



GEOVENT

INSTRUCTION MANUAL



GFB2 TOWER

GeoFilter GFB2 Tower 6-2, GeoFilter GFB2 Tower 9-3,
GeoFilter GFB2 Tower 12-4

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1.0 General safety precautions

IMPORTANT - Please study all the instructions before mounting and use.

Please keep these instructions in a safe place and instruct all users in the function and operation of the product.

Maintenance, replacement of filter cartridges/emptying of collection bucket, should only be done in accordance with section 4 in this manual.

Power cables and pneumatic air hoses should be replaced at once, if they are damaged. This should only be done by an authorised electrician and ventilation fitter.

Do not dismantle any factory-mounted parts, since it impedes the use of the equipment.

All electrical installations must be carried out by an authorised electrician.

1.1 Danger

It is dangerous to dismantle the filter while in operation.

When installing or servicing the filter it is imperative that the power is turned off.

1.2 Field of Application

The GFB2 Tower is used to filter the air extract from industrial processes such as welding, grinding, sandblasting, and powder coating.

The filter 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 GFB2 Tower is supplied with filter cartridges of various pleated textiles, both with and without coating (a minimum filtration level of 99.90% in compliance with the BIA-test.)

The filter self-cleans automatically as a compressed air pulse is sent down through the filter cartridges, causing the particles on the textile of the filter to be blown off and collected in the bucket below.

1.3 Technical data, filter

Model	No. of filters	Filter area [m ²]	No. solenoid valves
GFB2 TOWER 6-2	6	60	2
GFB2 TOWER 9-3	9	90	3
GFB2 TOWER 12-4	12	120	4

Model	Max. Air flow	Noise emission	Collection bucket
GFB2 Tower 6-2	3.600 m ³ /h	86 dB(A)	25 Liter
GFB2 Tower 9-3	5.400 m ³ /h	89 dB(A)	25 Liter
GFB2 Tower 12-4	7.200 m ³ /h	94 dB(A)	25 Liter

Model	Housing	Air tank	Art. no.
GFB2 Tower 6-2	Galvanized	8 liter	15-471
GFB2 Tower 9-3	Galvanized	12 liter	15-472
GFB2 Tower 12-4	Galvanized	16 liter	15-473

Compressed air: 3,5 - 6 bar - Clean and dry air
Air consumption: 3 liter compressed air per shot
Power supply: 24VDC el. 230VAC (standard)
Temperature: -10°C - +65°C
Corrosion class: III
Sealing class.: Class C

Temperature extracted air Max 150°C
Temperature surroundings -10°C - +65°C

Relative humidity must be below < 90%

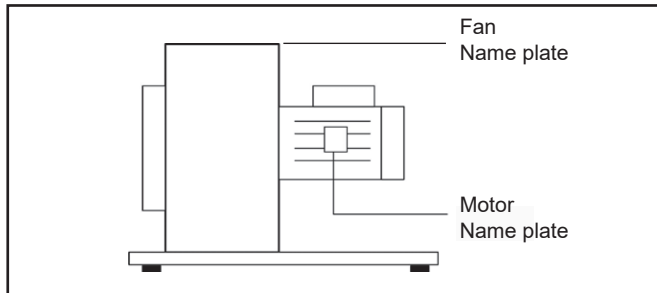
Differential pressure drop

Typical pressure drop: 1.000-1.500 Pa

The pressure drop in the filter will vary depending on the load and how dirty the filter cartridges are. The filter cartridges must be replaced, when the pressure drop exceeds 2.000 Pa.

Differential pressure drop is not allowed exceed 3.000 Pa.

1.4 Technical data, MEF fan



The label of the fan is found on the top left on the motor side of the fan housing and contains fan type and data. Motor size (kW) and ampere consumption can be read on the name plate of the motor.

Temperature:

Extract temperature: Max. 80°C

Ambient temperature: Max. 40°C

Higher temperatures require the use of special motors. Contact Geovent for more information.

1.5 Construction, filter

Casing: Galvanized steel (corrosion category III), with baffle plate in the inlet.

Filter medium: See filter table, section 4.2.

Air pressure tank: Powder coated

Automatic control: Filter regulation with digital display for adjusting cleaning time, cleaning interval, and after-cleaning cycle.

Collection bucket: Galvanized – 25-liter capacity.



Particle catch in the inlet functions as a diffusor and catches large particles, that could otherwise damage the filter medium.

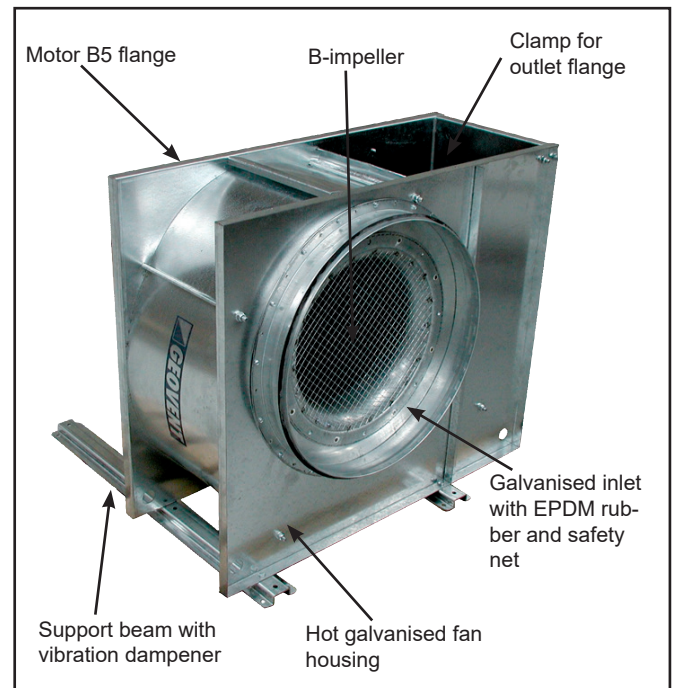
The particles fall into the bucket at the bottom of the filter.

