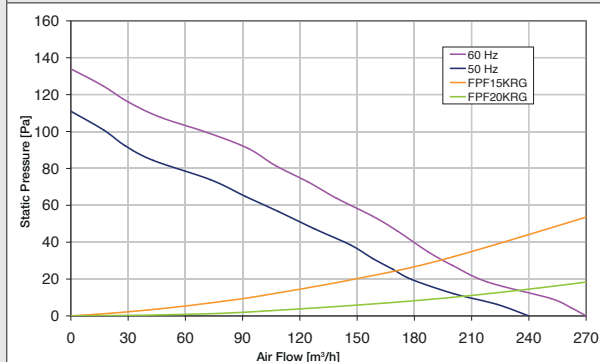
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Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF15KU115BE-110	115 V a.c.	50/60	0.265/0.274	30/30	240/270	111/134	50.0/55.0	1.78	-10 ÷ +50	CE; cURus;
FPF15KU115BER-110	115 V a.c.	50/60	0.265/0.274	30/30	240/270	111/134	50.0/55.0	1.78	-10 ÷ +50	CE; cURus;
FPF15KU230BE-110	230 V a.c.	50/60	0.132/0.130	29/29	240/270	111/134	50.0/55.0	1.78	-10 ÷ +50	CE; cURus;
FPF15KU230BER-110	230 V a.c.	50/60	0.132/0.130	29/29	240/270	111/134	50.0/55.0	1.78	-10 ÷ +50	CE; cURus;

Technical specifications



Standard flow / Reverse flow





General specifications

- Mounting without screws in square openings as indicated in the cut-out diagram
- Plate thickness between 1.5 and 2.2mm
- Plastic parts in PC/ABS alloy
- Permanent sealing gasket in polyurethane foam
- Filter media in thermo-linked progressive structure synthetic fibre
- filter class G3 (optionally filter class G4), according to EN 779
- Filter media can be cleaned, up to 10 times by washing, blowing dry and lightly beating
- IP55, Type1 and EMC versions on request
- UL approval according to UL 508

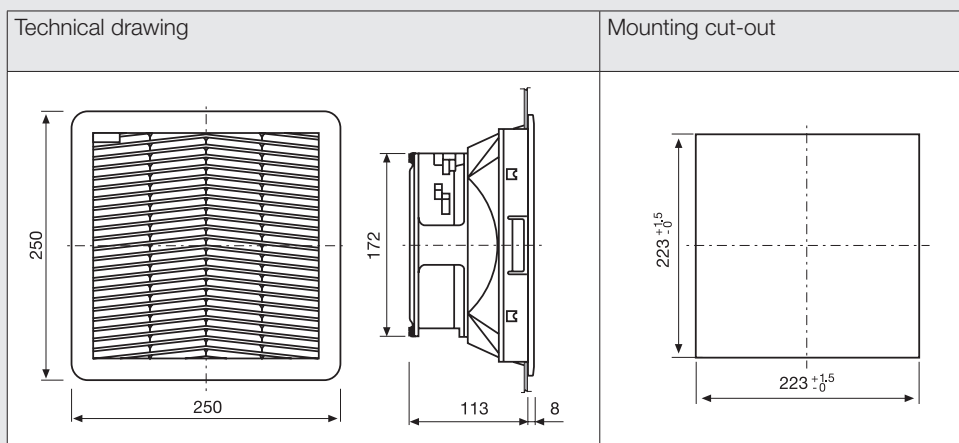


- ▶ Clip mounting system
- ▶ Low profile

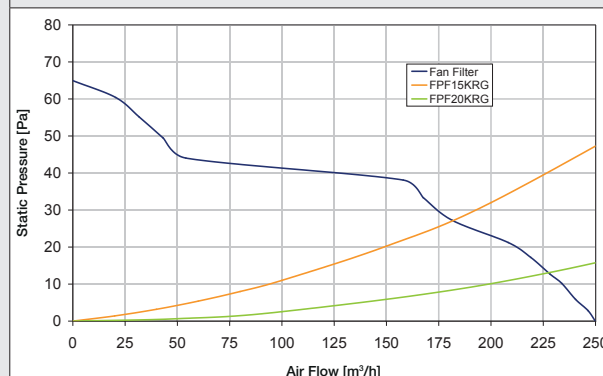
Technical data

Model	Rated Voltage	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF15KRD24BR-110	24 V d.c.	0.95	23	250	65	64.0	1.63	-10 ÷ +50	CE; cURus;
FPF15KUD24B-110	24 V d.c.	0.95	23	250	65	64.0	1.63	-10 ÷ +50	CE; cURus;
FPF15KUD48B-110	48 V d.c.	0.370	18	250	65	64.0	1.77	-10 ÷ +55	CE;

Technical specifications



Standard flow / Reverse flow



General specifications



- Mounting without screws in square openings as indicated in the cut-out diagram
- Plate thickness between 1.5 and 2.2mm
- Plastic parts in PC/ABS alloy
- Permanent sealing gasket in polyurethane foam
- Filter media in thermo-linked progressive structure synthetic fibre
- filter class G3 (optionally filter class G4), according to EN 779
- Filter media can be cleaned, up to 10 times by washing, blowing dry and lightly beating
- IP55, Type1 and EMC versions on request
- UL approval according to UL 508



- ▶ Clip mounting system
- ▶ Low profile
- ▶ High performance

Technical data

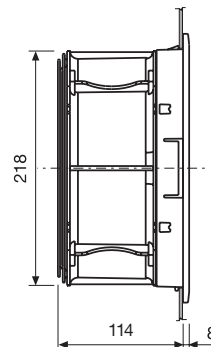
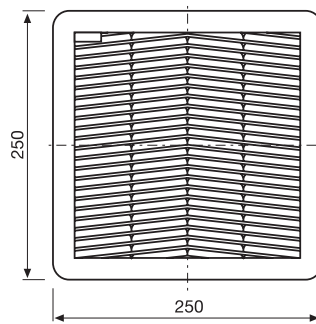
Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF15KGR115BE-130	115 V a.c.	50/60	0.60/0.65	58/70	360/400	160/180	66,0/69,2	2.88	-10 ÷ +70	CE; cURus;
FPF15KGU115BE-120	115 V a.c.	50/60	0.54/0.65	50/64	360/400	160/180	66,0/69,2	2.88	-10 ÷ +55	CE;
FPF15KGU115BER-120	115 V a.c.	50/60	0.54/0.65	50/64	360/400	160/180	66,0/69,2	2.88	-10 ÷ +55	CE;
FPF15KGR230BE-130	230 V a.c.	50/60	0.320/0.380	70/85	360/400	160/180	63.3/68.1	2.86	-10 ÷ +70	CE; cURus;
FPF15KGU230BE-120	230 V a.c.	50/60	0.300/0.382	67/87	360/400	160/180	63.3/68.1	2.86	-10 ÷ +50	CE;

Technical data

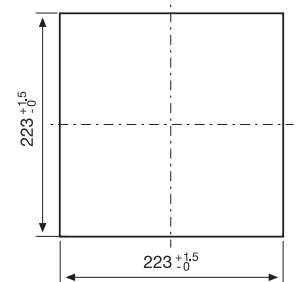
Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF15KGU230BER-120	230 V a.c.	50/60	0.300/0.382	67/87	360/400	160/180	63.3/68.1	2.86	-10 ÷ +50	CE;
FPF15KGU400TBE-120	400 V a.c.	50/60	0.140/0.130	71/93	360/400	160/180	69.8/72.7	3.01	-10 ÷ +55	CE;
FPF15KGU400TBER-120	400 V a.c.	50/60	0.140/0.130	71/93	360/400	160/180	69.8/72.7	3.01	-10 ÷ +55	CE;

