



**GEOVENT**

## INSTRUCTION MANUAL



## GEOFILTER GFC

GFC-75, GFC-150, GFC-225 AND GFC-300



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## 1.0 Introduction

This manual is made and designed in order to facilitate the best and most secure interaction with the product. The manual is relevant for people involved in transportation, stocking, installation, using, maintaining and all other thinkable interaction with the product.

The manual must be read in full and understood before interacting with the product.

When the manual has been read and understood in full, the table of contents can be used to find the relevant information in each case.

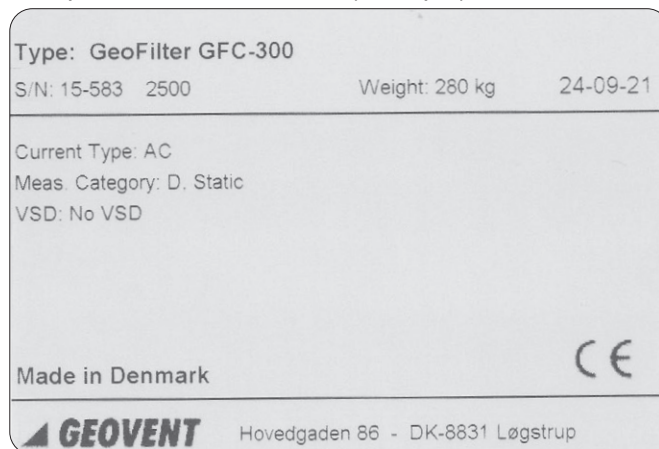
The product is manufactured by:

Geovent A/S  
Hovedgaden 86  
DK-8861 Løgstrup  
DENMARK

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E-mail: salg@geovent.dk  
www.geovent.com

This manual is to be used for all interactions with the product including: Transportation, stocking, installation, operation and maintenance.

This product is marked with: (example)



## 2.0 Safety

### 2.1 General safety

Carefully read this manual before use and observe the safety instructions in order to avoid injuries! Keep this manual in a safe place!

Secure that all users of the product have read this manual and that they follow the instructions as described. Observe all instructions marked on the product! Observe the indications of the manufacturer. Never use the product if you are in doubt about how it works or what you should do.

When doing maintenance follow the instructions in chapter 7.0.

Do not modify the product or use spare parts from other suppliers than Geovent, as this may hamper the product and the function.

### 2.2 Danger

You must wear safety gloves when handling or using the product to protect your hands from scratches etc.

Be aware that the product may tilt when you move it. You must handle the product with care and tie it safely to the truck or the fork lift when it is in transport.

Follow the instructions in chapter 7.0 when the product is maintained.

When handling the product be sure that there is no risk for the installer, and secure that there are no people around the product, secure that the product cannot fall down risking to injure persons or subjects.

The product is not to be used in areas categorised as ATEX zones, e.g. with dust from aluminium, flour, wood, and other mediums that present an explosion hazard.

If a repair is not possible you should dispose of the product. Please follow the instruction for disposal in chapter 10.0.

### 3.0 Machine overview

#### 3.1. Description

The filter is used for cleaning return air, intake air or circulated air to remove toxic gases, odours, aerosols, etc. from industrial production.

#### 3.2 Intended use

The air is sucked through the activated carbon in the filter basket, thereby removing toxic gases, odours, aerosols, etc.

Can be placed indoors or outdoors, but must be protected from rain.

The product is not to be used in areas categorised as ATEX zones, e.g. with dust from aluminium, flour, wood, and other mediums that present an explosion hazard. The product is supplied with filter cartridges of various pleated textiles, both with and without coating.

