

INDOOR AIR PURIFIER ION TEC AIR 80

Translation of the original operating instructions

Contents

1	Manufacturer	3			
2	Safety precautions	3			
2.1	Basic information	3			
2.2	Explanation of safety precautions	3			
2.3	General safety precautions	3			
2.4	Proper use	4			
2.5	Personnel qualification	4			
2.6	Use in children's day care centres and schools	5			
3	Functional description	5			
3.1	Unit structure	5			
3.2	Filtering and UV sterilisation.....	6			
4	Transport and assembly	6			
4.1	Transport	6			
4.2	Assembly	7			
4.3	Recommended air output and positioning.....	7			
5	Technical data	8			
5.1	Dimensions	8			
5.2	Technical data	8			
5.3	Air output-related consumption and noise level data.....	9			
6	Operation	9			
6.1	Setting the cleaning interval	9			
6.2	Touch panel.....	9			
6.3	Symbols.....	10			
6.4	Symbol explanation	10			
6.4.1	Home symbol	10			
6.4.2	On/off.....	10			
6.4.3	Child safety lock	10			
6.4.4	Settings	11			
6.4.4.1	Clock.....	11			
6.4.4.2	Date	11			
6.4.4.3	Brightness.....	11			
6.4.4.4	Cleaning interval.....	11			
6.4.4.5	UV-C lamp.....	11			
6.4.4.6	Operating hours.....	11			
6.4.4.7	Sleep mode panel	11			
6.4.4.8	Child safety lock	11			
6.4.4.9	Unlock code.....	12			
6.4.4.10	Warning signal	12			
6.4.4.11	Touch tone	12			
6.4.5	Air output.....	12			
6.4.6	Weekly schedule	12			
6.4.7	Timer	12			
6.4.8	Fan	13			
6.4.9	Filter cell	13			
6.4.10	UV-C lamp.....	13			
6.4.11	Activated harcoal filter	13			
7	Cleaning and replacement	14			
7.1	External cleaning.....	14			
7.2	Opening the maintenance door	15			
7.3	Pre-filter cleaning	15			
7.4	Filter cell cleaning.....	15			
7.5	Charcoal filter pad replacement	17			
7.6	UV-C bulb replacement.....	17			
7.7	Filter cell replacement	18			
8	Error messages and malfunctions	18			
8.1	Maintenance door error message	18			
8.2	Activated charcoal error message.....	18			
8.3	Filter cell error message.....	19			
8.4	UV-C bulb error message	19			
8.5	Malfunctions	19			
9	Maintenance and repair	20			
9.1	Air purifier maintenance	20			
9.2	Air purifier repair	20			
9.3	Spare parts.....	20			
10	Support	20			
11	Recycling and disposal	20			
12	Rating plate	21			
12.1	Serial number	21			
13	Ordering information	21			
14	Circuit diagram	22			
15	CE Declaration of Conformity	23			

1 Manufacturer

B.PRO GmbH
P.O. Box 13 10
75033 Oberderdingen
Phone 07045 44-81416
Fax 07045 44-81508
E-mail service@bpro-solutions.com
Internet www.bpro-solutions.com

2 Safety precautions

2.1 Basic information

The operating instructions contain basic safety precautions that must be observed during assembly, operation and maintenance. Failure to observe them may pose a risk to people, the environment and the air purifier:

- important air purifier functions may fail.
- People may be endangered through electrical or mechanical effects.

Warranty claims may be rendered void.

Before assembly/commissioning:

- read these operating instructions.
- Make sure that the contents of the operating instructions have been fully understood.
- Follow the instructions in this manual.

When operating the system:

- ensure that the operating instructions are available at the operating location.
- Follow the safety precautions.
- Only operate the air purifier in accordance with the output on the rating plate (see Point 12).

In case of questions or doubts:

- contact the manufacturer.

Target group:

this document is intended for the operator or user of the air purifier.

2.2 Explanation of safety precautions



DANGER! **Type and source of danger**

Immediately hazardous situation which, if not avoided, could result in death or serious injury.



WARNING! **Type and source of danger**

Potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION! **Type and source of danger**

Potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



NOTICE!