1.6 Construction, MEF fan

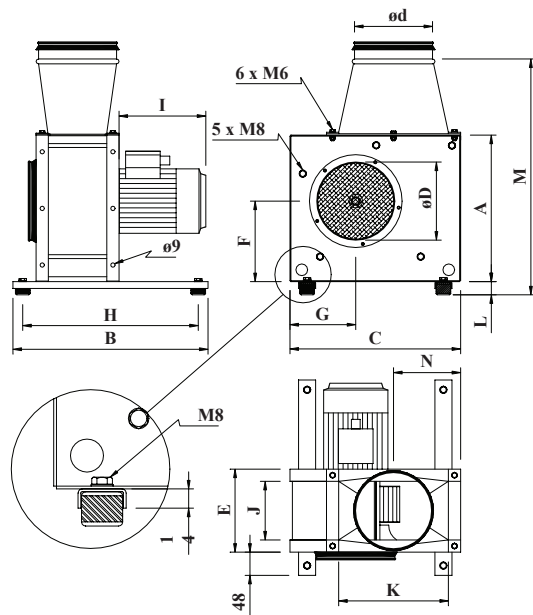
Fan housing: 100% galvanised steel for optimal corrosion resistance. A support beam equipped with vibration dampeners as well as inlet with safety net, attached to all fans.

Fan wheel: Galvanized backward curved impeller.

Motor: B5/B35 flange/foot motor, direct drive, protection class IP 55. See manufacturer's manual (attached).



Measurements:



Dimension LEF/MEF 250 - 630 (LEX/MEX)

Type	250	315	355	400	450	500	560	630
A	410	510	570	648	715	758	907	989
B	500	700	700	800	800	800	800	800
C	500	600	680	756	850	871	1070	1175
ØD	250	315	400	400	500	500	630	630
Ød	**	**	**	**	**	**	**	**
E	215	260	284	308	340	345	425	446
F	230	290	329	370	408	421	523	563
G	210	240	272	304	340	362	440	467
H	460	660	660	760	760	760	760	760
I	*	*	*	*	*	*	*	*
J	170	210	234	260	290	295	375	400
K	320	400	450	500	560	510	709	800
M	637	720	797	965	1045	1065	1340	1340
N	185	225	250	275	305	263	380	425
Weight	38*	43*	48*	56*	71*	81*	125*	135*

* Depends on motor size

**Depends on chosen outlet flange

NOTE: The above-mentioned data is applicable to the standard fans LEF/MEF 250-630. Any changes will be specified on the order confirmation/invoice.

2.0 Installation

For error-free performance, the GFB2 Tower should be installed indoors, e.g. in a well-ventilated room. We do not recommend outdoor installation. If indoors installation is not possible, it must at least be installed under a roof.

We do not recommend placing the filter outside, as it will cause condensation and some of the electronic components will cease to function at temperatures below -10°C.

The filter is delivered complete, fully mounted and pre-programmed from factory, ready to be connected to the ducting system and the mains.

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

The following installation should be performed by a trained service engineer.

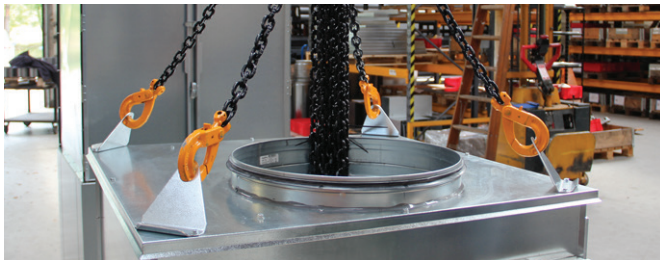
Procedure:

1. Place the GFB2 Tower upon solid, flat foundation (e.g. a concrete floor) and anchor it. Allow space to perform filter changes.
2. Attach the GFB2 Tower to circular ventilation tubes on both the clean side and the dirty side (the bottom tube connection is always the dirty side). Remember to seal the connection with joint filler and/or tape!
3. To ensure clear dilution, the discharge should be at least two metres over the ridgepole towards the atmosphere with a minimum discharge speed of 8 m/s.
4. All electronic components must be installed by an authorised electrician.
5. See section on operation for connection options.

IMPORTANT:

Cleaning pressure can be adjusted from 3.5 to 6 bar pure dry air as needed.

Increasing the cleaning pressure to more than 6 bar runs a risk of damaging the filter media.



1. Raise the fan on the four lift brackets (these can be removed afterward.)



2. Place the fan just above the filter and lower it carefully.



3. Install the included 6 x 20 mm bolts and washers to secure the fan.



4. Tighten all the bolts with a 10 mm fork wrench.



5. Remove the lift brackets after installing the fan.

2.1.1 Operating the filter

The filter is delivered as standard with timer control, but it can be beneficial in some situations to allow the cleaning frequency to be controlled as a function of the filter's pressure differentials. In other words, the filter runs a cleaning sequence, when it reaches a given pressure differential (that is, according to how large a pressure loss there is over the filter).

Therefore, be aware of whether the filter has been ordered with timer control or differential control when setting up the filter control

2.1.2 Timer control panel

Timer control



Menu

How to access programming

Press SET

Press + and - to select the required function.

Press OK to confirm.

Increase or decrease the value of the parameter

Press OK to confirm and exit.