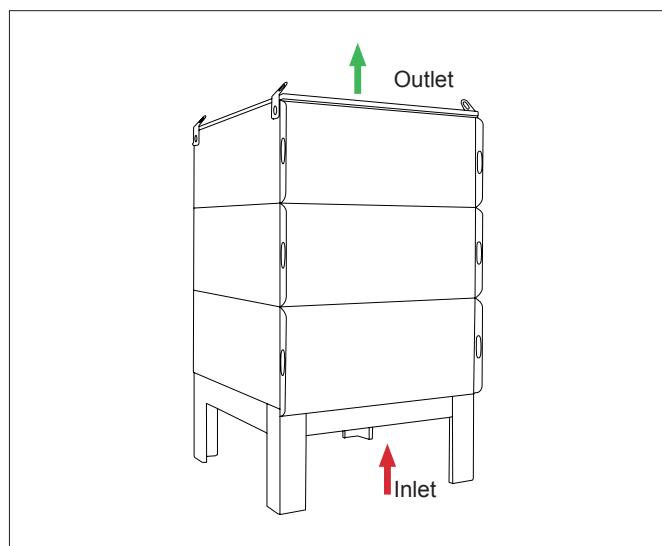
### 3.3 Machine specifications

#### 3.3.1 Design

Housing: Heavy hot-dip galvanised steel (corrosion class III)

Filter cartridges: Activated carbon

Filter basket: Galvanized steel sheet metal.  
Partly punched.  
Electric plated



### 3.3.2 Technical data

#### Dimensions

Model/ Dimension	Height [mm]	Width [mm]	Depth [mm]	Capacity kg carbon
GFC-75	1.612	900	962	~75
GFC-150	1.612	1.200	1.262	~150
GFC-225	2.112	1.200	1.262	~225
GFC-300	2.112	1.200	1.262	~300

Model/Dimension	Outlet [mm]	Inlet [mm]	Weight [uden kul]
GFC-75	ø 250 np	ø250 mf	181 kg
GFC-150	ø 250 np	ø250 mf	
GFC-225	ø 250 np	ø250 mf	
GFC-300	ø 250np	ø250 mf	260 kg

Temperature: -10°C - +65°C  
Corrosion class: III  
Sealing class: Class C

Temperature extracted air 40°C  
Temperature surroundings -5°C + 40°C

Relative humidity must be below Max 70%

#### Differential pressure loss

Typical pressure loss: 1.000 Pa

### 4.0 Transport, handling and storage

During transport in a truck or in another means of transportation the product must be securely packed in a box or a pallet and covered with a water proff material. The product must be securely stowed in the truck so that it will neither tilt nor shift during transport.

During transport over a short distance e.g. in a stock or a factory, the product can be moved by means of a forklift or a stabeler. When moved it must be secured that the product does not tilt or shift. And it must be secured that the limitations of the means of transportation is not exceeded.

Secure that there are no people around the product, when the product is moved.

The product must be placed in a dry place and covered securely, in order to secure that moist, metal parts or other substances do not damage the product. It is not allowed to place anything on top of the product.

## 5.0 Assembly, installation and start of operation

### 5.1 Location

The product should be installed indoors, e.g. in a well-ventilated room, but it can be installed outdoors. However, it must be ensured that no moisture enters the product.

Before installing the product, please make sure that the optimum installation area is selected. Is there room enough for the product? Is there space enough for carrying out satisfactory installation/-service of the product?

Place the product upon a solid, flat foundation (e.g. a concrete floor) and anchor it.

### 5.2 Installation

The product is delivered complete from factory, ready to be connected to the ducting system.

#### **Procedere:**

1. Place the product upon a solid, flat foundation (e.g. a concrete floor) and anchor it. Allow space to perform filter changes.
2. Attach the product to circular duct on both the clean side and the dirty side.  
**Remember to seal the connection with joint filler and/or tape!**
3. Sort the packing material according to local regulations. Afterwards dispose of it according to local regulations.

### 5.3 Control and test of the security system

When the product is installed you must secure:

- a. That the filter is placed on a solid, flat foundation and anchored to the ground or the wall, so that it cannot tilt.
- b. That the doors of the product are securely closed.
- c. That the complete system is tight.
- d. That the suction in the system is according to specification.

