



FF13PA115UFR

standard with fan



Technical data		
APPROVALS		
Approvals	CE; cURus; cULus; cCSAus	
PERFORMANCE		
Max Airflow	100/110	m³/h
Wax Allilow	59/65	CFM
Airflow with Exhaust Filter	68/79	m³/h
Almow with Exhaust Filter	40/46	CFM
Max Static Pressure	70/80	Pa
Wax Static Fressure	0.28/0.32	in H2O
ELECTRICAL DATA		
Rated Voltage	115	V a.c.
Rated Current	0.215/0.2	А
Rated Power	18/18	W
Operating Voltage	85-125	V a.c.
Frequency	50/60	Hz
Appliance Class	I	
Motor Protection	Impedance Protected	
MECHANICAL DATA		
Mounting Wall Thickness	1.3-3.2	mm
INDUITING WAIL THICKIESS	0.05-0.13	in
GENERIC DATA		
Spare Parts Filter Media	M13FPF-EU3	





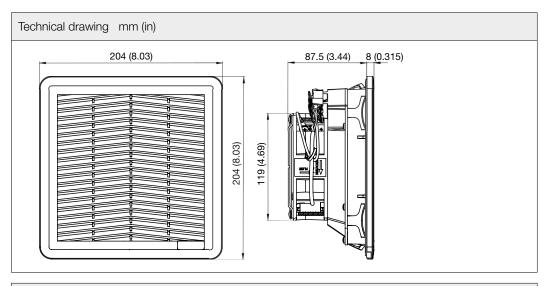
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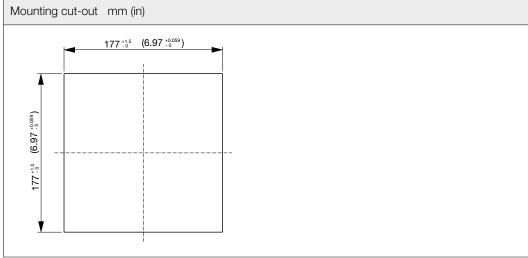
Technical data		
Casing Material	PC/ABS UL94 V-0	
RAL Number	7035	
Airflow Direction	Reverse	
Electrical Connection	Screwless Terminal Block	
Life Evenestanov	57000	h at 25 °C
Life Expectancy	57000	h at 77 °F
Wires Section	20-14	AWG
Wires Section	0.75-2.5	mm²
Fan Noise	46/49	dB(A)
Filter Class	ISO coarse 55%	ISO 16890
Filter Class	G3	EN 779
Filter Material	thermo-linked progressive structure synthetic fibre	
ENVIRONMENTAL AND THERMAL DATA		
IP Protection Degree	IP54	
Operating Temperature	-10÷55	°C
Operating remperature	14÷131	°F
Storage Temperature	-40÷70	°C
Storage Temperature	-40÷158	°F
UL DATA		
UL File Number Recognized Component	E237844	
UL File Number Listed	E500932	
UL Environmental Type Rating	Type 12	
UL Ambient Temperature	55	°C
OL Ambient Temperature	131	°F

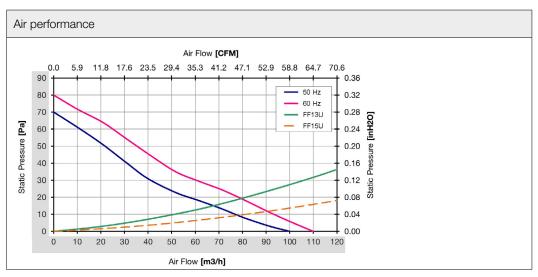




FF13PA115UFR











FF13PA230UN

standard with fan



Technical data			
APPROVALS			
Approvals	CE; cURus; cULus; cCSAus		
PERFORMANCE			
Max Airflow	110/130	m³/h	
Max Airliow	65/77	CFM	
Airflow with Exhaust Filter	84/100	m³/h	
Airnow with Exhaust Filter	49/59	CFM	
Max Static Pressure	80/100	Pa	
Max Static Pressure	0.32/0.40	in H2O	
ELECTRICAL DATA			
Rated Voltage	230	V a.c.	
Rated Current	0.126/0.11	А	
Rated Power	19/17	W	
Operating Voltage	184-253	V a.c.	
Frequency	50/60	Hz	
Appliance Class	I		
Motor Protection	Thermally Protected		
MECHANICAL DATA	MECHANICAL DATA		
Mounting Wall Thickness	1.3-3.2	mm	
Mounting Wall Thickness	0.05-0.13	in	
GENERIC DATA			
Spare Parts Filter Media	M13FPF-EU3		