Press SET again to exit programming mode.

Display

The display shows Off if terminals 14 and 15 are broken.

The display shows -0- if terminals 14 and 15 are closed but 12 and 13 are broken (fan switch)

Cleaning function

The Cleaning function is programmable. The shock wave and timer control can be set in the function menu.

The shock wave should be adjusted for the current application. From factory, it is set to shoot every 350 seconds. The timer setting may be changed in F3.

Cleaning function with off fan

The function allows one or more cleaning sequences (the number selected in F13), when the fan is turned off.

The cleaning time is always as selected in F02, while the pause time is selected in F14.

The display alternately shows the number of seconds to cleaning and the code "PCC".

List of Functions

- F02:** Activation time.
Possible values: 0.5 - 5.00. Step 0.01
Default = 0.20
- F03:** Pause time, between shots:
Possible values: 001 - 999. Step 1
Default = 350
- F04:** Number of valves.
Possible values: 01 - 16
Default = Automatic
- F05:** Output voltage.
Possible values: d24 / a24 / 115 / 230.
Default = a24
- F06:** Manual cleaning cycle.
Possible values: The number of valves set in F4
Press SET to activate.
- F13:** Cleaning cycles after fan stop.
Possible values: 01 - 99. Step 1
Default = 01
- F14:** Pause time between cleaning cycles after fan stop.
Possible values: 001 - 999. Step 1
Default = 10
- F15:** Service timer.
Possible values: 001 - 999. Step 1 (1=10 h)
Default = 100 (1000 h)
- F16:** Service alarms.
Possible values: 0 (off) -1 (on).
Default = 0 (off)
- F17:** Reset service timer.
Possible values: 0 (off) -1 (reset).
Default = 0 (off)

Note: The service timer will be reset and the F17 will be reset to 0 by setting F17 to 1.

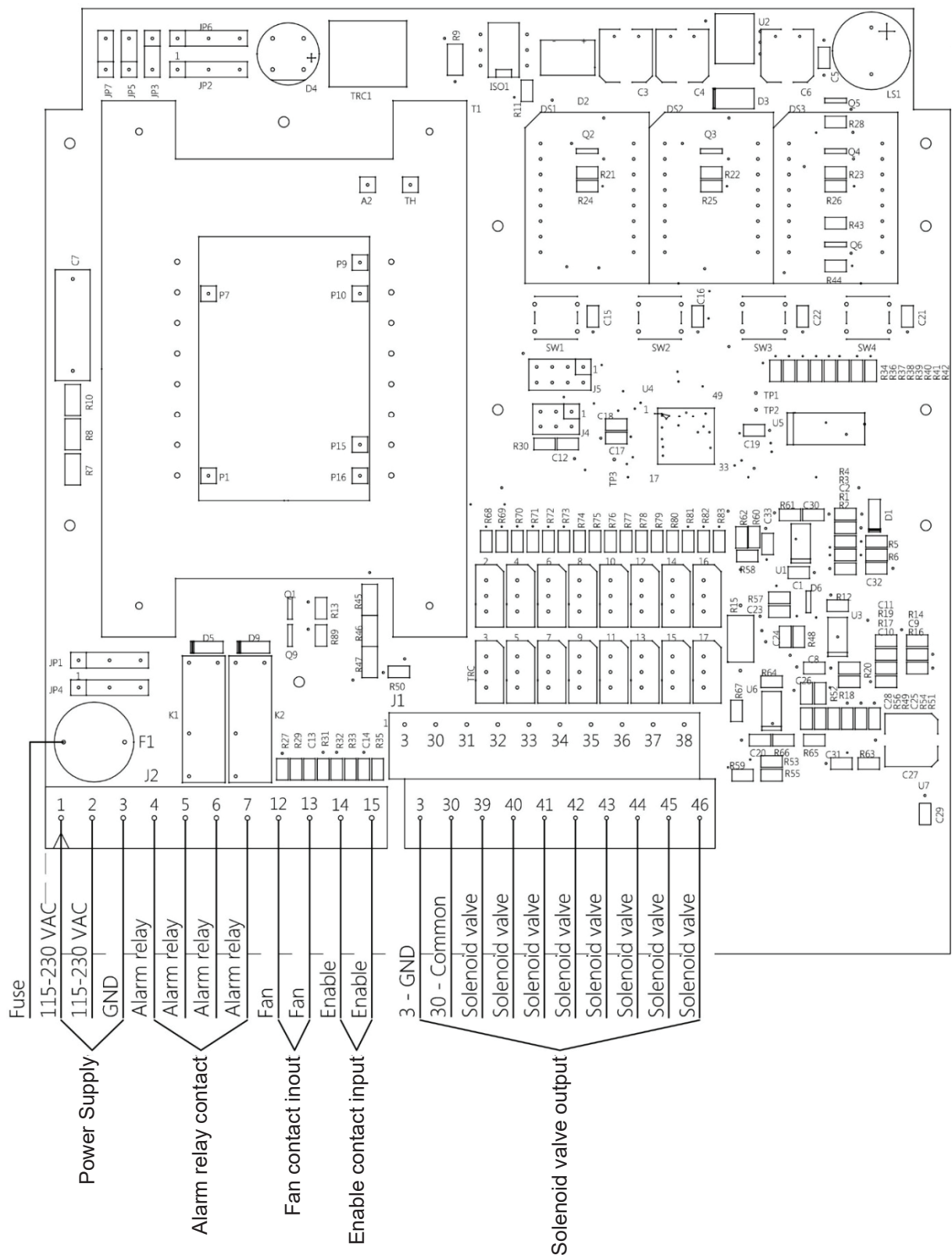
Alarms:

The unit runs a number of checks during the start-up cycle and during normal operation.