This combination of symbol and signal word indicates a possibly dangerous situation which, if not avoided, may result in damage to property and the environment.



Notice sign, describes general information, recommendations

1. Indicates step-by-step instructions for action (describes the order of tasks to be carried out)
- Indicates enumerations and lists without a fixed order
- ⇒ Reaction sign, described machine/system reaction(s)

2.3 General safety precautions

The air purifier may only be used in a technically perfect condition without maintenance backlog.



DANGER! **Electric voltage**

Contact with live parts.

- Only qualified personnel may carry out electrical work.
- Check electrical components regularly and have them replaced or repaired by a specialist if damaged.
- Remove the mains plug before carrying out maintenance, cleaning, repair and before opening the maintenance doors.



WARNING! **Fire**

Customer's socket outlet faulty or unsuitable.

- The air purifier may only be connected to a socket outlet suitable for the mains plug which corresponds to the specifications on the air purifier rating plate. Do not use the air filter with a damaged mains cable, plug or socket outlet.

The air purifier does not pose a direct fire hazard. In case of fire, wear respiratory protection. All conventional extinguishing agents can be used.



WARNING!
Risk of injury when operating within the reach of children

Operation in day care facilities and schools and the associated access of children and adolescents may pose an increased risk.

- For more information, please see Point 2.6.



NOTICE!
PROHIBITED!

- The deactivation of safety and monitoring devices.
- Assembly outdoors and operation outside of buildings.
- Assembly in rooms with permanently high humidity or on a damp surface.
- Operation in an inclined or horizontal position.
- Use as suction for machines.
- Extraction of high dust loads.
- Operation with damaged mains plug.
- Inserting objects or limbs into the air purifier.
- Operation in aggressive, hazardous, flammable, explosive or in any way dangerous atmospheres.
- Operation without or with spent activated charcoal filter inserts.
- Changes to the air filter system made by the customer.
- Maintenance reset without cleaning or replacing the filter components.
- Placing, storing and transporting living beings, objects and liquids on the air purifier.
- Use as a climbing device. There is a danger of tipping.
- Operating the air purifier with wet or damp hands.
- Removing safety labels.
- Moving the device when switched on.



In an emergency, switch the air purifier off and/or disconnect the mains plug.



No liability is assumed for unauthorised or improper use, manipulation or failure to observe the safety precautions.

2.4 Proper use

The ION TEC AIR 80 air purifier is intended for cleaning normal indoor air. In continuous operation, the ION TEC AIR 80 ensures a significantly lower aerosol load and inactivates up to 99.7% of filtered viruses and bacteria in the room. Pollen, germs, mould spores, fine dust, cigarette smoke, nicotine and odours are also reliably filtered. Intended areas include waiting rooms, offices, treatment rooms, restaurants, retail stores, children's day care centres and schools. See also Point 5.2.

The unit must be assembled in frostproof rooms. The air purifier must only be operated in an upright and stationary position.



WARNING!
Danger of tipping

Climbing on the air purifier or using it as a toy is prohibited.



The air purifier cleans particles from the air; it does not produce oxygen. Depending on how the corresponding room is used, a fresh air supply must be ensured (CO₂ load).

The air purifier may only be used by persons who are capable of understanding and complying with the information in these operating instructions.



DANGER!
Risk of injury due to improper operation

The air purifier may only be used in accordance with the operating conditions and operating time specified in these operating instructions. Any other or additional use is considered improper. The manufacturer is not liable for any resulting damage.

2.5 Personnel qualification

The air purifier may only be operated and filter components replaced and cleaned by trained personnel.

Cleaning and filter component replacement must be carried out as described in Point 6.

Any additional work may only be carried out by qualified personnel:

- Work on electrical components may only be executed by qualified electricians.
- Accident prevention regulations must be observed during work.
- Wear personal protective equipment.
- Observe labels and instructions on the air purifier or components.

2.6 Use in children's day care centres and schools

Additional information for children's day care centres and schools

The information provided here refers to special risks in children's day care centres and schools.



