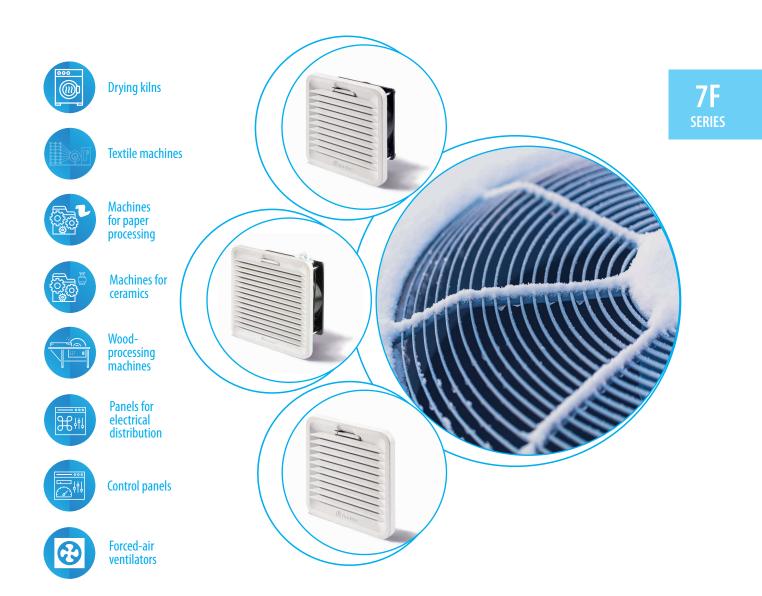


Filter Fan (24...630)m³/h and Exhaust Filter



FINDER reserves the right to alter characteristics at any time without notice. FINDER assumes no liability for damage to persons or property, caused as a result of the incorrect use or application of its products.

7F SERIES Filter Fan (24...630)m³/h

finder

Filter Fan for electrical cabinets and enclosures 120 V or 230 V AC versions	7F.20.8 .3	xx.1020 🚺	7F.20.8.)	0xx.2055 🔰	7F.20.8.>	xx.3100
 Very low acoustic noise Minimal depth within enclosure Air volume 24, 55 and 100 m³/h (free flow) Air volume 14, 40 and 75 m³/h (with Exhaust Filter installed in cabinet) Nominal voltage: 120 or 230 V AC (50/60 Hz) Time-saving installation and maintenance Easily replaceable filter mat Filter Fan supplied in Payora flow mode (75 pt) 	A A A A A A A A A A A A A A A A A A A					
• Filter Fan supplied in Reverse flow mode (7F.21)	 Nominal volta 120 or 230 V A Air volume 24 Rated power 1 Size 1 	C m³/h	 Nominal voltag 120 or 230 V A Air volume 55 Rated power 2 Size 2 	C m³/h	 Nominal voltag 120 or 230 V A Air volume 100 Rated power 2 Size 3 	C) m³/h
For outline drawing see page 14 Fan data						
Air volume (free flow) m ³ /h	2	4	5	5	10	00
Air volume (with exhaust filter installed) m ³ /h	1	4	4	0	7	5
Noise level dB (A)	2	7	42		42	
Life time at 40 °C h	50	000	50000		50000	
Electrical data						
Nominal voltage (U_N) V AC (50/60 Hz)	120	230	120	230	120	230
Operating range AC	(0.8	1.1)U _N	(0.8*	1.1)U _N	(0.8)	1.1)U _N
Current consumption A	0.23	0.1	0.25	0.12	0.25	0.12
Rated power W	17	17	28	28	28	28
Other data						
Housing, cover		Plastics a	according to UL94	V-0, light grey (R	RAL 7035)	
Filter mat (included)			rding to EN 779, fi			
Filter material	Synth		lf extinguishing, (Class F1 (DIN 534	re resistant to +1 38)	00 °C,
Electrical connections			Push-in t			
Wire size (mm²) min/max			0.7/			
Wire size (AWG) min/max				/14		
Ambient temperature range °C			-15	+55		
Ambient temperature range °C Protection class Protection category according to EN 60529 Protection category according to NEMA Approvals (according to type)						
Protection category according to EN 60529				54		
Protection category according to NEMA			Тур			
Approvals (according to type)			CE EAE of			

