



**TECHNICAL MANUAL**  
**Filter fan IP54 EKF**  
**Exit filter IP54 EKF**

## 1 DESCRIPTION

Filter fans EKF are used to maintain temperature and cool devices in distribution enclosures to ensure their optimal performance. They generate air flow that removes heat buildup and prevents overheating of components. To change the air flow direction, simply turn over the axial fan. The fans are highly durable and can withstand weathering and UV radiation. Regular filter maintenance is required to ensure long-term and reliable ventilation operation.

### ADVANTAGES:

- Low noise.
- Small installation depth.
- Filter included.
- Fast and easy installation.
- Resistant to weathering and UV radiation.

For the device list refer to Table 3.

## 2 TECHNICAL DATA

For specifications of fans, refer to Table 1.

Table 1

Characteristics	Values					
Air supply with free discharge, m <sup>3</sup> /h	39	138	272	586	800	1200
Air supply with exhaust filter, m <sup>3</sup> /h	24	100	200	380	400	850
Power consumption, W	13	21	26	42	63	160
Rated frequency, Hz	50/60					
Rated voltage Un, V AC	230-240					
Fan housing material	Aluminum					
Filter housing material	Plastic UL94 V-0, light grey, highly weather- and UV-resistant					
Operating temperature, °C	-25 to +65					
Degree of protection	IP54					
Operating and storage humidity, %	Max. 90					
Service life, h	Min. 50000				Min. 55000	

Characteristics	Values				
Mounting aperture, mm	92x92 <sup>+1</sup>	124x124 <sup>+1</sup>	176x176 <sup>+1</sup>	223x223 <sup>+1</sup>	291x291 <sup>+1</sup>
Power supply	2 stranded conductors, 300 mm	2 stranded conductors, 160 mm	terminal clamps for conductors 2,5 mm <sup>2</sup> , 0,8 N•m		

For specifications of filters, refer to Table 2.

Table 2

Characteristics	Values				
Mounting aperture, mm	92x92 <sup>+1</sup>	124x124 <sup>+1</sup>	176x176 <sup>+1</sup>	223x223 <sup>+1</sup>	291x291 <sup>+1</sup>
Installation depth, mm	24				
Filter fabric cleaning class	EN 14799, filtration up to 94%				
Filter material	Synthetic fiber, low flammability (flammability group F1), moisture resistance up to 100%, heat resistance up to 100 °C				
Degree of protection	IP54				

Table 3

Item code	Name
EXF19	Exit filter 92x92mm IP54 EKF
EXF52	Exit filter 124x124mm IP54 EKF
EXF170	Exit filter 176x176mm IP54 EKF
EXF305	Exit filter 223x223mm IP54 EKF
EXF433	Exit filter 291x291mm IP54 EKF
FAN19F	Filter fan 19m3/h 92x92mm IP54 EKF
FAN52F	Filter fan 52m3/h 124x124mm IP54 EKF
FAN102F	Filter fan 102m3/h 176x176mm 220V IP54 EKF
FAN170F	Filter fan 170m3/h 176x176mm 220V IP54 EKF
FAN305F	Filter fan 305m3/h 223x223mm 220V IP54 EKF
FAN433F	Filter fan 433m3/h 291x291mm IP54 EKF
FAN850F	Filter fan 850m3/h 291x291mm IP54 EKF