NOTICE! Unauthorised opening of the air purifier

The standard lock can be opened using a screwdriver, coin or similarly shaped object. This prevents unauthorised opening.

- A triangle lock is available as an option for door locking. This secures the unit against unauthorised opening.

Duty to supervise

Unsupervised operation and movement of the air purifier is not permitted. Currently applicable legislation on supervision must be observed. Failure to observe the duty to supervise may result in improper use or misuse of the air filter.

Misuse of the air purifier



DANGER! Danger of tipping

Climbing on the air purifier or using it as a toy is prohibited.

Nothing may be placed, stored or transported on the air purifier!

The air purifier must not be used as a climbing aid. There is a danger of tipping that may result in personal injury.

The air purifier must be secured against rolling away or moving using all four castor brakes. Misuse may result in people being trapped or limbs being crushed or rolled over. Keep limbs away from the castor, air inlet and air outlet areas.



Use the lock function to prevent unauthorised operation, see Point 6.4.3

Operation and replacement of filter components

Filter components may only be operated or replaced by trained personnel. Children must be kept away from the air purifier and components during replacement.

Keep children away from any dirt (e.g. pieces of the charcoal pads) and remove and dispose of immediately.

3 Functional description

The ION TEC AIR 80 air purifier is a powerful filter system for indoor air and reliably removes fine dust, pollen, bacteria, viruses, germs, mould spores, nicotine and smoke. It reduces VOCs and odours.

Filtered viruses and bacteria are inactivated through the use of UV-C irradiation. The filter components do not present an increased risk of infection.

3.1 Unit structure



Illustration 1: Air purifier

The air from the room is drawn in at the bottom, filtered and released back into the room clean via the upper air outlet.

It is operated using a touch panel. Here, running schedules (timer, weekly schedule), air volume settings and other individual configurations are made. The contamination level of the filter stages is displayed through colour coding (service traffic signal system). The touch panel is equipped with a child safety lock.

3.2 Filtering and UV sterilisation

The maintenance doors on the back provide access to the filter components.

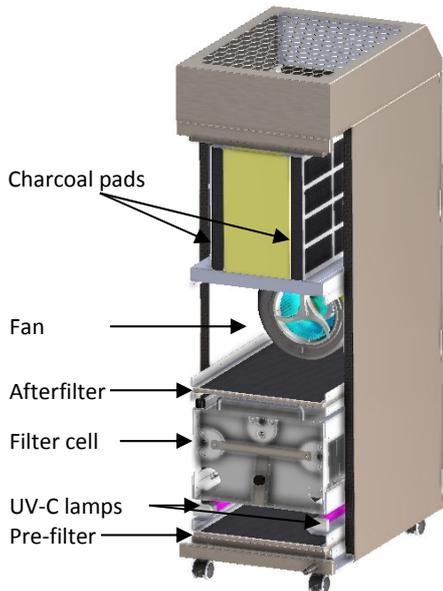


Illustration 2: Filter system structure

Pre-filter:

the fine metal mesh of the pre-filter captures coarse dust particles and dirt.

UV-C lamps:

The UV-C light of the two integrated lamps sterilises areas of the filter. The filter cell inactivates filtered viruses, bacteria and germs.

Filter cell:

The operating principle of the filter cell is based on the electrostatic principle. Aerosols, fine dust, pollen, bacteria, viruses, germs, mould spores, nicotine and smoke are ionised using high voltage and removed from the air stream via the large filtration surface of the filter cell. The high-voltage field of the filter cell produces ozone. This ozone reduces odour molecules, disinfects and is decomposed in the activated charcoal filter.

The filter cell can be cleaned and does not require replacement!



CAUTION! High ozone concentration

If the charcoal filter inserts are not inserted or are spent, the ozone concentration may increase, which may lead to respiratory tract irritation.

- If you detect ozone, switch off the air purifier and ventilate.
- The air purifier must not be operated without or with spent charcoal pads.

⇒ The air purifier will detect a missing charcoal filter insert and display a corresponding message on the operating panel. The air purifier will switch off after 30 seconds.

Afterfilter:

The afterfilter ensures the even distribution of the purified air.