7F SERIES



Filter Fan for electrical cabinets and enclosures 120 V or 230 V AC versions	7F.50.8.>	(xx.4230	7F.50.8.>	xx.4370
 enclosures 120 V or 230 V AC versions Very low acoustic noise Minimal depth within enclosure Air volume 230 and 370 m³/h (free flow) Air volume 180 and 250 m³/h (with Exhaust Filter installed in cabinet) Nominal voltage: 120 or 230 V AC (50/60 Hz) Time-saving installation and maintenance Further available versions*: EMC Filter Fan (7F.70) and EMC Exhaust Filter (7F.07) Filter Fan supplied in Reverse flow mode (7F.80) * Product codes, see pages 8 & 11 	 7F.50.8.xxx.4230 Nominal voltage 120 or 230 V AC Air volume 230 m³/h Rated power 40 W Size 4 		 Nominal voltage 120 or 230 V AC Air volume 370 m³/h Rated power 70 W Size 4 	
For outline drawing see page 15				
Fan data				
Air volume (free flow) m ³ /h	23	30	37	70
Air volume (with exhaust filter installed) m ³ /h	180		25	50
Noise level dB (A)	5	3	6	5
Life time at 40 °C h	500	000	500	000
Electrical data				
Nominal voltage (U _N) V AC (50/60 Hz)	120	230	120	230
Operating range AC	(0.8)	1.1)U _N	(0.81	1.1)U _N
Current consumption A	0.34	0.17	0.8	0.4
Rated power W	40	40	70	70
Other data				
Housing, cover	Plastics a	ccording to UL94	4 V-0, light grey (R	AL 7035)
Filter mat (included)	G3 accor	rding to EN 779, f	iltering degree (8	090)%
Filter material	· ·	1 5	ive construction, 1 guishing, Class F1	
Electrical connections/wire size	3	-pole screw term	inals/max. 2.5 mm	1 ²
Screw torque Nm		C	.8	
Ambient temperature range °C		-10.	+70	
Protection class			I	
Protection category according to EN 60529		IP	54	
Approvals (according to type)				

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7F SERIES

Fan data					
Air volume (free flow)	m³/h	230		37	70
Air volume (with exhaust filter ins	talled) m³/h	180		250	
Noise level	dB (A)	5	3	65	
Life time at 40 °C	h	500	000	500	000
Electrical data					
Nominal voltage (U _N)	V AC (50/60 Hz)	120	230	120	230
Operating range	AC	(0.8	1.1)U _N	(0.81	I.1)U _N
Current consumption	А	0.34	0.17	0.8	0.4
Rated power	W	40	40	70	70
Other data					
Housing, cover		Plastics according to UL94 V-0, light grey (RAL 7035)			AL 7035)
Filter mat (included)		G3 according to EN 779, filtering degree (8090)%			090)%
Filter material		Synthetic fibre with progressive construction, temperat resistant to +100 °C, self extinguishing, Class F1 (DIN 534			
Electrical connections/wire size		3-pole screw terminals/max. 2.5 mm ²			1 ²
Screw torque	Nm	0.8			
Ambient temperature range	°C	-10+70			
Protection class		I			
Protection category according to	EN 60529	IP54			
Approvals (according to type)		CE [HI c730°us			