### 3 OVERALL DIMENSIONS

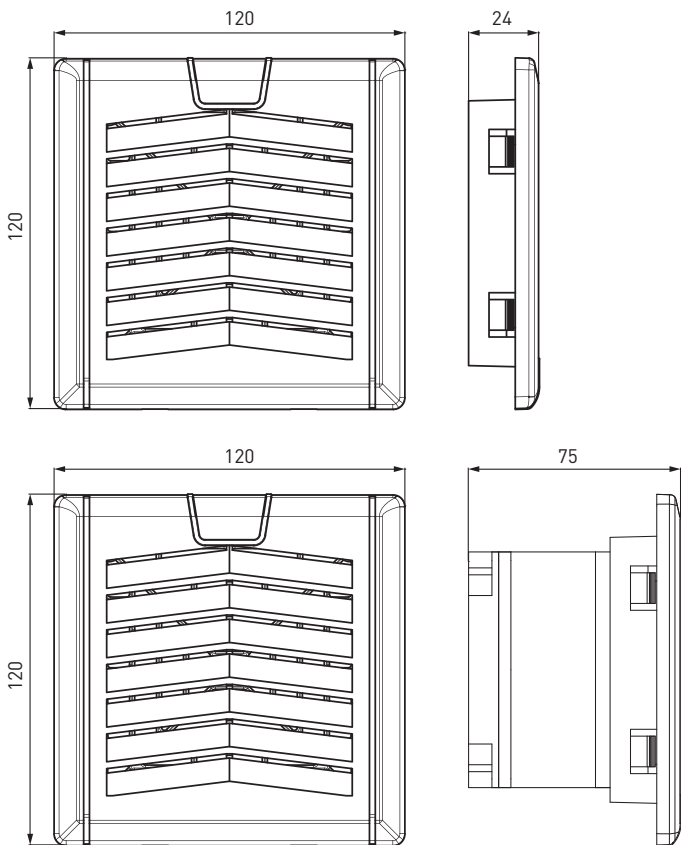


Figure 1. Filter fan 19m<sup>3</sup>/h and exit filter 92x92mm IP54 EKF

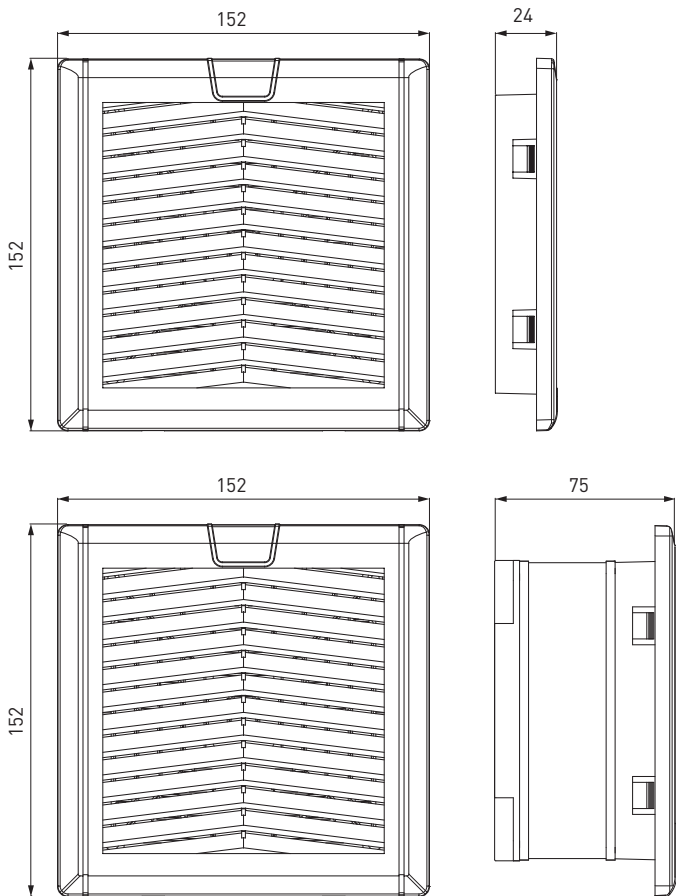


Figure 2. Filter fan 52m<sup>3</sup>/h and exit filter 124x124mm IP54 EKF

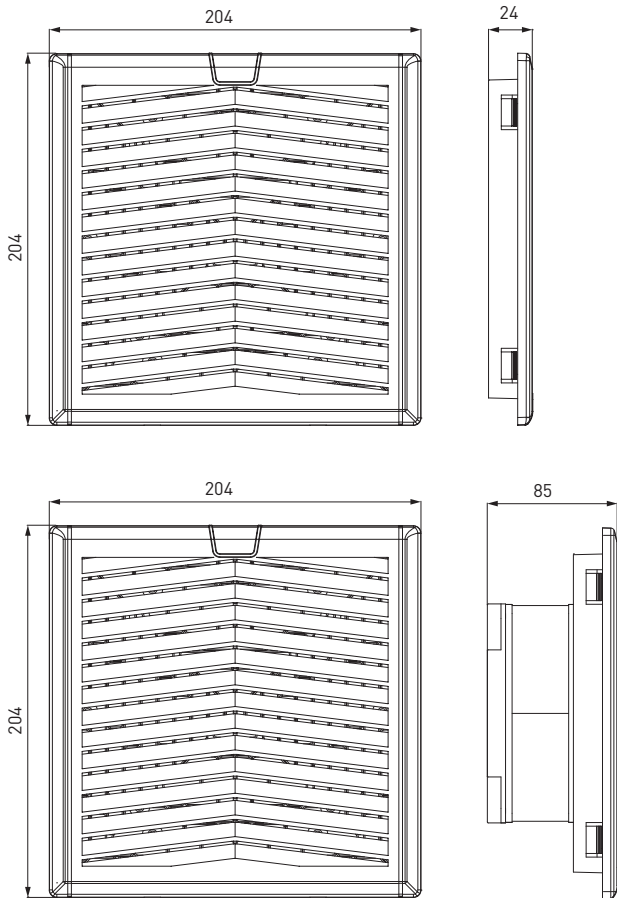


Figure 3. Filter fans 102m<sup>3</sup>/h, 170m<sup>3</sup>/h and exit filter 176x176mm EKF