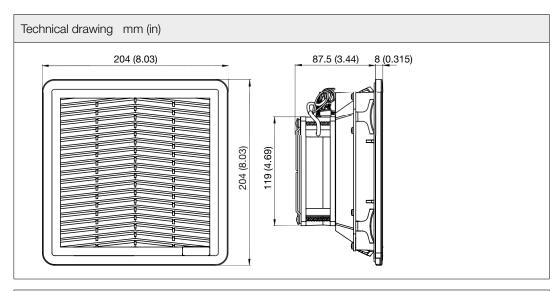
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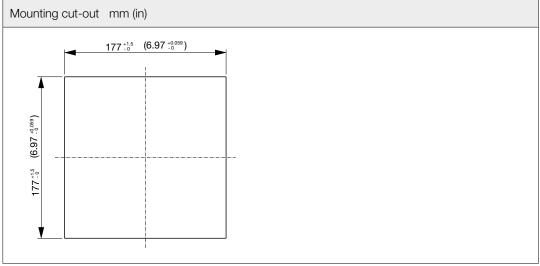
Technical data		
Casing Material	PC/ABS UL94 V-0	
RAL Number	7035	
Airflow Direction	Direct	
Electrical Connection	Screwless Terminal Block	
Life Expectancy	100000	h at 25 °C
Life Expectancy	100000	h at 77 °F
Wires Section	0.75-2.5	mm²
Wires Section	20-14	AWG
Fan Noise	40/44	dB(A)
Filter Class	G3	EN 779
Filter Class	ISO coarse 55%	ISO 16890
Filter Material	thermo-linked progressive structure synthetic fibre	
ENVIRONMENTAL AND THERMAL DATA		
IP Protection Degree	IP54	
Operating Temperature	-10÷55	°C
Operating remperature	14÷131	°F
Storage Temperature	-40÷70	°C
Storage Temperature	-40÷158	°F
UL DATA		
UL File Number Recognized Component	E237844	
UL File Number Listed	E500932	
OL File Nulliber Listed		
UL Environmental Type Rating	Type 12	
	Type 12 55	°C

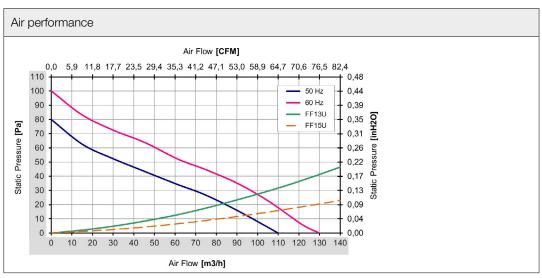




FF13PA230UN











FF13PA230UNR

standard with fan



Technical data		
APPROVALS		
Approvals	CE; cURus; cULus; cCSAus	
PERFORMANCE		
Max Airflow	112/132	m³/h
Wax Airnow	66/78	CFM
Airflow with Exhaust Filter	87/104	m³/h
Airliow with Exhaust Filter	51/61	CFM
Max Static Pressure	98/121	Pa
Max Static Pressure	0.39/0.49	in H2O
ELECTRICAL DATA		
Rated Voltage	230	V a.c.
Rated Current	0.128/0.11	А
Rated Power	19/18	W
Operating Voltage	184-253	V a.c.
Frequency	50/60	Hz
Appliance Class	I	
Motor Protection	Thermally Protected	
MECHANICAL DATA		
Mounting Well Thickness	1.3-3.2	mm
Mounting Wall Thickness	0.05-0.13	in
GENERIC DATA		
Spare Parts Filter Media	M13FPF-EU3	