The possible alarms and respective solutions are shown in the following table.

Alarm	Description	Action
E01	F05 set to 24Vdc - ac jumper detected.	24Vdc , switch the device off and move the ac/dc jumpers to dc. 24Vac , Press OK, then press SET, set the function F05 using +/-, select A24 and press OK to confirm.
E02	F05 set to 24Vac - dc jumper detected.	24Vac , switch the device off and move the ac/dc jumpers to ac. 24Vdc , Press OK, then press SET, set the function F05 using +/-, select d24 and press OK to confirm.
E03	F05 set to 24Vac or 24dc. Voltage out of range detected.	24V valves , switch the device off and move the output voltage selection jumper to 24V. If the jumper is in the correct position , press OK then SET, select the F05 function with +/- set the correct current and press OK.
E04	F05 set to 115V or dc. Voltage out of range detected.	115V valves , switch the device off and move the output voltage selection jumper to 115V. If the jumper is in the correct position , press OK then SET, select the F05 function with +/- set the correct current and press OK.
E05	F05 set to 230 V. Voltage out of range detected.	230V valves , switch the device off and move the output voltage selection jumper to 230V. If the jumper is in the correct position , press OK then SET, select the F05 function with +/- set the correct current and press OK.
E06	The current of the solenoid valve is lower than the minimum threshold or disconnected solenoid valve.	Check that the solenoid valve is connected correctly and the respective data. The alarm is self-reset.
E07	The current of the solenoid valve is higher than the maximum threshold.	Check that the solenoid valve is connected correctly and the respective data. The alarm is self-reset.
E08	Output short circuit. Alarm cannot be reset	Switch the filter off, check the solenoid valve, and switch the filter back on.
E11	Maintenance deadline reached.	Carry out maintenance.

Connections diagram



Supply voltage:	230V AC
Alarm relay:	No (Max 3A@250V AC)
Fan input:	Open = Fan off Closed = Fan on
Enable Cleaning:	Open = Cleaning disabled Closed = Cleaning enabled

2.1.3 Differential pressure control (OPTION)



- **In automatic mode (F01=1)**
 - dp value alternating with **OFF** if the enabling switch (14-15) is off.
 - dp value alternating with **-0-** if the enabling switch (14-15) is on but 12 and 13 are off.
 - dp valve only if the fan is on and active.
- **I manual mode (F01=0)**
 - OFF** if the enabling switch is off (14-15)
 - 0-** if the enabling switch (14-15) is on and the fan is off

Manual operating mode F01=0

The economiser will work as a programmable cycle sequencer in manual mode. The connected outputs will be activated at the programmable frequencies. Manual mode can be activated by accessing the configuration menu and setting F01 to 0. F02 and F03 will set the activation time and the pause time, respectively.

Automatic operating mode F01=1 (Standard)

By selecting automatic mode (F01=1), the economiser will work autonomously and carry out the pneumatic washing cycle only when needed. The device will start the washing cycle if the obstruction is higher than Threshold_DP_Start (F08). Washing is suspended when obstruction drops under Threshold_DP_Stop (F09) level until it reaches a value higher than the Threshold_DP_Start threshold once again. When washing is active, the economiser respects the times set in F02 (operating time) and F03 (pause time).

Automatic mode with forced cycle F01=2

Identical to the automatic mode, except for the fact that it is possible to obtain a cleaning cycle with the activation of the solenoid valves connected without reaching the Threshold_DP_Start (F08). The forced cleaning interval may range from 1 to 999 h and can be selected through function F22.

Proportional mode F01=3

With the proportional mode, the economiser will work in full autonomy, initially setting the DP_Start threshold (F08), activation time (F02) and pause time (F03). When the Start Cleaning threshold is exceeded, the solenoid valves are automatically activated in sequence. If the dp threshold drops below 15% at the end of an entire cycle of pulses of the connected solenoid valves, the washing is suspended until pressure returns to a value above the Start Cleaning dp value. If the dp value does not drop below 15% of the Start Cleaning threshold, the frequency of the time is automatically reduced in proportion with each entire cycle of pulses of the connected solenoid valves, until a minimum cycle time between solenoid valves reaches 10 seconds. The minimum threshold of 10 seconds has been chosen in order not to hamper the dispensing of air by the compressor connected to the filter.

Cleaning function with fan off (PCC)

This function allows to carry out one or more cleaning cycles (the number of cycles is defined by F13) when the fan is off. The on or off state of the fan may be determined by the state of contacts 12-13 (contacts open = fan off). If F11=0, or may be determined automatically (with F11=1) when the dp pressure drops under the threshold defined in F12. The pulse time of the valves will always be that defined in F02, while the pause time in this case is defined in F14.

The display alternatively shows the number of the valve activated and the word "PCC".

Number of output selection

The number of outputs (solenoid valves), on which the sequencer will run the cleaning cycle, can be selected. Cleaning will be carried out in order from the first to last solenoid valve. The valves can be adjusted by the F04 function.

dp 0 calibration (F07)

This function is used to reset dp reading with the fan off. Increase or decrease the value shown by pressing + and - as required. This value will be subtracted from the value read by the dp sensor.

dp sensor self-calibration

This function allows to reset dp reading with the fan off automatically.

Hold SET and OK at the same time with the device off.

The message CAL will appear after the start-up test.

Release the buttons. The unit will go back to normal state after a few instants.

Automatic calibration is complete.