Fan:

Thanks to modern EC technology, the fan is quiet and economical.

Charcoal pads:

Undesirable odours, ozone and pollutants (VOC, e.g. formaldehyde) are captured by the activated charcoal.

4 Transport and assembly

4.1 Transport

The ION TEC AIR 80 air purifier is delivered on a pallet by a carrier.

Any damage or suspected damage must be noted on the transport documents and countersigned by the carrier. The recipient must report the damage to B.PRO immediately, even if refusing acceptance.

The air purifier and packaging weighs approx. 95 kg.

The packaging must be disposed of according to legal requirements. Any local or country-specific regulations must be observed.



WARNING! Risk of injury from heavy loads

Lifting and transporting heavy loads may cause injury through overloading or falling objects.

- Use transport aids wherever possible.
- Do not lift alone.
- Always secure loads against tipping and rolling.



NOTICE!

Paint and edge protection must be used during transport.

- The improper use of lifting equipment or transport aids may cause damage to the underframe of the air purifier.

4.2 Assembly



For information on the ratio of room size to air output as well as the positioning of the air purifier, see Point 4.3.

The air purifier is safe from tipping up to an angle of 10° when stationary. You may only cross sloping surfaces with an incline of less than 10°.

The air purifier must be assembled in a dry, level location with sufficient load-bearing capacity and with all four castor brakes applied to prevent rolling.

The air purifier must be assembled horizontally and sufficient space must be provided for maintenance work (access to maintenance doors on the back).

There must be a suitable socket outlet nearby.



WARNING!

Risk of injury from tripping or falling!

The mains cable may pose a tripping hazard if looped or strained.

- Position cables away from areas with high footfall.
- Position the mains cable without loops or strain.
- Position the unit close to the socket outlet and do not use extension cables.



DANGER!

Risk of electric shock/sparks!

Operation with an unsuitable power supply may lead to personal injury or fire.

- Do not operate if there is visible damage to the air purifier, socket outlet or mains cable.
- The unit may only be connected to a socket outlet with a residual-current circuit breaker suitable for the mains plug which corresponds to the specifications on the air purifier rating plate.
- Do not lay the mains cable over edges or place objects on top of it.
- Do not roll unit over the mains cable.
- Ensure that the mains plug is accessible at all times.



NOTICE!

The electrical installation must be carried out in accordance with VDE 0100.

For safety reasons, we recommend the use of a residual-current circuit breaker (RCD) of the type  in the assigned electrical installation for the electrical connection of the air purifier.

Proceed as follows:

1. Assemble air purifier.
2. Remove transport packing/protection.
3. Insert the mains cable (three-pin safety plug) into a 230 V socket outlet with residual-current circuit breaker that complies with local and national electrical regulations (max. customer-supplied fuse protection 16A).
4. Configure the desired user settings.
When switching on for the first time, the air purifier requires individual settings, see Point 6.4.4.
5. The air purifier is ready for operation.

4.3 Recommended air output and positioning

With five-fold air exchange, the ION TEC AIR 80 air purifier is designed for rooms with a surface area of up to 80 m² and a height of 2.50 m. With these values, the air purifier can circulate and clean the air in the room five times per hour. Depending on the air exchange rate, corresponding room volumes result with a maximum air output of 1000 m³/h:

Surface area	Ceiling height	Room volume	Air exchange per hour
133 m ²	2.50 m	333 m ³	3
100 m ²	2.50 m	250 m ³	4
80 m ²	2.50 m	200 m ³	5
67 m ²	2.50 m	167.5 m ³	6

The higher the air exchange rate per hour, the faster aerosols and pollutants are filtered from the room.

Several units should be used for larger rooms. Air will be circulated more often in smaller rooms or the air output (m³/h) can be reduced on the air purifier.

Calculation of individual air output:

$$\text{Air purifier output} = \text{m}^3 (\text{surface area} \times \text{height}) \times \text{Air exchange per hour (desired)}$$

As described below in Point 6.4.5, the individually calculated air purifier output can be set via the air purifier's touch panel.