Technical specifications

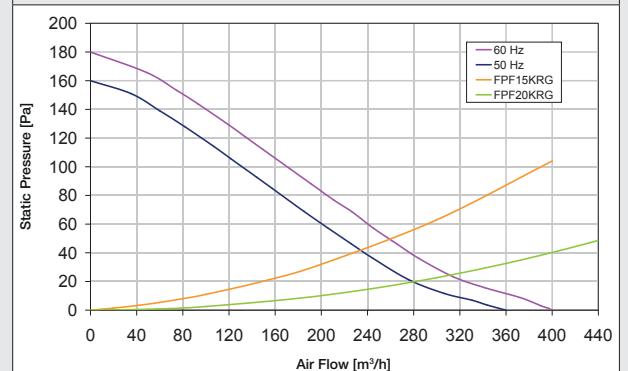
Technical drawing



Mounting cut-out



Standard flow / Reverse flow





General specifications

- Mounting without screws in square openings as indicated in the cut-out diagram
- Plate thickness between 1.5 and 2.2mm
- Plastic parts in PC/ABS alloy
- Permanent sealing gasket in polyurethane foam
- Filter media in thermo-linked progressive structure synthetic fibre
- filter class G3 (optionally filter class G4), according to EN 779
- Filter media can be cleaned, up to 10 times by washing, blowing dry and lightly beating
- IP55, Type1 and EMC versions on request
- UL approval according to UL 508

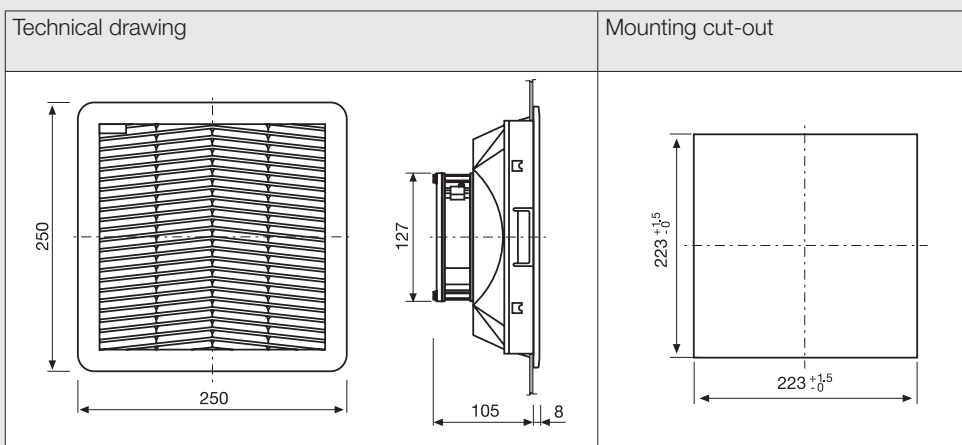


- ▶ Clip mounting system
- ▶ Low profile

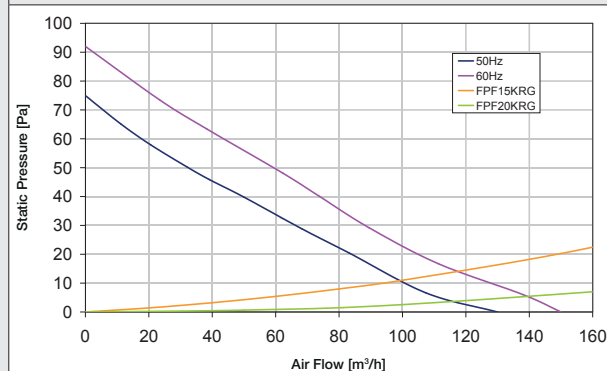
Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF15KMR115BER-110	115 V a.c.	50/60	0.200/0.160	17/15	130/150	75/92	46.0/50.0	1.49	-10 ÷ +50	CE; cURus;
FPF15KMU115BE-110	115 V a.c.	50/60	0.200/0.160	17/15	130/150	75/92	46.0/50.0	1.49	-10 ÷ +50	CE; cURus;
FPF15KMU230BE-110	230 V a.c.	50/60	0.100/0.090	23/21	130/150	75/92	46.0/50.0	1.47	-10 ÷ +50	CE; cURus;
FPF15KMU230BER-110	230 V a.c.	50/60	0.100/0.090	23/21	130/150	75/92	46.0/50.0	1.47	-10 ÷ +50	CE; cURus;

Technical specifications



Standard flow / Reverse flow





General specifications

- Mounting without screws in square openings as indicated in the cut-out diagram
- Plate thickness between 1.5 and 2.2mm
- Plastic parts in PC/ABS alloy
- Permanent sealing gasket in polyurethane foam
- Filter media in thermo-linked progressive structure synthetic fibre
- filter class G3 (optionally filter class G4), according to EN 779
- Filter media can be cleaned, up to 10 times by washing, blowing dry and lightly beating
- IP55, Type1 and EMC versions on request
- UL approval according to UL 508

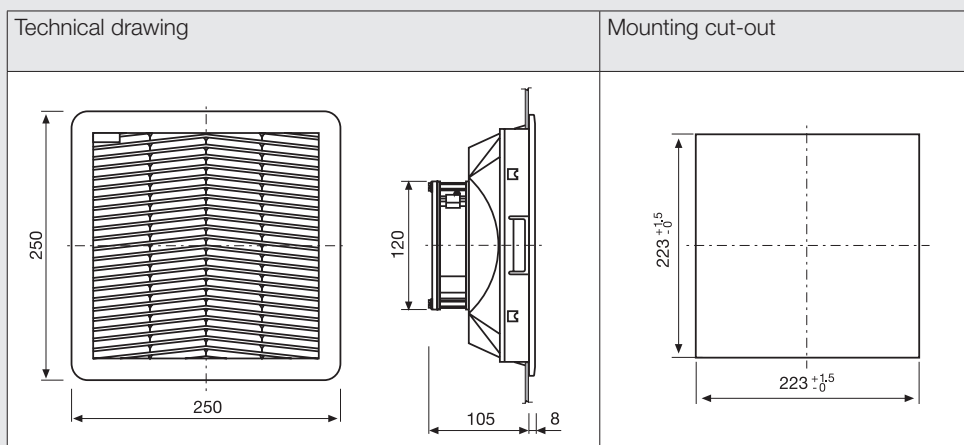


- ▶ Clip mounting system
- ▶ Low profile

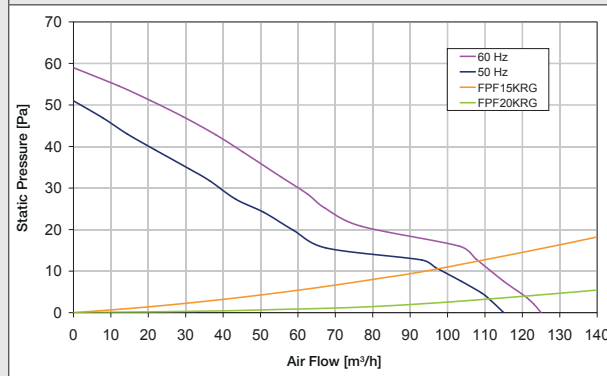
Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF15KPR115BE-110	115 V a.c.	50/60	0.210/0.180	20/18	115/125	51/59	46.0/50.0	1.43	-10 ÷ +50	CE; cURus;
FPF15KPR115BER-110	115 V a.c.	50/60	0.210/0.180	20/18	115/125	51/59	46.0/50.0	1.43	-10 ÷ +50	CE; cURus;
FPF15KPU230BE-110	230 V a.c.	50/60	0.125/0.110	20/19	115/125	51/59	46.0/50.0	1.43	-10 ÷ +50	CE; cURus;
FPF15KPU230BER-110	230 V a.c.	50/60	0.125/0.110	20/19	115/125	51/59	46.0/50.0	1.43	-10 ÷ +50	CE; cURus;