7F SERIES Filter Fan (24...630)m³/h



Filter Fan for electrical cabinets and	7F.50.8.xxx.5500	7F.50.8.xxx.5630
 Priter Pan for electrical cabinets and enclosures 120 V or 230 V AC versions Very low acoustic noise Minimal depth within enclosure Air volume 500 and 630 m³/h (free flow) Air volume 370 and 470 m³/h (with Exhaust Filter installed in cabinet) Nominal voltage: 120 or 230 V AC (50/60 Hz) Time-saving installation and maintenance Further available versions*: EMC Filter Fan (7F.70) and EMC Exhaust Filter (7F.07) Filter Fan supplied in Reverse flow mode (7F.80) * Product codes, see pages 8 & 11 Note: By reversing the fan motor, the air direction can be changed from "Inlet" Filter Fan mode to "Exhaust" Filter Fan mode** (except for the types 7F.50.8.xxx.4370, 7F.50.8.xxx.5500 and 7F.50.8.xxx.5630). ** Supplied in "Inlet" Filter Fan mode (Standard). 	7F.50.8.XXX.5500 Image: State of the state of	7F.50.8.xxx.5630 Image: Constant of the second
Fan data		
Fan data Air volume (free flow) m³/h	500	630
	500 370	630 470
Air volume (free flow) m ³ /h		
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/h	370	470
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)	370 65	470 72
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °Ch	370 65	470 72
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical data	370 65 50000	470 72 50000
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataNominal voltage (UN)V AC (50/60 Hz)	370 65 50000 120 230	470 72 50000 120 230
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataVNominal voltage (UN)V AC (50/60 Hz)Operating rangeAC	370 65 50000 120 230 (0.81.1)U _N	470 72 50000 120 230 (0.81.1)U _N
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataNominal voltage (UN)V AC (50/60 Hz)Operating rangeACCurrent consumptionA	370 65 50000 120 230 (0.81.1)U _N 0.8 0.4	470 72 50000 120 230 (0.81.1)U _N 1.10 0.55
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataVNominal voltage (UN)V AC (50/60 Hz)Operating rangeACCurrent consumptionARated powerWOther dataV	370 65 5000 120 230 (0.81.1)U _N 0.8 0.4 70 70	470 72 5000 120 230 (0.81.1)U _N 1.10 0.55 130 130
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataNominal voltage (UN)V AC (50/60 Hz)Operating rangeACCurrent consumptionARated powerWOther dataHousing, cover	370 65 50000 120 230 (0.81.1)U _N 0.8 0.4 70 70 Plastics according to ULS	470 72 50000 120 230 (0.81.1)U _N 1.10 0.55 130 130
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataNominal voltage (UN)V AC (50/60 Hz)Operating rangeACCurrent consumptionARated powerWOther dataHousing, coverFilter mat (included)	370 65 50000 120 230 (0.81.1)U _N 0.8 0.4 70 70 Plastics according to UL9 G3 according to EN 779,	470 72 5000 120 230 (0.81.1)U _N 1.10 0.55 130 130 4V-0, light grey (RAL 7035) filtering degree (8090)%
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataVNominal voltage (UN)V AC (50/60 Hz)Operating rangeACCurrent consumptionARated powerWOther dataVHousing, coverFilter mat (included)Filter materialV	370 65 5000 120 230 $(0.81.1)U_N$ 0.8 0.4 70 70 $Plastics according to ULS$ $G3 according to EN 779,$ $Synthetic fibre with progress resistant to +100 °C, self exti$	470 72 5000 120 230 (0.81.1)UN 1.10 0.55 130 130 4V-0, light grey (RAL 7035) filtering degree (8090)% sive construction, temperature nguishing, Class F1 (DIN 53438)
Air volume (free flow) m³/h Air volume (with exhaust filter installed) m³/h Air volume (with exhaust filter installed) m³/h Noise level dB (A) Life time at 40 °C h Electrical data V Nominal voltage (U _N) V AC (50/60 Hz) Operating range AC Current consumption A Rated power W Other data V Housing, cover Filter mat (included) Filter material Electrical connections/wire size	370 65 50000 120 230 $(0.81.1)U_N$ 0.8 0.4 70 70 $Plastics according to ULS$ $G3 according to EN 779,$ $Synthetic fibre with progress resistant to +100 °C, self extinated according to exterminated accordi$	470 72 5000 120 230 (0.81.1)U _N 1.10 0.55 130 130 4 V-0, light grey (RAL 7035) filtering degree (8090)% sive construction, temperature nguishing, Class F1 (DIN 53438) Is / max. 2.5 mm ²
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataNominal voltage (UN)V AC (50/60 Hz)Operating rangeACCurrent consumptionARated powerWOther dataHousing, coverFilter mat (included)Filter materialElectrical connections/wire sizeNm	370 65 5000 120 230 $(0.81.1)U_N$ 0.8 0.4 70 70 $Plastics according to ULS$ $G3 according to EN 779,$ $Synthetic fibre with progress resistant to +100 °C, self extination of the extension $	470 72 5000 120 120 0.8
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataNominal voltage (UN)V AC (50/60 Hz)Operating rangeACCurrent consumptionARated powerWOther dataHousing, coverFilter mat (included)Filter materialElectrical connections/wire sizeScrew torqueNmAmbient temperature range°C	370 65 5000 120 230 $(0.81.1)U_N$ 0.8 0.4 70 70 $Plastics according to ULS$ $G3 according to EN 779,$ $Synthetic fibre with progress resistant to +100 °C, self extination of the extension $	470 72 5000 120 230 (0.81.1)U _N 1.10 0.55 130 130 4 V-0, light grey (RAL 7035) filtering degree (8090)% sive construction, temperature nguishing, Class F1 (DIN 53438) ls / max. 2.5 mm ² 0.8
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataNominal voltage (UN)V AC (50/60 Hz)Operating rangeACCurrent consumptionARated powerWOther dataHousing, coverFilter mat (included)Filter materialScrew torqueNmAmbient temperature range°CProtection class	370 65 50000 120 230 (0.81.1)U _N 0.8 0.4 70 70 Plastics according to UL9 G3 according to EN 779, Synthetic fibre with progress resistant to +100 °C, self exti screw termina -10	470 72 5000 120 230 (0.81.1)U _N 1.10 0.55 130 130 4V-0, light grey (RAL 7035) filtering degree (8090)% sive construction, temperature nguishing, Class F1 (DIN 53438) ls / max. 2.5 mm ² 0.8 0+70 I
Air volume (free flow)m³/hAir volume (with exhaust filter installed)m³/hAir volume (with exhaust filter installed)m³/hNoise leveldB (A)Life time at 40 °ChElectrical dataVNominal voltage (UN)V AC (50/60 Hz)Operating rangeACCurrent consumptionARated powerWOther dataVHousing, coverVFilter mat (included)Filter materialElectrical connections/wire sizeScrew torqueScrew torqueNmAmbient temperature range°C	370 65 5000 120 230 (0.81.1)U _N 0.8 0.4 70 70 Plastics according to ULS G3 according to EN 779, Synthetic fibre with progress resistant to +100 °C, self extistant	470 72 5000 120 230 (0.81.1)U _N 1.10 0.55 130 130 4 V-0, light grey (RAL 7035) filtering degree (8090)% sive construction, temperature nguishing, Class F1 (DIN 53438) ls / max. 2.5 mm ² 0.8