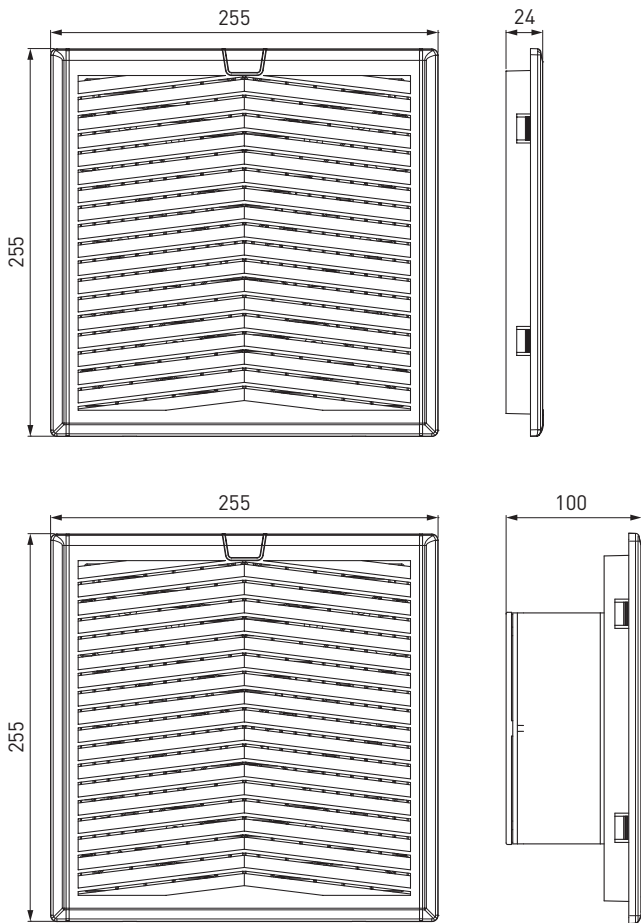


Figure 4. Filter fan 305m<sup>3</sup>/h and exit filter 223x223mm IP54 EKF

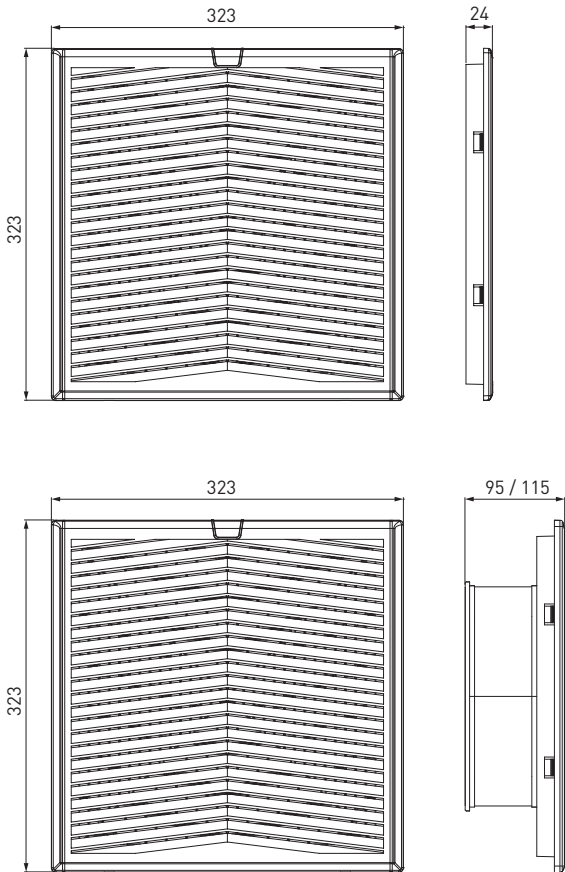


Figure 5. Filter fan 433m<sup>3</sup>/h and exit filter 291x291mm EKF  
Filter fan 850m<sup>3</sup>/h and exit filter 291x291mm EKF

## **4 INSTALLATION AND CONNECTION**

Filter fans and exit filters must be installed and connected by qualified electrical personnel.

Filter fans and exit filters are fast and easy to mount outside an enclosure.

### **INSTALLATION:**

- Select a suitable location for installing the enclosure and fan to maximize air flow and ventilation.
- The installation site should be shielded from excessive dirt and moisture.
- Install filter fans onto the vertical surfaces of the enclosure such as doors or walls.
- Make sure that the ambient temperature is lower than the temperature inside the enclosure.

### **FAN INSTALLATION AND CONNECTION:**

1. Cut out an opening in the enclosure wall or door. Clean the surface of the cutout to remove any dirt, sawdust, or grease.
2. Insert the mounting frame into the cutout and secure it with screws.
3. Secure the fan to the mounting frame with 4 screws. Connect the fan to the power supply.
4. Insert the filter cloth into the exit filter and snap it into place.

No tools are required to replace the filter cloth. To replace the filter cloth, remove the filter cover, insert a new filter cloth, and snap the filter back into place.

The fan can be maintained with no need to disassemble the mounting frame.

### **NOTICE!!!!!!**

The pre-configured air flow direction is "OUT". To change the flow direction to "IN", turn the axial fan over.

## **5 DELIVERY SCOPE**

Filter fans and exit filters EKF are supplied in an individual package. For all available documentation, scan the QR-code on the insert or on the inside of the package.

## **6 SAFETY REQUIREMENTS**

Do not use or operate filter fans or exit filters with visible mechanical damage.

**WARNING!**

Follow all safety procedures when operating filter fans and exit filters.

Do not use in corrosive environment.