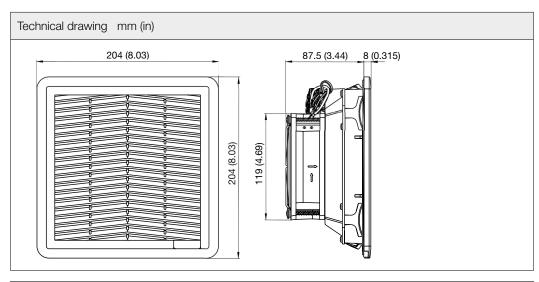
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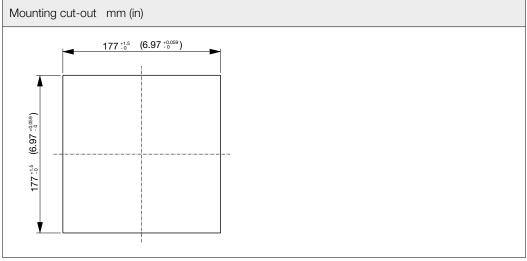
Technical data		
Casing Material	PC/ABS UL94 V-0	
RAL Number	7035	
Airflow Direction	Reverse	
Electrical Connection	Screwless Terminal Block	
Life Everenters	100000	h at 25 °C
Life Expectancy	100000	h at 77 °F
Wires Section	20-14	AWG
Wires Section	0.75-2.5	mm²
Fan Noise	40/44	dB(A)
Filter Class	ISO coarse 55%	ISO 16890
Filter Class	G3	EN 779
Filter Material	thermo-linked progressive structure synthetic fibre	
ENVIRONMENTAL AND THERMAL DATA		
IP Protection Degree	IP54	
Operating Temperature	-10÷55	°C
Operating remperature	14÷131	°F
Storage Temperature	-40÷70	°C
Storage Temperature	-40÷158	°F
UL DATA		
UL File Number Recognized Component	E237844	
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UL File Number Listed	E500932	
UL File Number Listed UL Environmental Type Rating	Type 12	
		°C

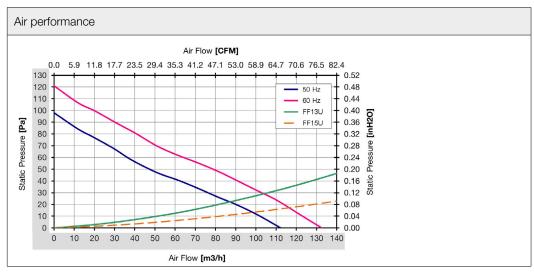




FF13PA230UNR











FF13PD24UN

standard with fan



Technical data			
APPROVALS			
Approvals	CE; UR; cULus; cCSAus		
PERFORMANCE			
Max Airflow	101	m³/h	
Wax Airilow	59	CFM	
Airflow with Exhaust Filter	76	m³/h	
Almow with Exhaust Filter	45	CFM	
Max Static Pressure	62	Pa	
Wax Static Flessure	0.25	in H2O	
ELECTRICAL DATA			
Rated Voltage	24	V d.c.	
Rated Current	0.342	A	
Rated Power	8.2	W	
Operating Voltage	10-26.7	V d.c.	
Motor Protection	Electronically Protected		
MECHANICAL DATA			
Mounting Wall Thickness	1.3-3.2	mm	
Wounting waii Thickness	0.05-0.13	in	
GENERIC DATA			
Spare Parts Filter Media	M13FPF-EU3		
Casing Material	PC/ABS UL94 V-0		
RAL Number	7035		





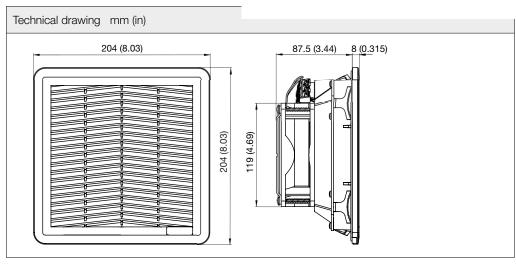
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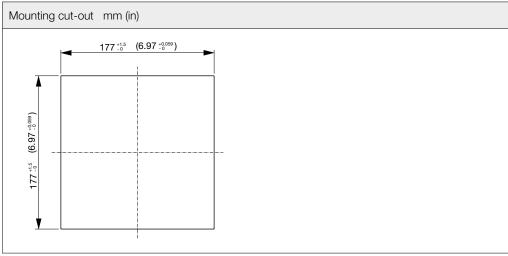
Technical data		
Airflow Direction	Direct	
Electrical Connection	Screwless Terminal Block	
17. 5	100000	h at 25 °C
Life Expectancy	100000	h at 77 °F
Wires Section	20-14	AWG
Wires Section	0.75-2.5	mm²
Fan Noise	42	dB(A)
Filter Class	ISO coarse 55%	ISO 16890
Filter Class	G3	EN 779
Filter Material	thermo-linked progressive structure synthetic fibre	
ENVIRONMENTAL AND THERMAL DATA		
IP Protection Degree	IP54	
O a a l'a a Tanana la a	-10÷55	°C
Operating Temperature	14÷131	°F
O	-40÷70	°C
Storage Temperature	-40÷158	°F
UL DATA		
UL File Number Recognized Component	E237844	
UL File Number Listed	E500932	
UL Environmental Type Rating	Type 12	
III Ambient Tenneneuster	55	°C
UL Ambient Temperature	131	°F