Filter Fan for electrical cabinets and	7F.20.9.024.1020	7F.20.9.024.2055	7F.20.9.024.3100	
 enclosures 24 V DC versions Very low acoustic noise Minimal depth within enclosure Air volume 24, 55 and 100 m³/h (free flow) Air volume 14, 40 and 75 m³/h (with Exhaust Filter installed in cabinet) Nominal voltage: 24 V DC Time-saving installation and maintenance Easily replaceable filter mat Filter Fan supplied in Reverse flow mode (7F.21) 	 Pr.20.3.024.1020 Interpretation of the second state of the second st	 Pr.20.9.024.2033 Nominal voltage 24 V DC Air volume 55 m³/h Rated power 7 W Size 2 	 Pr.20.9.024.5100 Nominal voltage 24 V DC Air volume 100 m³/h Rated power 7 W Size 3 	
For outline drawing see page 14				
Fan data				
Air volume (free flow) m ³ /ł		55	100	
Air volume (with exhaust filter installed) m ³ /h		40	75	
Noise level dB (A		46	45	
Life time at 40 °C	n 50000	50000	50000	
Electrical data				
Nominal voltage (U _N) V DC	24	24	24	
Operating range DC	C (0.81.1)U _N	(0.81.1)U _N	(0.81.1)U _N	
Current consumption A		0.32	0.32	
Rated power W	3.6	7	7	
Other data				
Housing, cover		according to UL94 V-0, light grey (
Filter mat (included)		ording to EN 779, filtering degree (8		
Filter material	Synthetic fibre with progressiv	e construction, temperature resist Class F1 (DIN 53438)	ant to 100 °C, self extinguishing,	
Electrical connections		Push-in terminals		
Wire size (mm ²) min/max		0.7/2.5		
Wire size (AWG) min/max		18/14		
Ambient temperature range °C		-15+55		
Protection class		<u> </u>		
Protection category according to EN 60529		IP54		
	Type 12			
Protection category according to NEMA				

7F SERIES

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7F SERIES Filter Fan (24...630)m³/h



Filter Fan for electrical cabinets and enclosures 24 V DC versions

- Very low acoustic noise
- Minimal depth within enclosure
- Air volume 230 m³/h (free flow)
- Air volume 180 m³/h (with Exhaust Filter installed in cabinet)
- Nominal voltage: 24 V DC
- Time-saving installation and maintenance
- Filter Fan supplied in Reverse flow mode (7F.80)

* Product codes, see pages 8 & 11

7F.50.9.024.4230



- Nominal voltage 24 V DC
- Air volume 230 m³/h
- Rated power 26 W
- Size 4

Note:

By reversing the fan motor, the air direction can be changed from "Inlet" Filter Fan mode to "Exhaust" Filter Fan mode** (except for the types 7F.50.8.xxx.4370, 7F.50.8.xxx.5500 and 7F.50.8.xxx.5630).

** Supplied in "Inlet" Filter Fan mode (Standard).

For outling	drawing			15
For outline	arawing	see	page	213

for outline drawing see page 15		
Fan data		
Air volume (free flow)	m³/h	230
Air volume (with exhaust filter installed)	m³/h	180
Noise level	dB (A)	61
Life time at 40 °C	h	50000
Electrical data		
Nominal voltage (U _N)	V DC	24
Operating range	DC	(0.81.1)U _N
Current consumption	А	1.08
Rated power	W	26
Other data		
Housing, cover		Plastics according to UL94 V-0, light grey (RAL 7035)
Filter mat (included)		G3 according to EN 779, filtering degree (8090)%
Filter material		Synthetic fibre with progressive construction, temperature resistant to 100 °C, self extinguishing, Class F1 (DIN 53438)
Electrical connections/wire size		screw terminals / max. 2.5 mm ²
Screw torque	Nm	0.8
Ambient temperature range	°C	-10+70
Protection class		1
Protection category according to EN 6052	.9	IP54
Approvals (according to type)		



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Ordering information

7F

SERIES

Example: Series 7F, Filter Fan for mounting in sidewalls, nominal voltage 230 V AC, size 1, air volume 24 m³/h.