Before putting the filter into operation its function should be tested.

Check for vibration or noise issues during use. Check that there are no leakages in the system. Seal any leakages you may find.

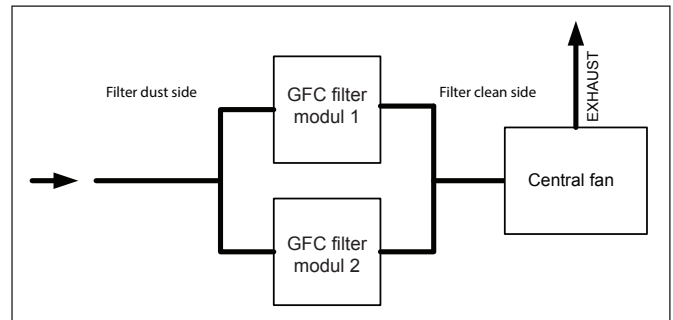
## 6.0 Commissioning

### 6.1 After installation

Check the installation according to chapter 5.3.

### 6.2 Parallel connection

If you need larger filtration capacity the GFB2 filters can be connected in parallel



## 7.0 Control, test and maintenance

### 7.1 Control

Check the installation according to chapter 5.3.

### 7.2 Maintenance

A qualified service technician should check the entire system at least once a year.

The machine to which the filter is connected must be completely stopped, the supply isolator must be open and locked before starting work.

The work must be carried out by trained personnel.

Personal protective equipment must be worn to avoid exposing personnel to hazards.

#### **Periodic maintenance:**

- Clean the inside of the filter cabinet using a vacuum cleaner and water and soap.



## 7.3 Replacing filter activated carbon

1. Before removing the filter cover, it is important that the service technician is wearing the necessary personal safety measures, such as respiratory protection and gloves, which comply with the local Working Environment Authority's regulations for working with contaminated dust.
2. The machine to which the filter is connected must be completely stopped. Supply isolator for the current must be open and locked during service.



3. Remove the three front covers.



4. Remove the 2 crossbars.



5. Use a forklift to lift the filter basket out of the filter cabinet.



6. Open the filter basket by loosening the locking nut at the top and lift off the lid.
7. a. Empty approximately 25% of the activated carbon with a shovel.  
b. Lift the filter basket with a crane or forklift and place a collection box underneath.  
c. Lift the inner metal cylinder in the filter basket, allowing the contents to fall out of the bottom and into the collection box.  
d. Dispose of the contents according to local regulations and rules.
8. Fill the filter basket with new activated carbon.
9. Follow items 2 - 5 - in reverse order.

## 8.0 Cleaning

The inside and outside of the product is cleaned with a vacuum cleaner or a damp cloth.

## 9.0 Troubleshooting

In case of problems with the functioning of the product, the pressure drop should be checked.

If the pressure drop is too high, check whether there is a blockage of the air flow in the product or the connected pipes.

## 10.0 Dismantling, disabling and scrapping

Before removing the filter cover, it is important that the service technician is wearing the necessary personal safety measures, such as respiratory protection and gloves, which comply with the local Working Environment Authority's regulations for working with contaminated dust.

Deactive the product by the electrical mains. Empty the contents of the filter basket into a container and close it. Dispose of it according to local regulations. The inside of the product must be cleaned by means of a vacuum cleaner with a filter which suits the purpose. Further the indside of the product is cleaned with a damp cloth.