Fuse

Fuses can be replaced with selected Amp consumption:

3A = 24Vdc / ac

List of Functions

- F01:** Activation time.
Possible values:
0 - Manual (Δp excluded)
1 - Automatic (Default)(Δp included)
2 - Automatic with forced cycle (Δp included)
3 - Proportional (Δp included)
- F02:** Activation time.
Possible values: 0.05 - 5.00. Step 0.01
Default = 0.20
- F03:** Pause time.
Possible values: 001 - 999. Step 1
Default = 020
- F04:** Number of valves.
Possible values: 01 - 16. Step 1
Default = Dependant on filter size
- F05:** Output voltage.
Possible values: d24 / a24 /115 / 230
Default = a24
- F06:** Manual cleaning cycles.
Possible values: 1 the number of valves specified in F04.
- F07:** Zero dp threshold.
Possible values: 0.00 kPa -3.99 kPa. Step 0.01
Default = 0.00 kPa
- F08:** Cleaning cycle start threshold.
Possible values: 0.00 kPa - 3.99 kPa. Step 0.01
Default = 0.80 kPa
- F09:** Cleaning cycle stop threshold.
Possible values: 0.00 kPa - 3.99 kPa. Step 0.01
Default = 0.40 kPa
- F10:** Max DP Alarm Threshold. (Filter Clogging)
Possible values: 0.00 kPa - 3.99 kPa. Step 0.01
Default = 3.00 kPa
- F11:** Fan on recognition mode.
Possible value: 0 = fan input
Possible value: 1 = pressure
Default = 0
- F12:** dp threshold for fan on recognition if F11=1.
Possible values: 0.00 kPa - 3.99 kPa. Step 0.01
Default = 0.10 kPa
- F13:** Cleaning cycles after fan stop.
Possible values: 01 - 99. Step 1
Default = 01

- F14:** Pause time between cleaning cycles after fan stop.
Possible values: 001 - 999. Step 1
Default = 10
- F15:** Service timer.
Possible values: 001 - 999. Step 1. (1=10 h)
Default = 100 (1000 h)
- F16:** Service alarm.
Possible values: 0 (disabled) -1 (enabled).
Default = 0 (disabled)
- F17:** Reset service timer.
Possible values: 0 (disabled) -1 (reset).
Default= 0 (disabled).
- Note:** The service timer will be reset and the **F17** will be reset to 0 by setting **F17** to 1.
- F18:** Precoating function enabling.
Possible values: 0 = (disabled) 1 = (enabled)
Default = 0 = (disabled)
- F19:** dp threshold for precoating function.
Possible values: 0.00 kPa - 3.99 kPa. Step 0.01
Default = 2.00 kPa
- F20:** Enabling Minimum DP Alarm function.
Possible values: 0 (disabled) 1 = (enabled)
Default = 0 (disabled)
- F21:** Min. DP Alarm Threshold (Broken Sleeve/Cartridge).
Possible values: 0.00 kPa - 3.99 kPa. Step 0.01
Default = 0.20 kPa
- F22:** Forced Cleaning Cycle
(Available only in funktion mode F01 = 2).
Possible values: 1 h - 999 h. Step (1 h)
Default = 4 h

Alarms

The unit runs a number of checks during the start-up cycle and during normal operation.

The possible alarms and respective solutions are shown in the following table.

Alarm	Description	Action
E01	F05 set to 24Vdc - ac jumper detected	24Vdc , switch the device off and move the ac/dc jumpers to dc. 24Vac , Press OK, then press SET, set the function F05 using +/-, select A24 and press OK to confirm.
E02	F05 set to 24Vac - dc jumper detected	24Vac , switch the device off and move the ac/dc jumpers to ac. 24Vdc , Press OK, then press SET, set the function F05 using +/-, select d24 and press OK to confirm.
E03	F05 set to 24Vac or dc. Voltage out of range detected.	24V valves , Switch the device off and move the output voltage selection jumper to 24V. If the jumper is in the correct position , press OK then SET, select the F05 function with +/- set the correct current and press OK
E04	F05 set to 115V eller dc. Voltage out of range detected.	115V valves , switch the device off and move the output voltage selection jumper to 115V. If the jumper is in the correct position , press OK then SET, select the F05 function with +/- set correct current and press OK
E05	F05 set to 230 V. Voltage out of range detected.	230V valves , switch the device off and move the output voltage selection jumper to 230V. If the jumper is in the correct position , press OK then SET, select the F05 function with +/- set correct current and press OK
E06	Solenoid valve current lower than minimum threshold or disconnected solenoid valve.	Check correct connection of the solenoid valve and respective data. The alarm is self-reset.
E07	Solenoid valve current higher than maximum threshold.	Check correct connection of the solenoid valve and respective data. The alarm is self-reset.
E08	Output short circuit. Alarm cannot be reset	Switch the device on and back on after having checked the solenoid valve system.
E09	dp maximum pressure exceeded (F10)	Check state of filtering elements.
E10	dp sensor hardware offset out of range	The self-calibration of the dp sensor has determined that a value is out of range. Disconnect the air tubes and repeat the function. Take the device to be serviced if the alarm occurs again.
E11	Maintenance deadline reached	Carry out maintenance
E12	dp sensor full-scale value reached	Check state of filtering elements. Important: Running in this condition may damage the device.
E13	Minimum DP alarm value ranging from F12 to F21 (Warning: The alarm is generated with a fixed delay of 60 seconds)	Check the status of the filtering elements.

2.2 Test-run – finetuning

Before finally putting the filter into operation its function should be tested and the cleaning cycle adjusted, so that it fits the facility, in which it will be used.

Check that the pause interval on the cleaning system is appropriate for the actual amount of dust – adjust if necessary (see instructions for filter operation).