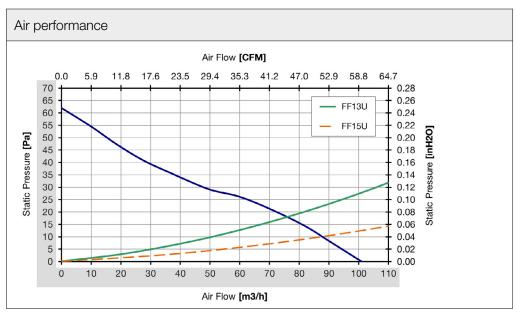




FF13PD24UN











FF13PD24UNR

standard with fan



Technical data		
APPROVALS		
Approvals	CE; UR; cULus; cCSAus	
PERFORMANCE		
Max Airflow	114	m³/h
Max All IIOW	67	CFM
Airflow with Exhaust Filter	96	m³/h
Almow with Exhaust Filter	57	CFM
Max Static Pressure	87	Pa
Max Static Flessure	0.35	in H2O
ELECTRICAL DATA		
Rated Voltage	24	V d.c.
Rated Current	0.355	А
Rated Power	8.5	W
Operating Voltage	10-26.7	V d.c.
Motor Protection	Electronically Protected	
MECHANICAL DATA		
Mounting Wall Thickness	1.3-3.2	mm
Woulding Wall Thickness	0.05-0.13	in
GENERIC DATA		
Spare Parts Filter Media	M13FPF-EU3	
Casing Material	PC/ABS UL94 V-0	
RAL Number	7035	





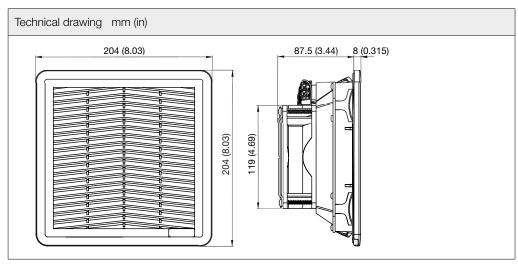
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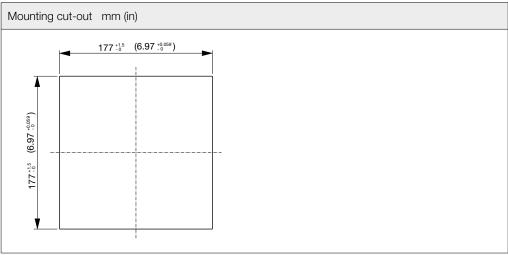
Technical data		
Airflow Direction	Reverse	
Electrical Connection	Screwless Terminal Block	
1.55	100000	h at 25 °C
Life Expectancy	100000	h at 77 °F
Wires Section	20-14	AWG
Wires Section	0.75-2.5	mm²
Fan Noise	42	dB(A)
Filter Class	ISO coarse 55%	ISO 16890
Filter Class	G3	EN 779
Filter Material	thermo-linked progressive structure synthetic fibre	
ENVIRONMENTAL AND THERMAL DATA		
IP Protection Degree	IP54	
Operating Temperature	-10÷55	°C
Operating remperature	14÷131	°F
Storage Temperature	-40÷70	°C
Storage remperature	-40÷158	°F
UL DATA		
UL File Number Recognized Component	E237844	
UL File Number Listed	E500932	
UL Environmental Type Rating	Type 12	
UL Ambient Temperature	55	°C
OL Ambient Temperature	131	°F