Technical specifications



Standard flow / Reverse flow





General specifications

- Mounting without screws in square openings as indicated in the cut-out diagram
- Plate thickness between 1.5 and 2.2mm
- Plastic parts in PC/ABS alloy
- Permanent sealing gasket in polyurethane foam
- Filter media in thermo-linked progressive structure synthetic fibre
- filter class G3 (optionally filter class G4), according to EN 779
- Filter media can be cleaned, up to 10 times by washing, blowing dry and lightly beating
- IP55, Type1 and EMC versions on request
- UL approval according to UL 508

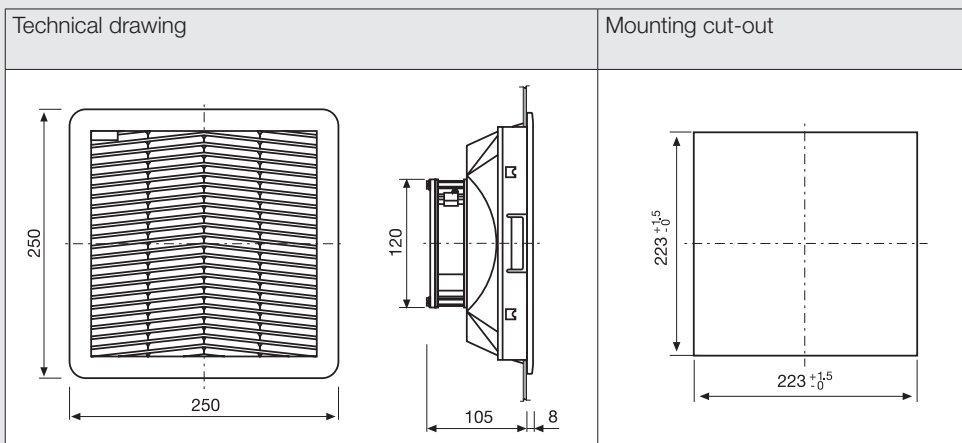


- ▶ Clip mounting system
- ▶ Low profile

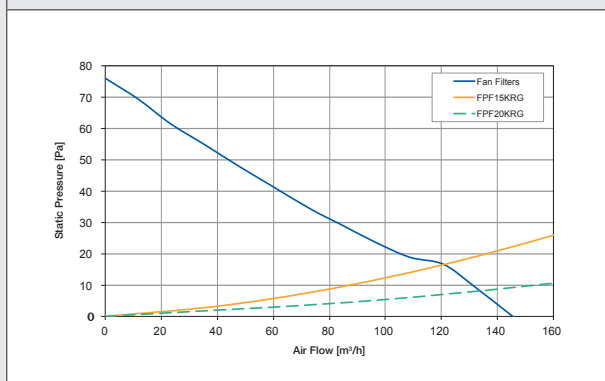
Technical data

Model	Rated Voltage	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF15KPRD24BR-110	24 V d.c.	0.400	9.6	145	76	42.5	1.19	-10 ÷ +50	CE; cURus;
FPF15KPUD24B-110	24 V d.c.	0.400	9.6	145	76	42.5	1.19	-10 ÷ +50	CE; cURus;
FPF15KPRD48B-110	48 V d.c.	0.160	7.7	145	76	42.5	1.19	-10 ÷ +55	CE;
FPF15KPRD48BR-110	48 V d.c.	0.160	7.7	145	76	42.5	1.19	-10 ÷ +55	CE;

Technical specifications



Standard flow / Reverse flow





General specifications

- Mounting without screws in square openings as indicated in the cut-out diagram
- Plate thickness between 1.5 and 2.2mm
- Plastic parts in PC/ABS alloy
- Permanent sealing gasket in polyurethane foam
- Filter media in thermo-linked progressive structure synthetic fibre
- filter class G3 (optionally filter class G4), according to EN 779
- Filter media can be cleaned, up to 10 times by washing, blowing dry and lightly beating
- IP55, Type1 and EMC versions on request
- UL approval according to UL 508



- ▶ Clip mounting system
- ▶ Low profile

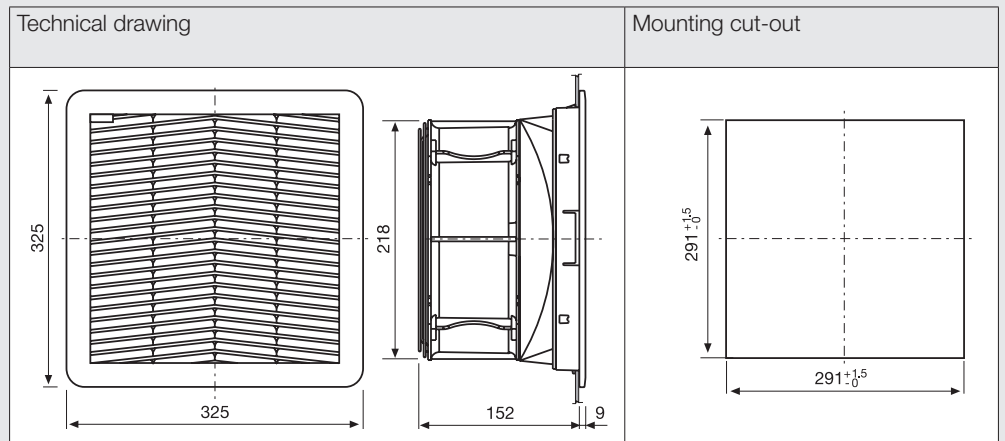
Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF20KR115BE-130	115 V a.c.	50/60	0.60/0.65	58/70	520/580	160/186	74.7/78.9	3.6	-10 ÷ +70	CE; cURus;
FPF20KU115BE-120	115 V a.c.	50/60	0.54/0.65	50/64	520/580	160/186	66.0/69.2	3.58	-10 ÷ +55	CE;
FPF20KU115BE-130	115 V a.c.	50/60	0.60/0.65	58/70	520/580	160/186	66,0/69,2	3.58	-10 ÷ +70	CE; cURus;
FPF20KU115BER-120	115 V a.c.	50/60	0.54/0.65	50/64	520/580	160/186	66.0/69.2	3.58	-10 ÷ +55	CE;
FPF20KR230BE-130	230 V a.c.	50/60	0.326/0.391	70/85	520/580	160/186	65.3/68.1	3.58	-10 ÷ +70	CE; cURus;
FPF20KU230BE-120	230 V a.c.	50/60	0.335/0.405	77/92	520/580	160/186	65.3/68.1	3.56	-10 ÷ +50	CE;

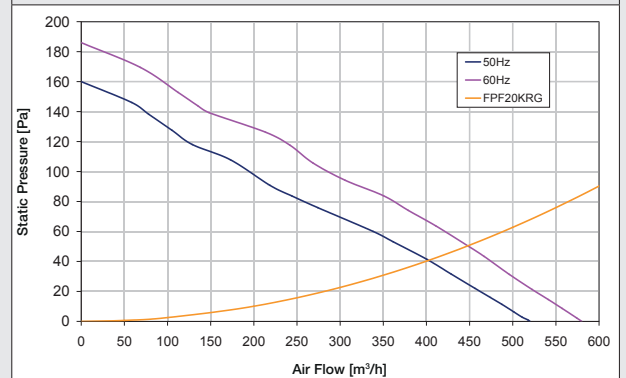
Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF20KU230BE-130	230 V a.c.	50/60	0.300/0.360	70/85	520/580	160/186	65,3/68,1	3.56	-10 ÷ +70	CE; cURus;
FPF20KU230BER-120	230 V a.c.	50/60	0.300/0.382	67/87	520/580	160/186	65.3/68.1	3.56	-10 ÷ +50	CE;
FPF20KR400TBER-120	400 V a.c.	50/60	0.140/0.130	71/93	520/580	160/186	69.8/72.7	3.73	-10 ÷ +55	CE;
FPF20KU400TBE-120	400 V a.c.	50/60	0.140/0.130	71/93	520/580	160/186	69.8/72.7	3.71	-10 ÷ +55	CE;