## **7 MAINTENANCE**

For maintenance, follow national safety rules for operation of electrical installations.

Filter fans and exit filters shall be maintained and serviced only by qualified electrical personnel.

## **8 TRANSPORTATION AND STORAGE**

Filter fans and exit filters can be transported by any means of enclosed transport that ensures protection of packed products from mechanical impacts and weather exposure.

Filter fans and exit filters shall be stored indoors in the original package at the ambient temperature from  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$  and relative humidity of max. 90% at  $+25^{\circ}\text{C}$ .

## **9 DISPOSAL**

Life-expired and failed products shall be disposed of in compliance with the national and local laws and regulations in force. To dispose of the product, send it to an authorized company for recycling in compliance with the effective national and local laws and regulations.

## **10 MANUFACTURER'S WARRANTY**

The manufacturer guarantees the filter fans and exit filters comply with the declared characteristics and requirements, provided that consumers follow the operation, transportation and storage conditions and requirements.

Service life: 10 years.

Shelf life: 7 years from the date of manufacture specified on the product package or housing.

Warranty period: 7 years from the date of sale specified in the sales receipt.

**Manufacturer:** 000 Electroresheniya, Otradnaya st., 2b/9, 127273, Moscow, Russia, tel. +7 (495) 788-88-15.

**MEA regional headquarters:** EKF ELECTRICAL SOLUTION FZCO, Office 249, Techno Hub-2, Dubai Silicon Oasis, P.O. box 341079, Dubai, United Arab Emirates, tel. +9 (714) 547-06-18.

**Importer and EKF trademark service representative on the territory of the Republic of Kazakhstan:** TOO «Energoresheniya Kazakhstan», Kazakhstan, Almaty, Bostandyk district, Turgut Ozal st., 247, apt 4.

## 11 CERTIFICATE OF ACCEPTANCE

Filter fans and exit filters EKF have been approved for operation.

Date of manufacture: for information, refer to the product package.

Quality control stamp



OTK 3

EAC



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