7 F.2 0	. 8	. 2	3 0	. 1	0	2	0
Series Type 20 = Filter Fan - for indoor use 21 = Reverse flow Filter Fan - for indoor use 50 = Filter Fan - for indoor use 70 = EMC Filter Fan - for indoor use 80 = Reverse flow Filter Fan - for indoor use Supply version 8 = AC (50/60 Hz)							
9 = DC Operating voltage 024 = 24 V DC 120 = 120 V AC 230 = 230 V AC							
Enclosure cut-out $1 = \text{Size 1} (92^{+0.5} \times 92^{+0.5}) \text{ mm}$ $2 = \text{Size 2} (125^{+1.0} \times 125^{+1.0}) \text{ mm}$ $3 = \text{Size 3} (177^{+1.0} \times 177^{+1.0}) \text{ mm}$ $4 = \text{Size 4} (224^{+1.0} \times 224^{+1.0}) \text{ mm}$ $5 = \text{Size 5} (291^{+1.0} \times 291^{+1.0}) \text{ mm}$							
Air volume (free flow)							

G

Standard versions	EMC versions	Reverse flow versions	
7F.20.8.120.1020	_	7F.21.8.120.1020	Filter Fan, Size 1
7F.20.8.120.2055	_	7F.21.8.120.2055	Filter Fan, Size 2
7F.20.8.120.3100	—	7F.21.8.120.3100	Filter Fan, Size 3
7F.50.8.120.4230	_	7F.80.8.120.4230	Filter Fan, Size 4
7F.50.8.120.4370	_	7F.80.8.120.4370	Filter Fan, Size 4
7F.50.8.120.5500	_	7F.80.8.120.5500	Filter Fan, Size 5
7F.50.8.120.5630	_	—	Filter Fan, Size 5
7F.20.8.230.1020	_	7F.21.8.230.1020	Filter Fan, Size 1
7F.20.8.230.2055	—	7F.21.8.230.2055	Filter Fan, Size 2
7F.20.8.230.3100	—	7F.21.8.230.3100	Filter Fan, Size 3
7F.50.8.230.4230	7F.70.8.230.4230	7F.80.8.230.4230	Filter Fan, Size 4
7F.50.8.230.4370	7F.70.8.230.4370	7F.80.8.230.4370	Filter Fan, Size 4
7F.50.8.230.5500	7F.70.8.230.5500	7F.80.8.230.5500	Filter Fan, Size 5
7F.50.8.230.5630	7F.70.8.230.5630	—	Filter Fan, Size 5
7F.20.9.024.1020	—	7F.21.9.024.1020	Filter Fan, Size 1
7F.20.9.024.2055	—	7F.21.9.024.2055	Filter Fan, Size 2
7F.20.9.024.3100	_	7F.21.9.024.3100	Filter Fan, Size 3
7F.50.9.024.4230	7F.70.9.024.4230	7F.80.9.024.4230	Filter Fan, Size 4

Note:

The technical features (air volume, dimensions and electrical parameters) for the Standard Filter Fans (7F.20 and 7F.50), the EMC Filter Fans (7F.70) and the Reverse flow versions (7F.21 and 7F.80) - are exactly the same.

7F.50.8.120.5630 has no UL approval. Other versions on request.

7F SERIES Exhaust Filter		Ø	finder	7F series
Exhaust Filter The size of the Exhaust Filter should match	7F.02.0.000.1000	F.02.0.000.2000	VEW 7F.02.0.000.3000	
the size of the Filter Fan to achieve the best ventilation within the cabinet • Minimum depth within enclosure • Time-saving installation and maintenance • Easily replaceable filter mat			10 top	
	 For Filter Fans 7F.20.x.xxx.1020 Size 1 	 For Filter Fans 7F.20.x.xxx.2055 Size 2 	 For Filter Fans 7F.20.x.xxx.3100 Size 3 	
				G
For outline drawing see page 14				
Other data		·	· · · · · · · · · · · · · · · · · · ·	
Housing, cover	Plastics	according to UL94 V-0, light gre	ey (RAL 7035)	
Filter mat (included)		ording to EN 779, filtering degre		
Filter material	Synthetic fibre with p	rogressive construction, tempe elf extinguishing, Class F1 (DIN	rature resistant to +100 °C,	
Protection category according to EN 60529		IP54		
Protection category according to NEMA		Type 12		
Approvals (according to type)		CE EAE cAN [®] us		

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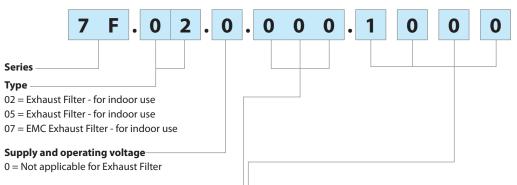


Exhaust Filter	7F.05.0.000.4000	7F.05.0.000.5000			
 The size of the Exhaust Filter should match the size of the Filter Fan to achieve the best ventilation within the cabinet Minimum depth within enclosure Time-saving installation and maintenance Further available versions*: EMC Exhaust Filters (7F.07) 					
* Product codes, see page 11					
	 For Filter Fans 7F.50.x.xxx.4230 or 7F.50.8.xxx.4370 Size 4 	 For Filter Fans 7F.50.8.xxx.5500 or 7F.50.8.xxx.5630 Size 5 			
For outline drawing see page 15					
Other data					
Housing, cover	Plastics according to UL94	V-0, light grey (RAL 7035)			
Filter mat (included)	G3 according to EN 779, f	iltering degree (8090)%			
Filter material		ve construction, temperature guishing, Class F1 (DIN 53438)			
Protection category according to EN 60529	IP54				
Approvals (according to type)	CE ERE c910us				

SERIES

Ordering information

Example: Series 7F, Exhaust Filter for mounting in sidewalls, size 1.