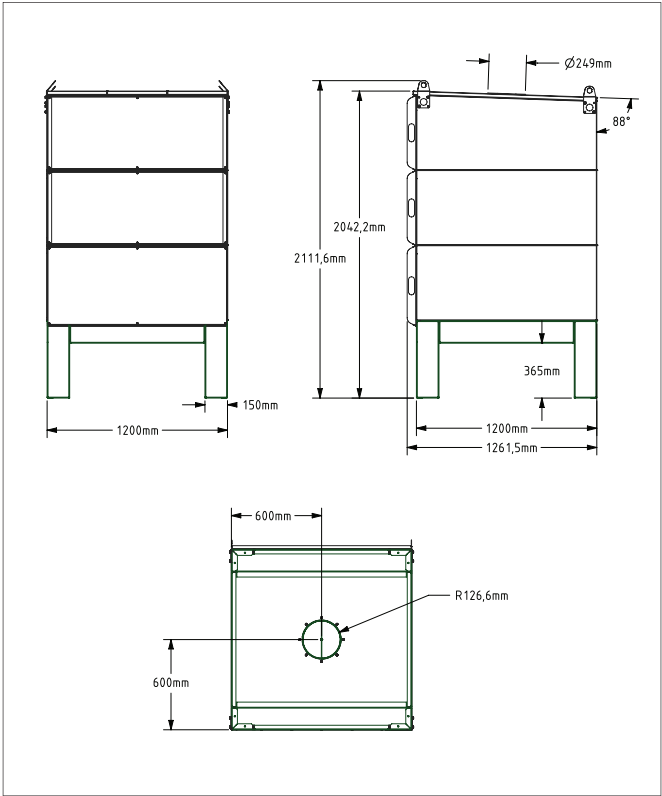
Dismantle the metallic parts by unscrewing screws and bolts. Afterwards cut the larger pieces into smaller pieces and dispose of it according to local regulation.

Dismantle plastic parts and dispose of it according to local regulations.

The packing material must be sorted according to local regulation in order to be able to reuse the material.

11.0 Dimensions

GeoFilter GFC



Modell/ Dimension [mm]	Height [mm]	Width [mm]	Depth [mm]
GFC-75	1.612	900	962
GFC-150	1.612	1.200	1.262
GFC-225	2.112	1.200	1.262
GFC-300	2.112	1.200	1.262

12.0 Liability

Warranty

Geovent A/S grants a warranty for products, which are defective, when it can be proved that the defects are due to poor manufacture or materials on the part of Geovent. The warranty comprises remedial action (reparation or exchange) until one year after the date of shipment.

No claims can be made against Geovent A/S in relation to loss of earnings or consequential loss as a result of defects on products from Geovent.

Wear on parts such as filter cartridges and hose is not included in the warranty.

User liability

In order for Geovent to be capable of granting the declared warranty, the user/fitter must follow this instruction manual in all respects.

Under no circumstances may the products be changed in any way, without prior written agreement with Geovent A/S.

Please refer to the current sales and delivery conditions at [www.geovent.com](http://www.geovent.com)

### 13.0 Declaration of conformity

The manufacturer: GEOVENT A/S  
HOVEDGADEN 86  
DK-8831 LØGSTRUP

Hereby declares that:

The product: GeoFilter  
Model: GFC-75, GFC-150, GFC-225,  
GFC-300

Complies with the relevant parts of the following directives and standards:

Directive 2006/42 / EC of the European Parliament and of the Council of 17 May 2006 on machines and amending directives 95/16 / EC.

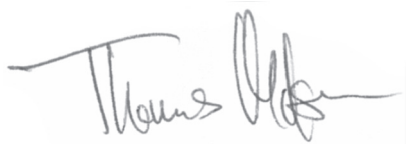
This declaration is no more valid if changes are made to the product by others than the manufacturer.

Authorized to collect the technical file:

Lise Cramer

Date: 12.01.2024

Position: Director  
Name: Thomas Molsen



Signature:



### 14.0 Spare part list

Art. No.	Description
15-580A	Filter basket - GFC-75
15-581A	Filter basket - GFC-150
15-582A	Filter basket - GFC-225
15-583A	Filter basket - GFC-300
	Activated carbon











***GEOVENT***

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