In the event of draughts, the air output can be reduced. It is recommended to position the air purifier centrally on one side of the room, see Illustration 3. This enables circulation of all air in the room. Larger items of furniture or fixtures may obstruct the air stream.

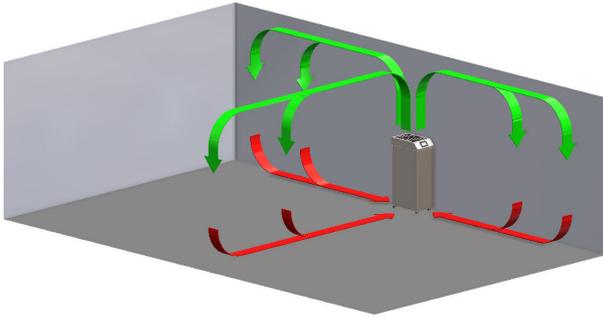


Illustration 3: Possible positioning

5 Technical data

5.1 Dimensions

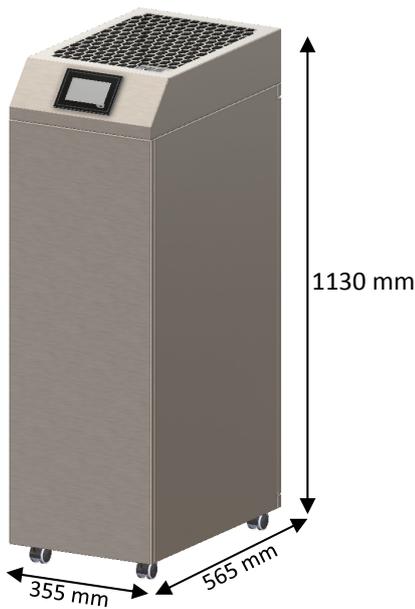


Illustration 4: ION TEC AIR 80 dimensions

5.2 Technical data

Air output	adjustable 200 – 1000 m ³ /h
Filter area	4.6 m ²
For rooms up to	80 m ² with five-fold air exchange
Output	60 to 275 Watt depending on configured output capacity
Connected load	220 – 240 V, 50-60 Hz
Noise level at 200/400/600/800/1000 m³/h	20 / 36.5 / 43 / 47.5 50 dB(A)
Current consump-	Max. 1.8 A
Filter stages	<ul style="list-style-type: none"> • Pre-filter • UV-C lamps • Filter cell • Afterfilter • Activated charcoal filters
Equipment	<ul style="list-style-type: none"> • Digitally controlled high-voltage technology • Energy-saving EC fan • Touch panel with child safety lock • Weekly schedule with switch-on function • Timer function • Active service management with service traffic signal system • 24/7 operation • 2.15 m connection cable with Schuko plug • 4 steering castors with brake
Protection type	IP20
Relative humidity	max. 90 %
Operating temperature	0°C to 40°C, non-condensing
Weight/packaged	80 kg / 95 kg
Dimensions W x D x H	355 x 565 x 1130 mm
Housing	Powder-coated, anthracite grey RAL 7016, traffic white RAL 9016
Options	Triangle lock

5.3 Air output-related consumption and noise level data

Power consumption in Watts in relation to the extraction performance in m³/h and corresponding noise level.

200 m ³ /h	60 Watt	20 dB(A)
300 m ³ /h	70 Watt	25 dB(A)
400 m ³ /h	80 Watt	36.5 dB(A)
500 m ³ /h	100 Watt	41.5 dB(A)
600 m ³ /h	125 Watt	43 dB(A)
700 m ³ /h	160 Watt	45 dB(A)
800 m ³ /h	210 Watt	47.5 dB(A)
900 m ³ /h	260 Watt	50 dB(A)
1000 m ³ /h	275 Watt	50 dB(A)

6 Operation

6.1 Setting the cleaning interval

In order to set the cleaning interval, the air purifier operating area is divided into three groups. This group division serves to enable the classification of particle quantities.

The user selects and enters the group with the touch panel. Classification and setting is carried out by the user, see Point 6.4.4.4. The default setting is G3.