Check for vibration or noise issues during use of the GFB2 Tower. Check that the entire system is completely sealed. In case of squeaking sounds, locate leakage and seal with joint filler.

We recommend checking the ventilation system to ensure, that it is delivering the amount of air which the system is proportioned for. Measure the amount of air and regulate using the regulation valve. In the event of overcapacity, the power usage can exceed the capacity of the fan motor, thereby causing the motor to burn out. See the fan manual.

3.0 Use – user instruction

When assembly of the filter is complete, installed correctly and ready for use, there will not be any interaction between the user and the filter besides emptying the bucket. Naturally, the user should be aware of whether there is correct suction in the exhaust system. See section 4.0 Maintenance.

During filtration of processes in which the filter media are exposed to high loads, it may be necessary to use Prekote. Prekote is a granulate, which is applied to the filter and increases the life expectancy of the filter media.

See the separate instructions on this or contact Ge-ovent for more information.

IMPORTANT: It is imperative that the cleaning cycle intervals are adjusted according to the load put on the filter.

First when installing and secondly after a period where it is evaluated if the intervals between cleaning shots should be shorter or longer.

If the shots are fired too often, it will shorten the lifespan of the filter media and cost more energy. Are the shots fired too seldom there will be more strain on the fan making filtration more costly and ineffective.

4.0 Maintenance

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

Periodic maintenance of the filter:

- All electronic parts should be checked yearly
- Check that the supply of compressed air is clean and dry to avoid condensation causing damage to the filter cartridges and solenoid valves.
- Check the pressure loss over the filter and change the filter cartridges if pressure loss exceeds 2.000Pa.
- Regularly check the filter's clean side for dust particles and change filter cartridges in the event of leakage.

Periodic maintenance of fan

- The wheel and fan housing should be rinsed once a year or as needed. This can be done with a cleaning brush and soapy water. Remember to disconnect power before cleaning and to dry off with a dry cloth. This will ensure the fan a longer life.
- Maintenance of the motor must be in accordance with the manufacturer's instructions. See the attached manual.

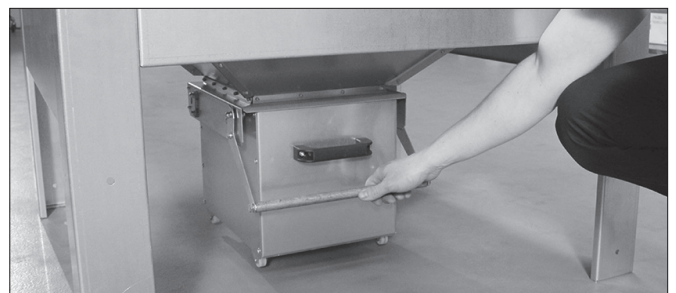
Only use original parts.

Access to the inner side of the fan housing and the fan wheel is from the rear of the fan. Disconnect power and remove the motor flange by loosening the bolts.

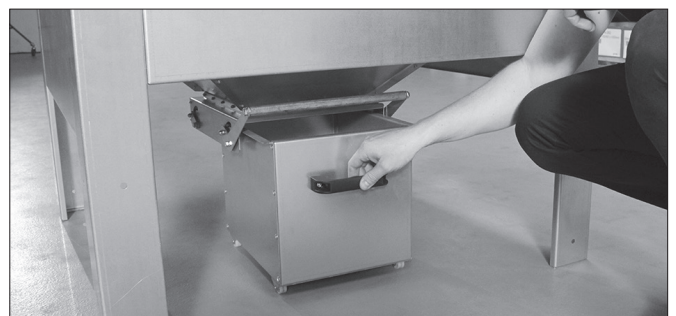
4.1.1 Emptying the collection bucket

Empty the bucket when it reaches around 2/3 capacity, otherwise it may place further strain on the filter medium. Following this, dispose of the bucket's content responsibly according to existing regulations.

Only empty the bucket after switching off the system



1. Pull the handle up



2. Pull/roll out bucket and empty



3. Roll bucket in and push handle down while holding bucket in place.

Door:



1. Loosen the bolts, turn the latch 90° to the left.



2. The door opens (the filter can be replaced)

3. After filter change, close the door again.

4. Turn the latch 90° to the right, while holding the door in place.

5. Tighten the bolts until the latch is tightly secured to the door.

Security Check:

1. Check that all 4 locks are tight so they cannot be loosened by hand.

2. Pull the handle, to be sure that it is locked.

4.1.2 Replacing the filter cartridges

The filter medium should be changed after about 4.000 – 8.000 hours of operation or after a maximum of 4 years. This depends partially on the strain on the filter, and partially on what its use has been.

Procedure:

1. Before opening the door of the filter, it is important that the service technician takes the necessary personal safety precautions such as wearing a respirator and gloves that meet the Working Environment Authority's rules for working with contaminated dust.

2. All power must be disconnected and unable to be activate during servicing.



3. Loosen all screws holding the filter cartridge in place.



4. Turn the filter to remove it.

5. Place the contaminated filter in a plastic bag and dispose it according to rules for hazardous waste.
6. Mount the clean filter cartridge by repeating the above steps in reverse order.
7. Check the filter for functionality and leakage before use.

How to optimize your filter

1. Choose the correct filter medium for the job
2. Clean using correct air pressure
3. Correct injection sequence setting
4. Daily addition of Prekote
5. Ensure that the filter medium is dry
6. Shut down cleaning

4.2 Troubleshooting

In the event of problems caused by increased pressure loss, low amounts of air etc., go through the following points:

Dust proceeds to come out of the inlets

The cleaning system is having to "blow" too much dust off the cartridges at one time and the dust is seeping into the tubes. Reduce the pause interval on the filter control until the dust no longer comes out through the inlets.