Technical specifications



Standard flow / Reverse flow





General specifications

- Mounting without screws in square openings as indicated in the cut-out diagram
- Plate thickness between 1.5 and 2.2mm
- Plastic parts in PC/ABS alloy
- Permanent sealing gasket in polyurethane foam
- Filter media in thermo-linked progressive structure synthetic fibre
- filter class G3 (optionally filter class G4), according to EN 779
- Filter media can be cleaned, up to 10 times by washing, blowing dry and lightly beating
- IP55, Type1 and EMC versions on request
- UL approval according to UL 508



- ▶ Clip mounting system
- ▶ Low profile
- ▶ High performance

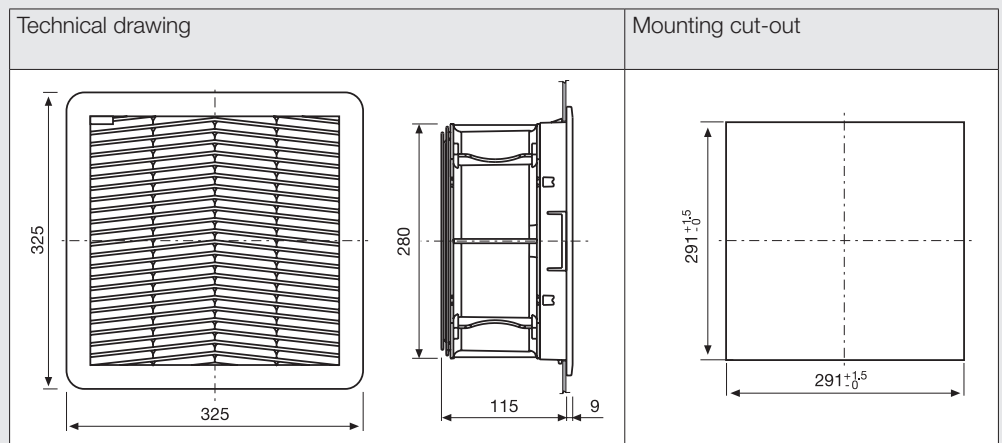
Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF20KGR115BE-130	115 V a.c.	50/60	1.4/1.5	112/148	660/745	220/222	74.7/78.9	4.31	-10 ÷ +70	CE; cURus;
FPF20KGU115BE-120	115 V a.c.	50/60	0.96/1.3	107/143	660/745	220/222	74.7/78.9	4.43	-10 ÷ +55	CE;
FPF20KGU115BE-130	115 V a.c.	50/60	1.4/1.5	112/148	660/745	220/222	74.7/78.9	4.29	-10 ÷ +70	CE; cURus;
FPF20KGU115BER-120	115 V a.c.	50/60	0.96/1.3	107/143	660/745	220/222	74.7/78.9	4.43	-10 ÷ +55	CE;
FPF20KGR230BE-130	230 V a.c.	50/60	0.60/0.72	111/140	660/745	220/222	68.0/70.0	4.43	-10 ÷ +70	CE; cURus;

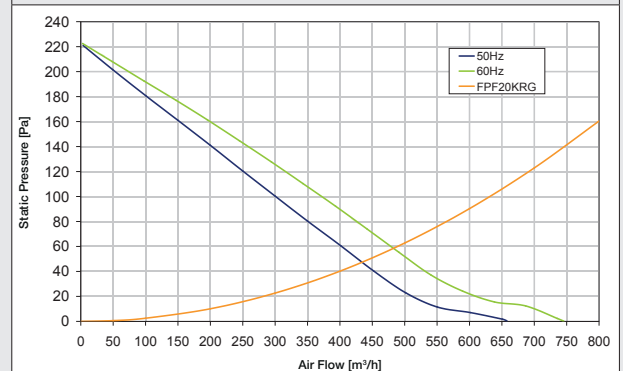
Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
FPF20KGU230BE-120	230 V a.c.	50/60	0.50/0.72	111/140	660/745	220/222	72.8/75.8	4.26	-10 ÷ +55	CE;
FPF20KGU230BE-130	230 V a.c.	50/60	0.60/0.72	111/140	660/745	220/222	68.0/70.0	4.41	-10 ÷ +70	CE; cURus;
FPF20KGU230BER-120	230 V a.c.	50/60	0.50/0.72	111/140	660/745	220/222	72.8/75.8	4.26	-10 ÷ +55	CE;
FPF20KGR400TBER-120	400 V a.c.	50/60	0.180/0.200	93/123	660/745	220/222	76.0/79.0	4.78	-10 ÷ +55	CE;

Technical specifications



Standard flow / Reverse flow

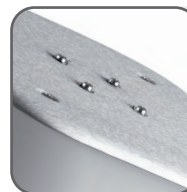
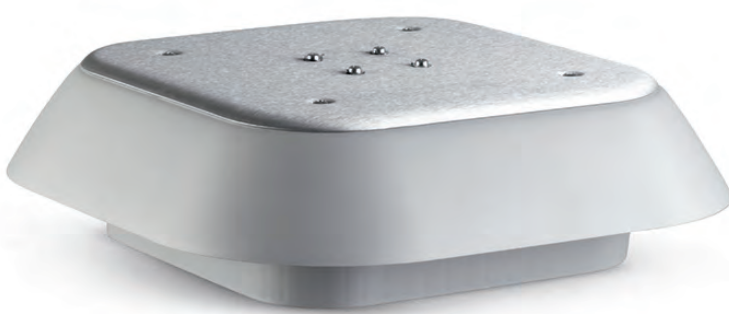


ROOF EXHAUST UNITS

Roof exhaust units are commonly used in restricted spaces to dissipate hot air that is extracted from the top of enclosures.

These units can be provided with an exhaust filter for either convection cooling or forced air-cooling in combination with a fan.

TP SERIES



CASING MATERIAL
Plastic structure with aluminum top

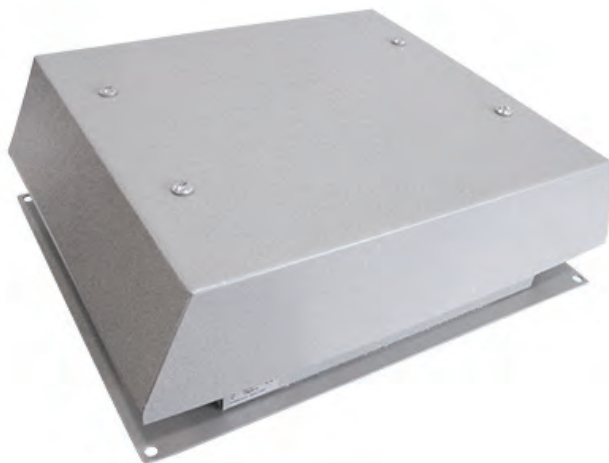


PROTECTION
Available in 4 different protection classes



VENTILATION
Natural air convection or forced air

T SERIES



CASING MATERIAL
Metal structure

HIGH PERFORMANCE VERSION (T22)

