Specification / technical data

Connection voltage	230V / 50Hz
Max power	50W
Ambient temperature	-20ºC…+50ºC
Max relative humidity	* 80%
Fuse	0,5 A (230V slow)

* The ozone production of the air cleaner will be lower, when the air humidity gets higher. When the air humidity drops, the ozone production will increase again.

Type	Φ	Capacity [m^3/h]		
	mm inch	High 100%	Medium 50%	Low 20%
DIA-150*	150 5,8"	1.200	600	240
DIA-160	160 6"	1.200	600	240
DIA-200	200 8"	1.800	900	360
DIA-250	250 10"	2.400	1.200	480
DIA-315	315 12"	3.000	1.500	600
DIA-355	355 14"	3.000	1.500	600
DIA-400	400 16"	3.000	1.500	600

* DIA-150 is a combination of DIA-160 with reduction adapters

Operation

A mains plug with Protected Earth (PE) should be connected to mains inlet connector.


The air cleaner can easily be operated by plugging a mains plug into the mains and switching on the mains switch.
There are 3 settings to adjust the ozone capacity:
HIGH - MEDIUM - LOW

Maintenance and repairs

Servicing and installation of the air cleaner may only be done according local regulations by certified personnel AFTER the air cleaner is completely separated from the mains. The user is responsible for the (dis)assembly and repairs of the air cleaner.

The air cleaner is almost maintenance free. After a long period of intensively usage, the ozone reactor may get polluted. The reactor can be disassembled and replaced.

The mains plug must be disconnected from the mains, before the air cleaner may be disassembled.

1) Disassemble the ozone reactor by unscrewing the 4 nuts of the housing bottom part. The reactor can be fully removed from the tube by lowering the bottom part.

2) Unscrew the 2 bolts of the reactor cage so it can be removed.

3) Disconnect the 2 bolts of the reactor and all wiring so the reactor can be replaced.
Assembly is the reverse of previous steps.


User manual

Diamond Air

Disinfection

Bacteria viruses moulds
100% Odour removal

 website: www.diamond-air.nl

The way of cleaning air in nature

Disinfection of viruses, bacteria and moulds
100% odor removal
Lightweight & easy to install
Plug & play ozone reactor
Ozone capacity settings

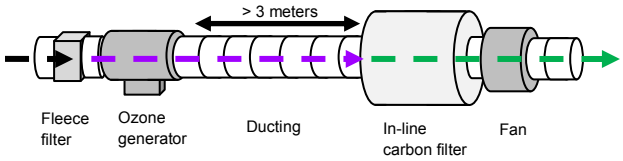
Safety instructions
The ozone generator is exclusively for industrial usage. When using the ozone generator, safety precautions should be observed. Therefore read the instructions very carefully.

Warning hazardous voltages
The ozone generator makes use of high voltages. Do **NOT** touch conducting (metal) parts when the ozone generator is connected to the mains (230V) Before connecting the ozone generator to the mains, the it should be installed in a ventilation system.

Short circuit protection
The ozone generator is short circuit protected with a fuse. If the fuse blows, the ozone generator should be turned off, before replacing the fuse. The fuse is placed near the mains inlet. The fuse can be replaced by opening the fuse cap.

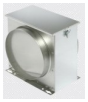
Diamond air in-line system
The revolutionary new air cleaning system!

With Diamond air in-line system you have:
1. Fleece filter for large dust particles
2. Ozone generator for disinfection and odor control
3. In-line carbon filter for blocking ozone and filtering fine particles
4. Fan for air flow creation



At least **5 meters of ducting** should be used **after** the air flow passed the ozone generator. This is to let the ozone have sufficient time to react with the polluted air.

The Diamond air in-line system parts are optimized for every ventilation system.
The capacity of ozone created by the ozone generator should match the capacity of the in-line carbon filter, which also should match fan capacity.
Detailed specifications on the separate parts can be found in there related user manual.

Con-nect size	Fleece filter box	Ozone generator	In-line carbon filter	Fan
mm / inch				
150 / 5,8"	FV-150	DIA-150	In-line 600	MAX PS EC 150
160 / 6"	FV-160	DIA-160	In-line 600	MAX PS EC 160
200 / 8"	FV-200	DIA-200	In-line 1000	MAX PS EC 200
250 / 10"	FV-250	DIA-250	In-line 1500	MAX PS EC 250
315 / 12"	FV-315	DIA-315	In-line 2500	MAX PS EC 315
355 / 14"	FV-355	DIA-355	In-line 3000	MAX PS EC 355
400 / 16"	FV-400	DIA-400	In-line 3000	MAX PS AC 400

Ozone safety
Ozone can be recognised in nature as the fresh air after a thunderstorm, which is nature's way of cleaning the air.
The effect of ozone on human health depends on the concentration and duration of exposure.
Because of the possible effects it is important to always have a correct way of working with ozone.

Installation instruction
Ozone generator can only be used integrated in a ventilation system.
There are 2 installation options:

1. Air flow outputs in (semi) closed areas.
The ozone can be blocked by using an in-line carbon filter at the output of the ventilation system. Ozone will be blocked by the carbon and will break down to oxygen again.
Advised setup the Diamond air in-line system!

2. Air flow outputs in open areas.
The ozone concentration in open air declines rapidly. Ozone concentration in open air will never exceed 0,1ppm, so accepted for human safety.

Advise is to place the ozone generator close after the fan, so maximum length of ducting issued for ozone reaction time with the polluted air.