Pressure loss increases quickly during use and air level falls accordingly

- The cleaning system cannot keep up with the dust level.
- Reduce the pause interval until the pressure loss is normal again. If this fails, the filter cartridge must be changed.
 - Increase cleaning pressure (to a maximum of 6 bar, as the filter media could otherwise be damaged).
 - Increase after-cleaning.
 - Use Prekote. Contact Geovent for more information.

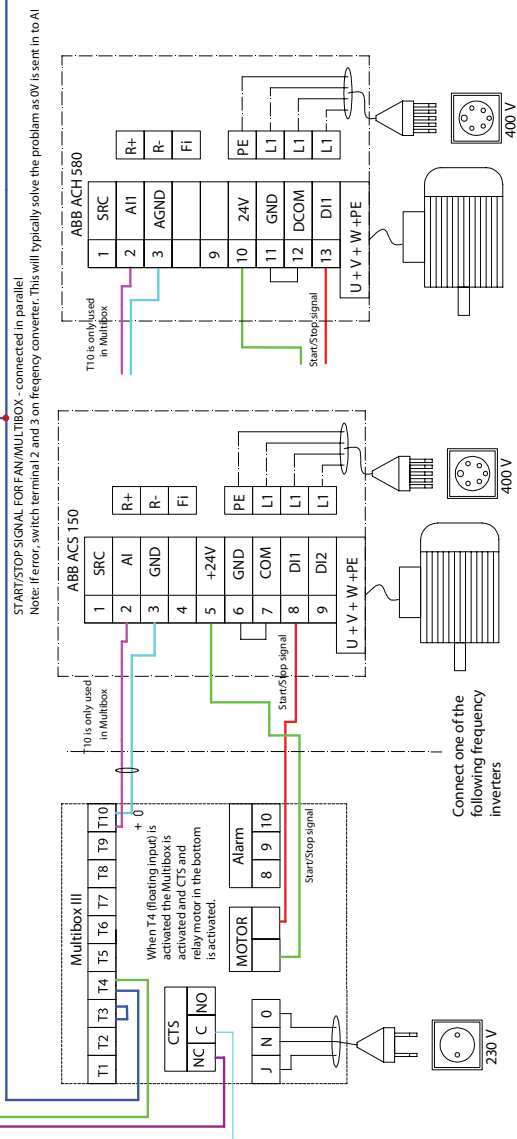
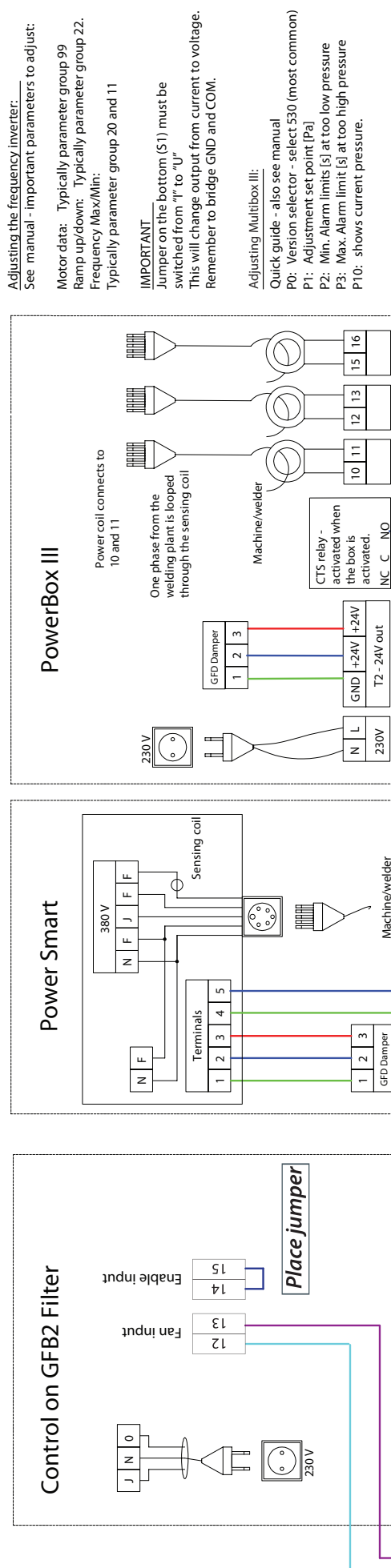
The pressure switch sounds alarm