Model numbering system for TP SERIES

<i>description</i>	TP	19	R	115	B	A	-	SXX	<i>description</i>
FAMILY TP / T TP = small plastic T = large metallic									CUSTOM SERIES SXX = custom version
FAN DIMENSION									
COLOUR R = ral 7032 U = ral 7035 N = ral 9005									VERSION A = anodized
VOLTAGE () = no voltage 115 = 115 V.a.c. 230 = 230 V.a.c.									DESIGN



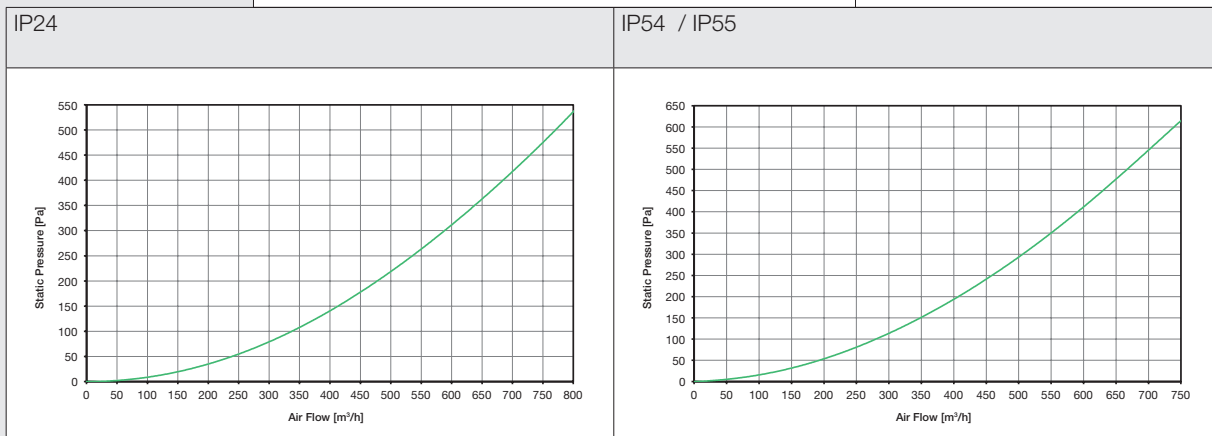
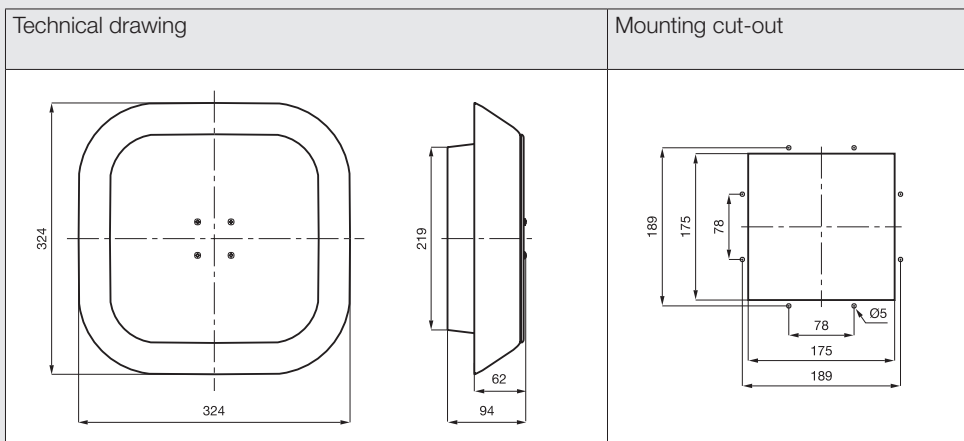
General specifications

- Mounting by nr. 8 Ø4x16 mm screws for thermoplastic material in square openings as indicated in the cut-out diagram
- Plate thickness: any
- Plastic parts in PC/ABS alloy and aluminum cover
- Standard color RAL 7035, other colors available on request, subject to quantity
- Permanent sealing gasket in polyurethane foam
- UL approval according to UL 508 and CSA approval according to CSA/CAN 22.2 No. 14



Technical data		
Model	Protection Degree	Approvals
	IP	
TP19U1	IP24	CE; cULus; cURus; cCSAus;
TP19U541	IP54	CE; cULus; cURus; cCSAus;
TP19U551	IP55	CE; cULus; cURus; cCSAus;

Technical specifications





General specifications

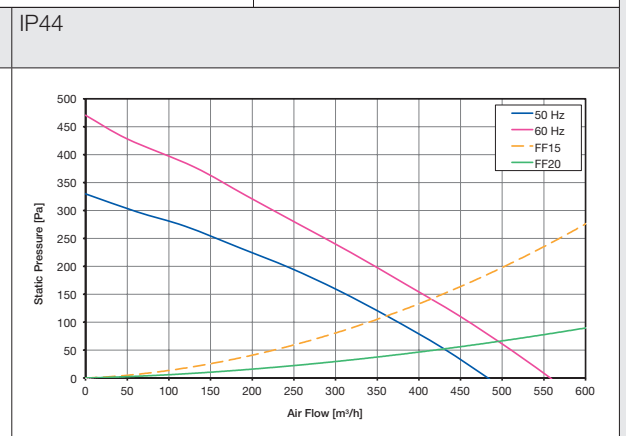
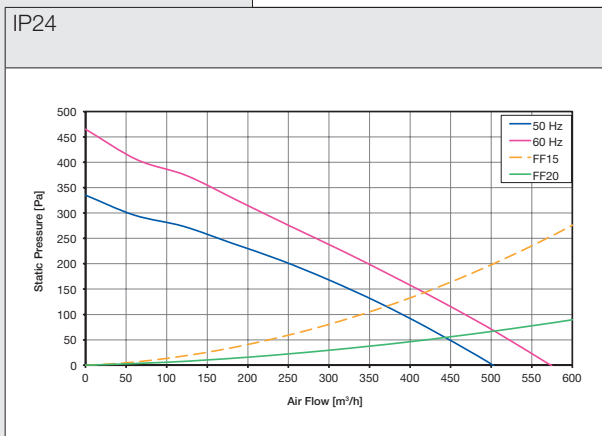
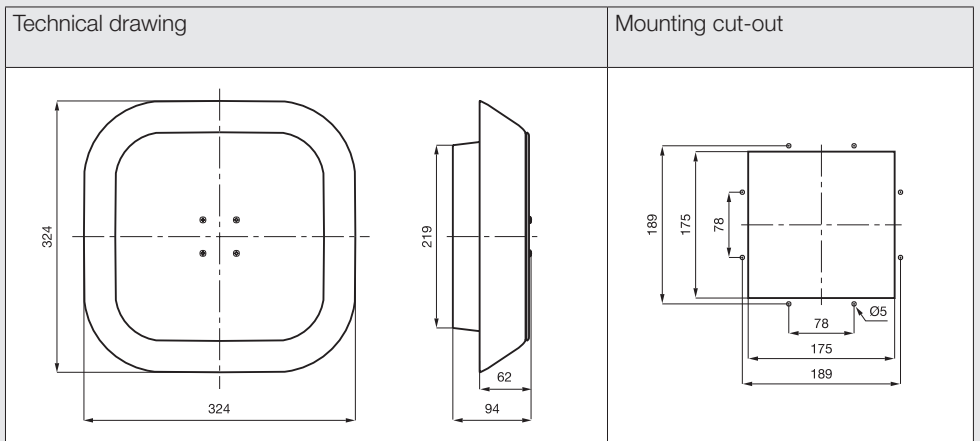
- Mounting by nr. 8 Ø4x16 mm screws for thermoplastic material in square openings as indicated in the cut-out diagram
- Plate thickness: any
- Plastic parts in PC/ABS alloy and aluminum cover
- Standard color RAL 7035, other colors available on request, subject to quantity
- Permanent sealing gasket in polyurethane foam
- UL approval according to UL 508 and CSA approval according to CSA/CAN 22.2 No. 14



Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
TP19U115B	115 V a.c.	50/60	0.55/0.65	62/75	500/575	335/465	67.9/71.0	2.54	-10 - +60	CE;
TP19U115B1	115 V a.c.	60	0.85	97	575	465	72.9	2.56	-10 - +55	CE; cULus; cURus; cCSAus;
TP19U115B441	115 V a.c.	60	0.85	97	560	470	71.9	2.64	-10 - +55	CE; cULus; cURus; cCSAus;
TP19U230B	230 V a.c.	50/60	0.307/0.361	67/83	500/575	335/465	67.9/71.0	2.53	-10 - +60	CE;
TP19U230B1	230 V a.c.	50/60	0.310/0.360	70/81	500/575	335/465	67.9/71.0	2.51	-10 - +55	CE; cULus; cURus; cCSAus;
TP19U230B44	230 V a.c.	50/60	0.309/0.354	69/81	485/560	330/470	67.9/71.0	2.62	-10 - +60	CE;
TP19U230B441	230 V a.c.	50/60	0.310/0.360	70/81	485/560	330/470	67.9/71.0	2.6	-10 - +55	CE; cULus; cURus; cCSAus;

Technical specifications





General specifications

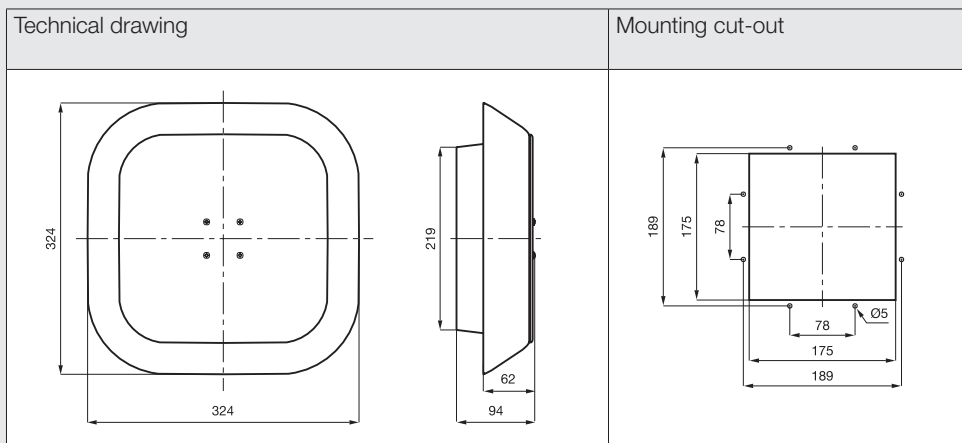
- Mounting by nr. 8 Ø4x16 mm screws for thermoplastic material in square openings as indicated in the cut-out diagram
- Plate thickness: any
- Plastic parts in PC/ABS alloy and aluminum cover
- Standard color RAL 7035, other colors available on request, subject to quantity
- Permanent sealing gasket in polyurethane foam
- UL approval according to UL 508 and CSA approval according to CSA/CAN 22.2 No. 14



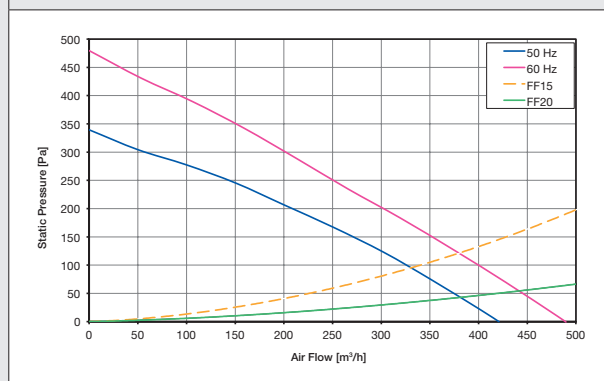
Technical data

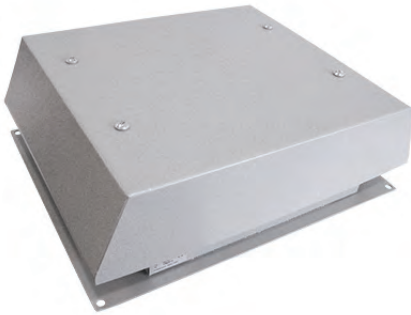
Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
TP19U115B54	115 V a.c.	50/60	0.62/0.64	66/74	420/490	340/480	67.9/71.0	2.63	-10 - +60	CE;
TP19U115B541	115 V a.c.	60	0.85	97	490	480	71.9	2.65	-10 - +55	CE; cULus; cURus; cCSAus;
TP19U115B55	115 V a.c.	50/60	0.62/0.64	66/74	420/490	340/480	67.9/71.0	2.63	-10 - +60	CE;
TP19U115B551	115 V a.c.	60	0.85	97	490	480	71.9	2.66	-10 - +55	CE; cULus; cURus; cCSAus;
TP19U230B54	230 V a.c.	50/60	0.309/0.360	70/83	420/490	340/480	67.9/71.0	2.62	-10 - +60	CE;
TP19U230B541	230 V a.c.	50/60	0.310/0.360	70/81	420/490	340/480	67.9/71.0	2.61	-10 - +55	CE; cULus; cURus; cCSAus;
TP19U230B55	230 V a.c.	50/60	0.309/0.360	70/83	420/490	340/480	67.9/71.0	2.63	-10 - +60	CE;
TP19U230B551	230 V a.c.	50/60	0.310/0.360	70/81	420/490	340/480	67.9/71.0	2.61	-10 - +55	CE; cURus; cCSAus;

Technical specifications



IP54 / IP55





General specifications

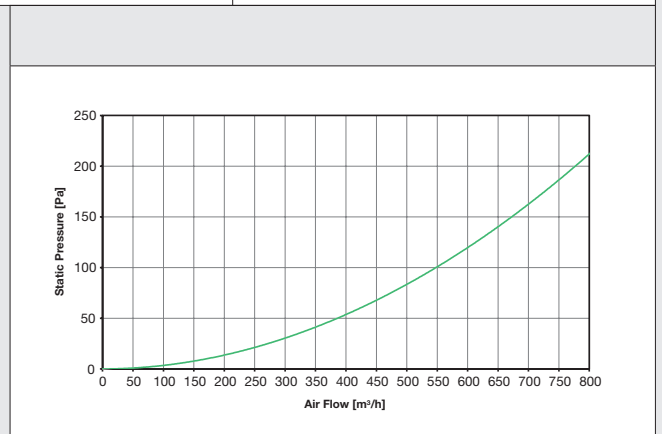
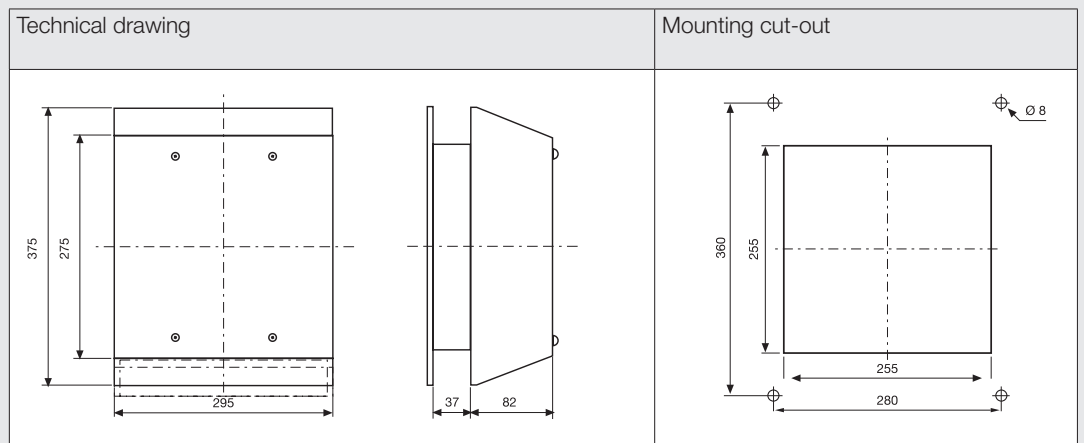
- Mounting by nr. 4 M6 screws in square openings as indicated in the cut-out diagram
- Plate thickness: any
- Epoxy painted steel casing
- Permanent sealing gasket in polyurethane foam
- Standard color RAL 7035 and RAL 7032