Operating voltage —

000 = Not applicable for Exhaust Filter

Enclosure cut-out

1000 = Size 1 (92^{+0.5} x 92^{+0.5}) mm 2000 = Size 2 (125^{+1.0} x 125^{+1.0}) mm 3000 = Size 3 (177^{+1.0} x 177^{+1.0}) mm 4000 = Size 4 (224^{+1.0} x 224^{+1.0}) mm 5000 = Size 5 (291^{+1.0} x 291^{+1.0}) mm

Exhaust Filter - All versions

Standard-versions	EMC - versions	
7F.02.0.000.1000	_	Exhaust Filter, Size 1
7F.02.0.000.2000	—	Exhaust Filter, Size 2
7F.02.0.000.3000	_	Exhaust Filter, Size 3
7F.05.0.000.4000	7F.07.0.000.4000	Exhaust Filter, Size 4
7F.05.0.000.5000	7F.07.0.000.5000	Exhaust Filter, Size 5

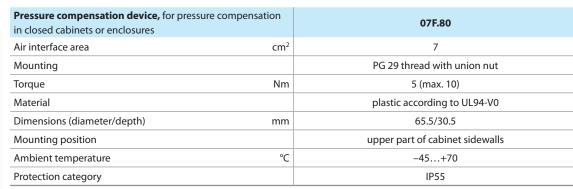
Components

Standard-Filter Fan	Standard-Exhaust Filter	EMC-Filter Fan	EMC-Exhaust Filter	Filter mat	Size
7F.20.8.xxx.1020	7F.02.0.000.1000	_	_	07F.15	1
7F.20.8.xxx.2055	7F.02.0.000.2000	_	—	07F.25	2
7F.20.8.xxx.3100	7F.02.0.000.3000	_	—	07F.35	3
7F.50.8.xxx.4230	7F.05.0.000.4000	7F.70.8.230.4230	7F.07.0.000.4000	07F.45	4
7F.50.8.xxx.4370	7F.05.0.000.4000	7F.70.8.230.4370	7F.07.0.000.4000	07F.45	4
7F.50.8.xxx.5500	7F.05.0.000.5000	7F.70.8.230.5500	7F.07.0.000.5000	07F.55	5
7F.50.8.xxx.5630	7F.05.0.000.5000	7F.70.8.230.5630	7F.07.0.000.5000	07F.55	5
7F.20.9.024.1020	7F.02.0.000.1000	—	—	07F.15	1
7F.20.9.024.2055	7F.02.0.000.2000	—	_	07F.25	2
7F.20.9.024.3100	7F.02.0.000.3000	_	_	07F.35	3
7F.50.9.024.4230	7F.05.0.000.4000	7F.70.9.024.4230	7F.07.0.000.4000	07F.45	4

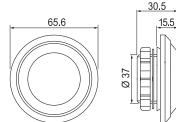
Spare Filter mats	07F.15	07F.25	07F.35	07F.45	07F.55
Protection category	IP54				

Accessories





07F.80



Unit package contains 2 pressure compensation devices

7F

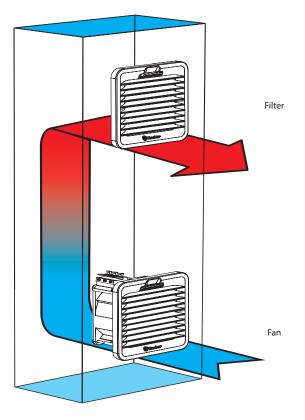
SERIES

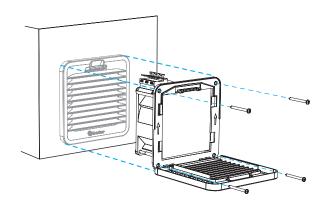
G



Mounting instructions for Filter Fans

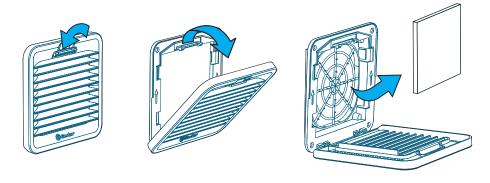
Mounting arrangement of Filter Fans and Exhaust Filter





The installation with the only clips is optimized for 1.5 mm thick sheets; it is also possible with thicknesses from 1 to 2.5 mm. Fixing with screws (supplied) is recommended. Tightening torque 0.3 Nm.