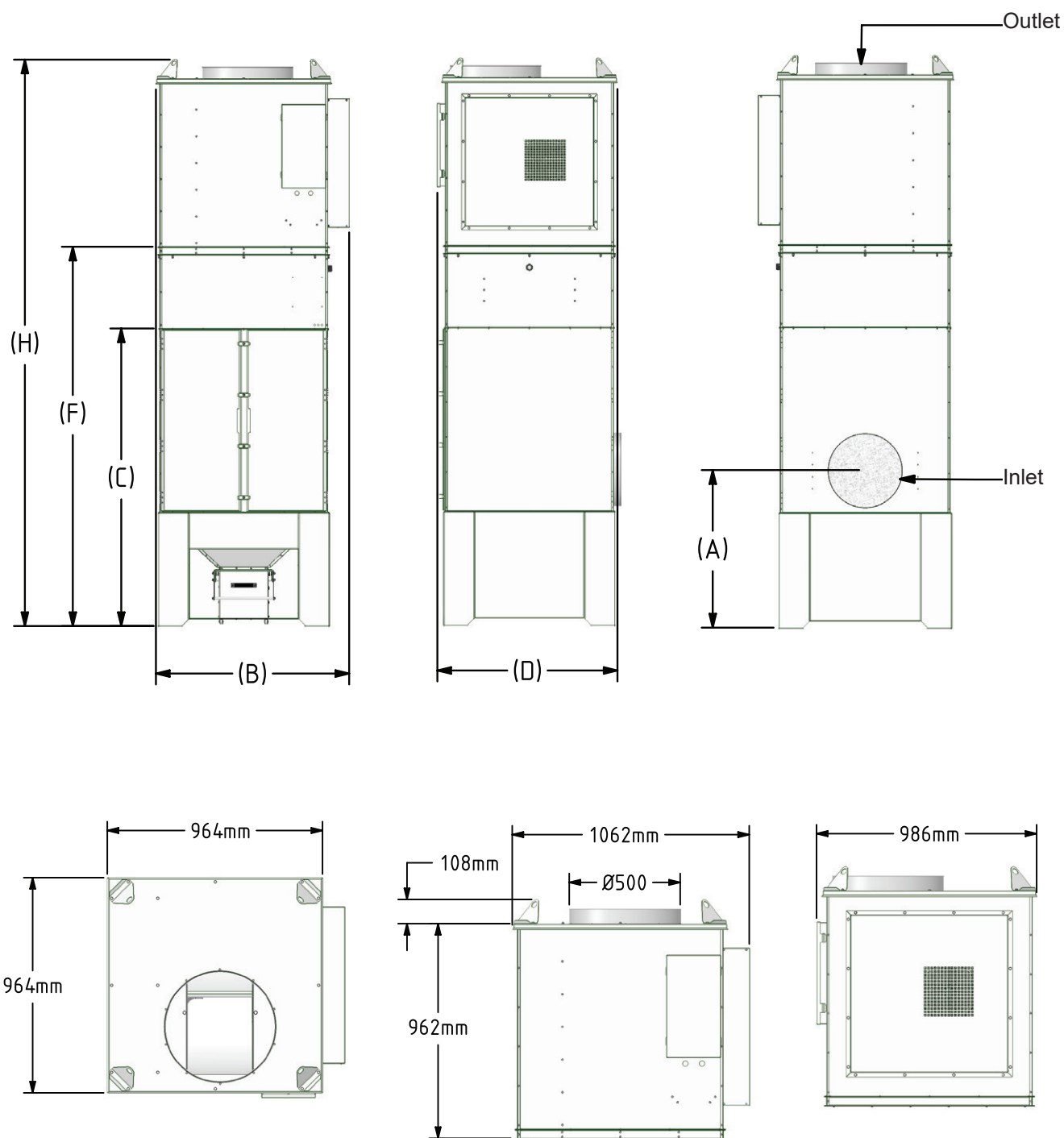
Either the filter cartridge is torn or needs to be replaced immediately (pressure differential is too low) or the filter cartridges are nearing the end of their lifecycle, and need to be replaced (pressure differential too high).

Filter media and their use (suggested)

Application	15-335	15-480 FL	15-108 Dustbox	15-482	03-260 HVU	03-259 HVU	03-260 HVU-it	15-480A	15-481 FL
Oil mist	X								X
Dry welding smoke									X
Oil saturated welding smoke									P*
Foundry									X
Zink					X	X	X		
Powder coating		X						X	
Plasma / lazer cutting				P*					
Sandblasting / Sand		X							
Sandblasting / Glass								M*	
Sandblasting / enamel, steel, aluminium					X	X	X		
Grinding			X		X	X	X		X
Unspecified dust - no smoke		X							
Milk powder									X
Spice								A*	
Tobacco								X	
Paper								X	
Chalk									X
Cement									X
Saw dust								A*	
*Notes: P = Prekote M = Moisture resistant A = ATEX approved									

MULTI COUPLING DIAGRAM - TERMINALS, MULTIBOX AND FREQUENCY INVERTERS





GFB2 Tower 9-3

Model/Dimension [mm]	A	B	D	H	Inlet	Outlet	Weight	Casing
GFB2 Tower 6-2	810	985	910	3040	ø315np	ø400np	kg.	Galvanized
GFB2 Tower 9-3	855	1060	985	3100	ø400np	ø500np	360 kg.	Galvanized
GFB2 Tower 12-4	900	1230	985	3150	ø500np	ø500np	kg.	Galvanized

5.0 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

6.0 Declaration of conformity



HOVEDGADEN 86 • DK-8831 LØGSTRUP
(+45) 8664 2211 • salg@geovent.dk

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

hereby declares that:

The product: GFB2 filter
Model: GFB2-6-2, GFB2-9-3, GFB2-12-4

has been manufactured in compliance with the following directives and standards:

European Parliament and Council Directive 2006/42/EC of 17 May 2006 on machinery, and amendments to Directive 95/16/EC.

The following harmonized standards have been applied:

EN ISO 14121-1:2007 Risk assessment – part 1

EN ISO 12100-1:2005 Basic concepts and general principles for design.

EN ISO 12100-1:2009 Construction and design
Part 1: Basic terminology and methodology

EN ISO 12100-2:2005 Basic concepts and general principles for design.

EN ISO 12100-2:2009 Construction and design
Part 2: Technical principles

The product: Fan
Model: MEF355 1,5kw, MEF400 4,0kw,
MEF450 5,5kw, MEF500 7,5kw

has been manufactured in compliance with the directions of the Directive Council 2006/42/EEC, regarding machine safety, changes of directive 95/16/EEC and following standards:

UNE-EN ISO 12100: 2012

Authorized to collect the technical file:

Lise Cramer

Date: 29.10.2019

Position: Director
Name: Thomas Molsen

Signature :





GEOVENT

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