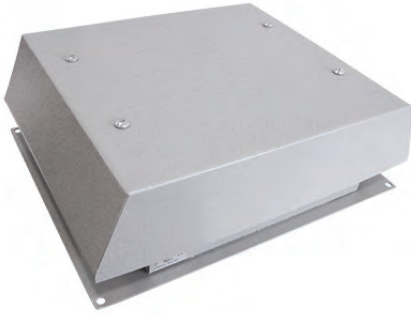


Technical data

Model	Approvals
T19UK	CE;

Technical specifications





General specifications

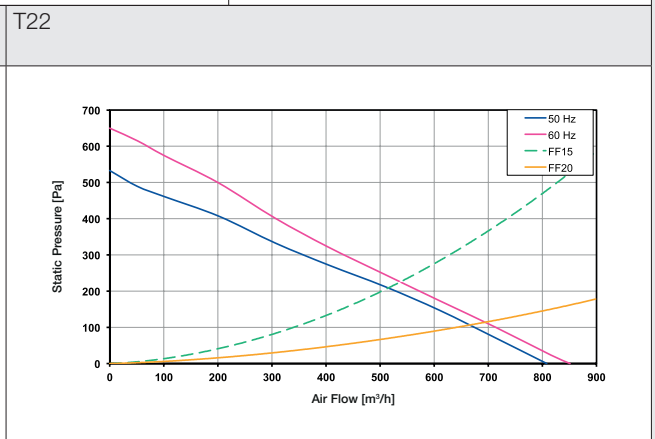
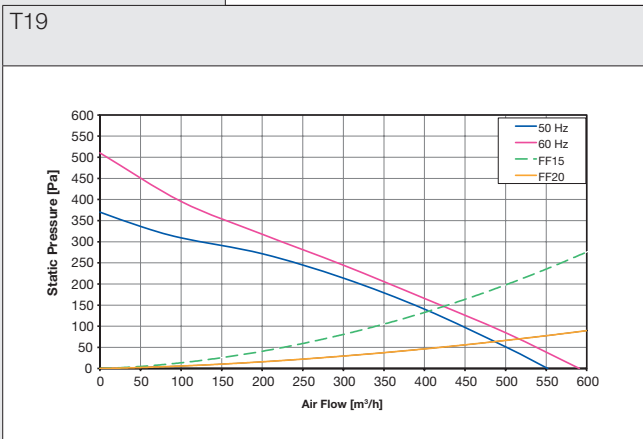
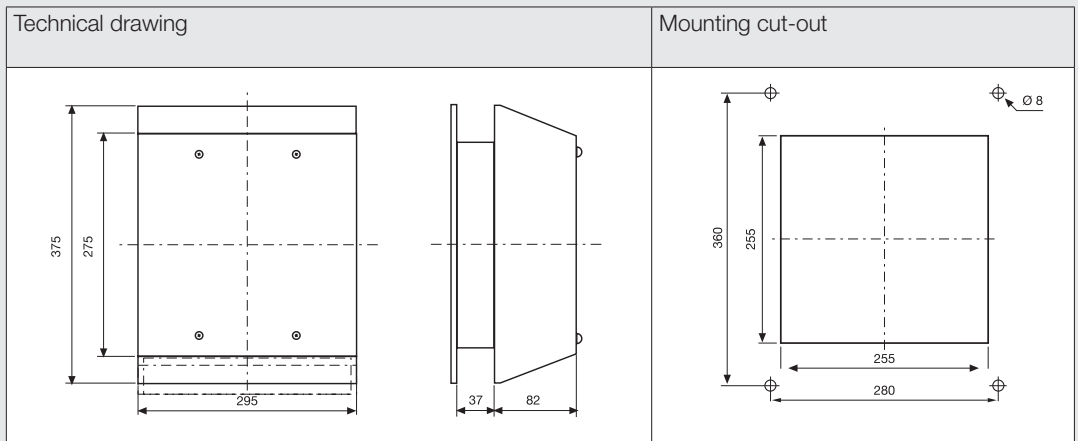
- Mounting by nr. 4 M6 screws in square openings as indicated in the cut-out diagram
- Plate thickness: any
- Epoxy painted steel casing
- Permanent sealing gasket in polyurethane foam
- Standard color RAL 7035 and RAL 7032



Technical data

Model	Rated Voltage	Freq.	Rated Current	Rated power	Max air flow	Static Pressure	Noise	Weight	Working Temp. Range	Approvals
	V	Hz	A	W	m³/h	Pa	dB(A)	Kg	°C	
T19R115B	115 V a.c.	50/60	0.53/0.62	58/71	550/590	370/510	67.9/71.0	5.53	-20 ÷ +60	CE;
T19R230B	230 V a.c.	50/60	0.290/0.340	62/78	550/590	370/510	67.9/71.0	5.53	-20 ÷ +60	CE;
T19U115B	115 V a.c.	50/60	0.53/0.62	58/71	550/590	370/510	67.9/71.0	5.92	-20 ÷ +60	CE;
T19U230B	230 V a.c.	50/60	0.290/0.340	62/78	550/590	370/510	67.9/71.0	5.91	-20 ÷ +60	CE;
T22R115B	115 V a.c.	50/60	1.1/1.5	130/170	800/850	520/650	74.0/75.6	6.36	-20 ÷ +60	CE;
T22R230B	230 V a.c.	50/60	0.56/0.70	125/161	800/850	520/650	75.2/76.7	6.28	-20 ÷ +60	CE;
T22U115B	115 V a.c.	50/60	1.10/1.50	130/170	800/850	520/650	74.0/75.6	6.74	-20 ÷ +60	CE;
T22U230B	230 V a.c.	50/60	0.56/0.70	125/161	800/850	520/650	75.2/76.7	6.65	-20 ÷ +60	CE;

Technical specifications





General specifications

The adaptor is a plastic frame, which allows the filter fan installation in a semi built-in position in the electric cabinet, reducing the internal dimensions.

- Available for FPF series in 150x150mm, 250x250mm and 325x325mm sizes
- Standard color RAL 7035 and 7032 grey, other colors on request

Technical data

Model	Description
FPFA12-7032G	for FPF12 series
FPFA12-7035G	for FPF12 series
FPFA12-9005G	for FPF12 series
FPFA15-7032G	for FPF15 series
FPFA15-7035G	for FPF15 series
FPFA20-7011G	for FPF20 series
FPFA20-7032G	for FPF20 series
FPFA20-7035G	for FPF20 series

Technical specifications

FPFA12	FPFA15	FPFA20



General specifications

The stainless steel hose-proof protection hood is particularly suitable for outdoors applications or in the food industry. This cover protects against splashing water and solid foreign objects and it is easily washable.