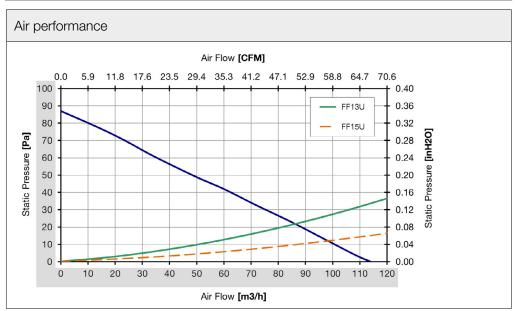




## FF13PD24UNR











FF13U standard without fan

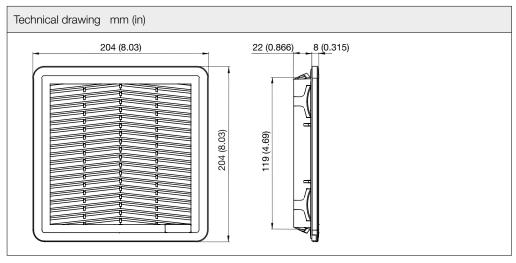


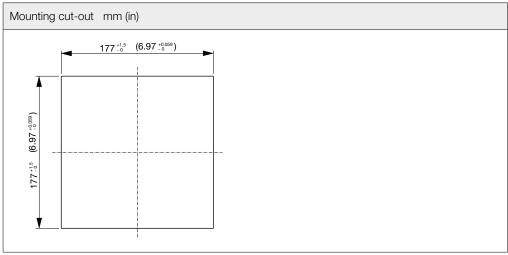
Technical data		
APPROVALS		
Approvals	CE; cURus; cULus; cCSAus	
MECHANICAL DATA		
Mounting Wall Thickness	1.3-3.2	mm
Woulding wall trickness	0.05-0.13	in
GENERIC DATA		
Spare Parts Filter Media	M13FPF-EU3	
Casing Material	PC/ABS UL94 V-0	
RAL Number	7035	
Filter Class	ISO coarse 55%	ISO 16890
Filter Class	G3	EN 779
Filter Material	thermo-linked progressive structure synthetic fibre	
ENVIRONMENTAL AND THERMAL DATA		
IP Protection Degree	IP54	
Operating Temperature	-30÷60	°C
Operating remperature	-22÷140	°F
Storage Temperature	-40÷70	°C
Storage remperature	-40÷158	°F
UL DATA		
UL File Number Recognized Component	E237844	
UL File Number Listed	E500932	
UL Environmental Type Rating	Type 12	
Technical data		

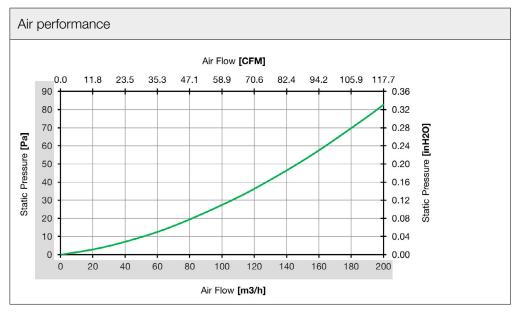
Technical data		
UL Ambient Temperature	60	°C
	140	°F



FF13U











FF13UC

EMC version without fan



Technical data		
APPROVALS		
Approvals	CE; cURus; cULus; cCSAus	
MECHANICAL DATA		
Mounting Wall Thickness	1.3-3.2	mm
	0.05-0.13	in
GENERIC DATA		
Spare Parts Filter Media	M13FPF-EU3	
Casing Material	PC/ABS UL94 V-0	
RAL Number	7035	
Filter Class	ISO coarse 55%	ISO 16890
Filter Class	G3	EN 779
Filter Material	thermo-linked progressive structure synthetic fibre	
ENVIRONMENTAL AND THERMAL DATA		
IP Protection Degree	IP54	
Operating Temperature	-30÷60	°C
	-22÷140	°F
Storage Temperature	-40÷70	°C
	-40÷158	°F
UL DATA		
UL File Number Recognized Component	E237844	
UL File Number Listed	E500932	
UL Environmental Type Rating	Type 12	
Technical data		
UL Ambient Temperature	60	°C
	140	°F



FF13UC

EMC version without fan