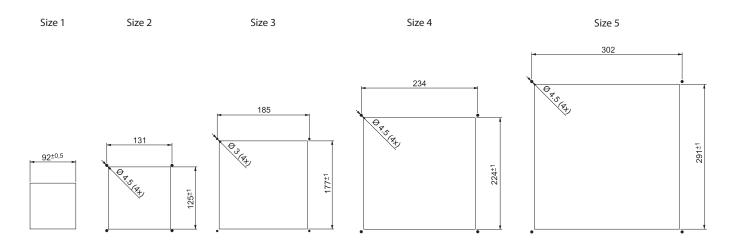
Replacement of Filter mat (Type 7F.20)







Drilling template and mounting cut-outs for Filter Fans and Exhaust Filter



Mounting and maintenance

- 1. Make the panel cut-out according to the size of the Filter Fan or Exhaust Filter in the sidewall of the cabinet as appropriate.
- A template of the panel cut-out is included in the packaging of the Filter Fan or Exhaust Filter.
- 2. Make the electrical connection.
- 3. Mount by simply snapping the side-located lugs on the Filter Fan or Exhaust Filter into the panel cut-out (without using screws for sidewall thickness of 1.2...2.4 mm).
 - At other thickness it is recommended to mount the Filter Fan by the screws supplied (for size 1, the template shows the mounting cut-out only).
- 4. When screws are needed for the mounting, remove the plastic cover and fix the Filter Fan with the 4 screws supplied.
- Then insert the filter mat and snap the plastic cover to the mounting frame.
- 5. During maintenance or when replacing the filter mat remove the plastic cover, replace the filter mat and snap on the plastic cover.

G

7F

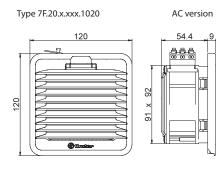
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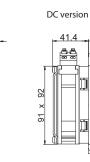


Outline drawings

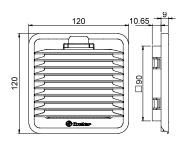
7F

SERIES

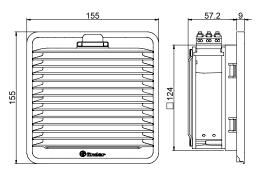




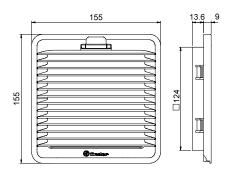
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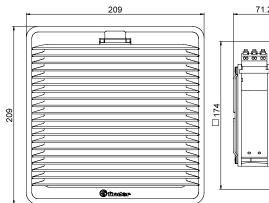
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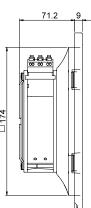


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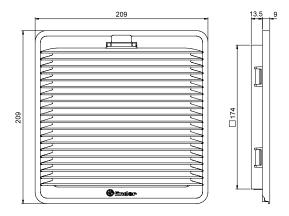


Type 7F.20.x.xxx.3100





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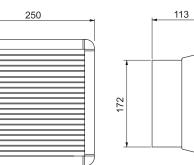


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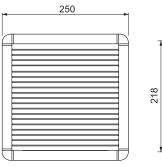
Outline drawings

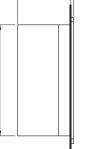
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5.5

Type 7F.50.x.xxx.4370

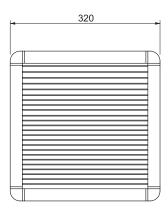


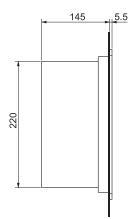


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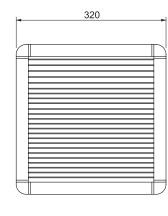
5.5

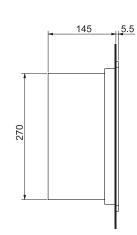
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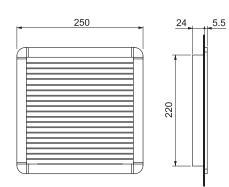




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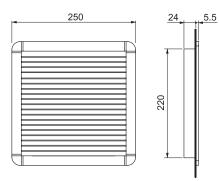




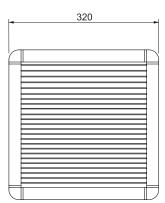


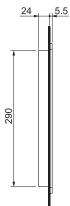
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Type 7F.05.0.000.4000