- Available for FPF series in all sizes
- AISI 304 stainless steel cover of 1mm with bayonet joint on support
- Stainless steel support of 0.6mm to apply between base and clips



Technical data	
Model	Description
SSC-08	for FPF08 series
SSC-12	for FPF12 series
SSC-13	for FPF13 series
SSC-15	for FPF15 series
SSC-20	for FPF20 series

Technical specifications

	SSC-08	SSC-12
SSC-13	SSC-15	SSC-20



General specifications

The filter media are made of high performance nonwovens produced from elastic, break-resistant polyolefin fibers with thermal bonding.

- High arrestance throughout their entire useful lifetime, thus providing maximized operational reliability
- The filter media can be cleaned, up to 10 times, by careful washing, blowing dry and lightly beating
- Available for FPF series in all sizes
- G4 not for FPF08 models

G3

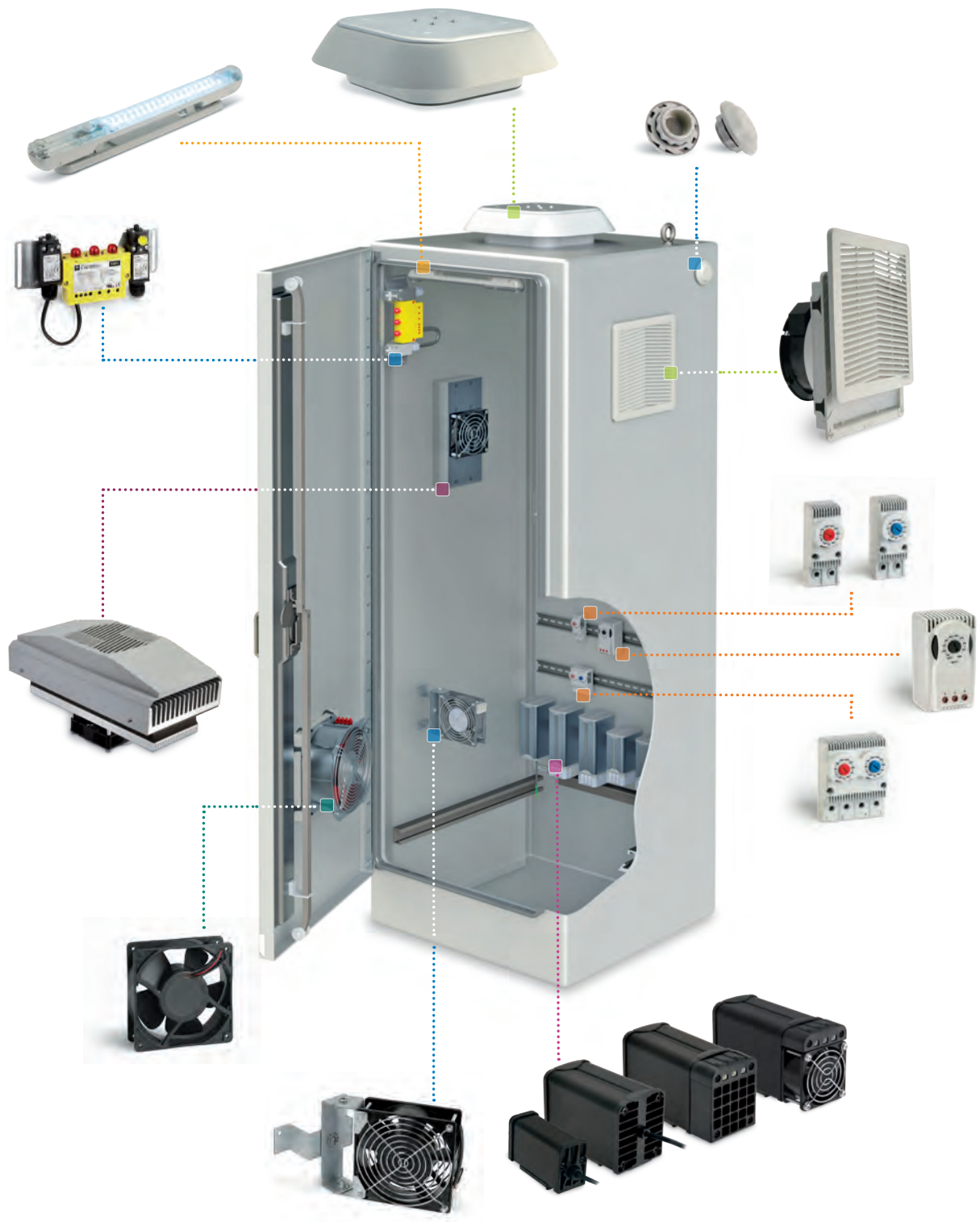
G4

▶ 6 pcs. kit

Technical data

Model	Description	Filtration Class
M08FPFK	for FPF08 series	G3
M12FPF5K	for FPF12 series	G4
M12FPFK	for FPF12 series	G3
M13FPF5K	for FPF13 series	G4
M13FPFK	for FPF13 series	G3
M15FPF5K	for FPF15 series	G4
M15FPFK	for FPF15 series	G3
M20FPF5K	for FPF20 series	G4
M20FPFK	for FPF20 series	G3

Fandis. Solutions for enclosures



Fandis offers different solutions to satisfy enclosure needs:

- > VENTILATION SYSTEMS
- > AMBIENT CONTROL SYSTEMS

- > CLIMATE CONTROL SYSTEMS
- > ELECTRO-TECHNICAL SYSTEMS

LIMITED LIABILITY AND WARRANTY DISCLAIMER

The Manufacturer hereby makes no representation or warranties expressed or implied, statutory or otherwise. All implied warranties, including those of merchantability or fitness for use are hereby disclaimed.

The product is made in conformity with the cogent standards provided for by European Health and Safety legislation.

Where expressly indicated, the product conforms to the standard of Safety and Performance defined by recognised international bodies and subject to their periodic verification.

Any loss or damage, both incidental and consequential, for any failure to perform or delay to perform due to wrong use or wrong installation of the product, as well as to the non-observance of technical specifications, are not covered by the Manufacturer's warranty.

The buyer alone is responsible to determine the suitability of the product.

The data indicated in the catalogue is purely indicative. The product is subject to wear.

Electrical connections must be carried out in compliance with pertinent national, state or local health and safety laws.

If the apparatus in which the product is incorporated should guarantee continuous use without variation or interruption in performance, the product must be utilised only in the presence of a device which immediately signals any functional anomaly or arrest, allowing immediate intervention or the activation of an auxiliary product.

If installed and/or integrated in other apparatus, the use and maintenance manual of the apparatus must also indicate the correct use of our product and its working characteristics and must prescribe its estimated life, before the product actually reaches the maximum working hours shown in the data sheets, that is to say, taking account of all the specific conditions of use and of the technical specifications supplied and must supply exhaustive information allowing the user to substitute the product (removal & substitution).

Any fan found to be defective within the limits of the warranty, will be replaced free of charge. Costs of labour or other extra subsequent costs relative to the removal, restitution or new installation of the fan are not covered by the product warranty.

Sales Conditions and Data Sheets available on www.fandis.it

Other models are available on request, subject to quantities.

Colors of engineering.

Fandis is an international point of reference for thermal management systems (thermal solutions) in industrial and professional fields.

Forever oriented to service excellence, Fandis quality is certified for the entire process of production and research into the design of advanced solutions.

Fandis today, thanks to experience accumulated over 30 years of activity, provides a valued technological partnership for all its clients.



Fandis S.p.A.
Via per Castelletto 69 - 28040 Borgo Ticino (NO) - Italy
Tel. +39 0321 96 32 32 - Fax +39 0321 96 32 96
info@fandis.it

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