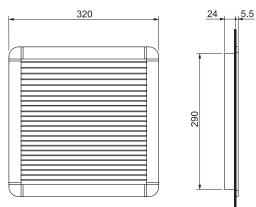


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Type 7F.05.0.000.5000



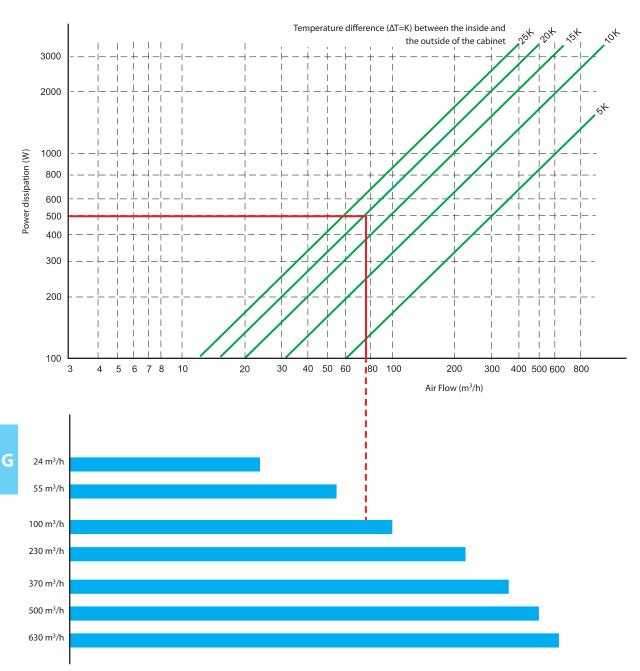
7F SERIES



Fan selection

7F

SERIES



Example

First, estimate the power dissipated within the cabinet. Then calculate the maximum difference between the internal and external temperature (green lines) by considering the difference between the maximum permitted internal temperature (as dictated by the temperature rating of the enclosed components, or specification) and the maximum temperature expected outside the cabinet.

The projection onto the X axis, of the intersection between the power (watts) and the appropriate green line, corresponds to the air flow rate in m^3/h required to meet the maximum internal temperature limit. Extending this line vertically to intersect with the blue horizontal lines, indicates the most appropriate model of 7F fan to be fitted to the cabinet to provide the requisite air flow.

The example above considers a cabinet with an internal thermal power dissipation of 500 W, and assumes the maximum temperature difference between the inside and the outside of the cabinet to be 20K. The required air flow can be seen to be a little less than 80 m³/h.

It is suggested that this is increased by 10% to allow for the affects of a dirty filter.

And so, it can be seen that models of the 7F with 100 m³/h flow rate will provide the proper dissipation of heat under these circumstances.



Application notes

Filter Fan

The ball-bearing axial fan housing is made of aluminium and the rotor is made of plastic or metal (depending on the type).

Filter classes

Within EN 779 are specified 9 filter classes, categorised into 4 coarse dust filters und 5 fine dust filters.

The coarse dust filters G1 - G4 are able to filter particles > 10 μ m and the fine dust filters G5 - G9 are able to filter particles from (1...10) μ m.

Filter classes	Example of particle	Particle size	
G1 - G4 (EU1 - EU4)	Textile fibers, hair, sand, pollen, spores, insects, cement dust	> 10 µm	
G5 - G9 (EU5 - EU9)	tobacco smoke, oil smoke,		

Filtering degree (Am)

The degree of filtering (Am) is the percentages of dust, by weight, that is caught and retained by the filter.

Filter mats

The quality of these filters mats has been independently tested, according EN 779 and branded after passing the test.

The filter mats are to filter class G3 and have an average filtering degree of (80...90)%.

Filter material

The filter material consists of a synthetic fiber with progressive construction which is moisture-resistant to 100% RH and temperature resistant to +100 °C.

According to the strict requirements of fire class F1, DIN 53438, these filter mats are self extinguishing.

Progressive construction at filter mats

The individual fibers of these filter mats are bonded by a special process to provide a progressive construction where the fiber size and spacing varies through the thickness of the filter mat.

This means that coarse dust particles are caught early and fine dust later through the thickness of the mat. In this way the entire depth of the filter mat is used.

Flammability class of the housing and the cover

The plastic materials used comply with flammability class V-0, according UL94.

EMC Filter Fans and EMC Exhaust Filters

The plastic mounting frame of the EMC Filter Fans (7F.70) and EMC Exhaust Filters (7F.07) are sprayed with a conductive (metallic) paint.

The gasket located on the mounting frame, for sealing the Filter Fan or Exhaust Filter in the cabinet is also metalised.

In addition; located at the EMC Filter Fan between the metalized mounting frame and the filter mat, is a metal grid.

Therefore, between the metal parts of the Filter Fan and the metal cabinet, there is a conductive connection.

Filter Fan in "reverse flow" version

As supplied, the standard Filter Fan is in "Draw-In"- mode, which means that cool air is filtered and drawn into the cabinet. In some cases it may be required that the warm air is blown out of the cabinet.

In which case it is possible to get Filter Fans in "Exhaust Filter" mode version (7F.80).

Mounting of the pressure compensation device

In sealed cabinets and enclosures the internal pressure can vary due to changes in temperature. The pressure compensation device (07F.80) will relieve this internal/external pressure differential whilst maintaining a high level of protection - preventing the ingress of dust and moisture into the cabinet or the enclosure. The pressure compensation device is approved for use in cabinets and enclosures according to DIN EN 62208.

Drill a hole Ø $37^{+1.0}$ mm in the housing wall and fix the pressure compensation device with the accompanying nut. It is important to ensure that the sealing ring is located on the outside. To ensure optimum pressure balance, it is recommended to fit 2 pressure compensation device at the upper sides of the cabinet or enclosure.