The following division example shows the expected aerosol and particle load in the room. Individual variations are not considered and should be classified by the user at their own responsibility. Classification depends on room cleaning frequency as well as the aerosols and particles.

A highly frequented waiting area that is cleaned daily has a lower particle load than a waiting area with the same usage rate that is cleaned weekly. The aerosol load depends on the number of people.

In order to ensure the service life of the filter cell, the pre-filter should be regularly checked for coarse dirt particles and cleaned if necessary.

Application	Group
Offices	G1
Break room (office)	G1
Waiting room (doctor's surgery)	G1
Gyms and fitness centres	G1
Meeting room	G1
Residential	G1
Treatment rooms	G1
Hospitals	G1
Laboratories	G1
Retail stores (areas with increased customer footfall)	G2

Restaurant (dining area)	G2
Canteens	G2
Break room (production)	G2
Waiting room	G2
Restaurant (kitchen area)	G2
Reception areas	G2
School classrooms	G3
Children's day care centres	G3
Smoking areas	G3
Hairdresser (only with optional coarse filter)	G3
Bars	G3
Commercial kitchens	G3
Event spaces	G3
e.g. joinery use excluded!	-

Service life of replacement/cleaning intervals per group and filter stage.

	G1	G2	G3
	Maximum operating hours		
UV-C	8000	8000	8000
Filter cell	2000	1250	750
Activated charcoal	3000	2500	2000

Colour-coded filter stage symbols in the start menu and operating hours display for individual filter stages. When 100% is reached (activated charcoal or filter cell) the air purifier switches off and can only be used again once the filter cell has been cleaned or the charcoal pads have been replaced, see Point 7.

0% to 72%	Green range
73% to 92%	Orange range
93% to 100%	Red range

6.2 Touch panel

All entries are made via the intuitive touch panel. The operating panel responds to pressure. No special stylus is required.

After connecting to a socket outlet, the air purifier shows that it is ready for operation by displaying the start menu.



6.3 Symbols

Operating panel symbol	Explanation
	On/off switch Green = on Grey = off
	Child safety lock Operation lock Grey = disabled Green = enabled Red = touch panel locked
	Settings
	Weekly schedule Grey = disabled Green = enabled
	Timer Grey = disabled Green = enabled
	UV-C lamp Grey = off Green = functioning Orange = prepare replacement Red = replace soon
	Sleep mode panel Grey = disabled Green = enabled
	Filter cell Grey = testing/off Green = functioning Orange = prepare cleaning Red = clean soon Red strikethrough = not inserted or damaged; cannot be switched on!
	Activated charcoal filter Grey = testing Green = functioning Orange = prepare replacement Red = replace soon Red strikethrough = not inserted; cannot be switched on!
	Maintenance door open Automatic switch-off; cannot be switched on!
	Return to start menu
	Accept entry
	Leave number input field without accepting
	Delete
	Weekdays
	Sound switch
	Adjuster

	Back
	Maintenance interval reset
	Cleaning interval G1 to G3
	Information fields Square fields
	Input fields In weekly schedule

6.4 Symbol explanation

Grey = disabled or information
Green = enabled or in working condition
Orange = warning, prepare action
Red = action required

Round fields = function fields
Square fields = information fields
Green-outlined fields = input fields
Red-outlined fields = information fields
Yellow-outlined fields = group input fields in weekly schedule

6.4.1 Home symbol

The home symbol leads back to the start menu.

6.4.2 On/off

Switching the air purifier on and off
Symbol grey = air purifier off
Symbol green = air purifier on

6.4.3 Child safety lock

The lock symbol shows the status of the touch panel operation lock.
The operating panel locking function prevents unauthorised operation. It must be enabled in the settings menu.

The locking function can only be used if it has been enabled in the settings.
See Point 6.4.4.8.

Symbol grey = locking function disabled
Symbol green = locking function enabled
Symbol red = touch panel locked

⇨ **WARNING:** The operating panel automatically locks after the time specified in the settings!

The default unlocking code is 4321.
For changes, see the description of settings in Point 6.4.4.9.

 If the individual unlock code is unknown, the code can be reset to the default 4321 by entering the number sequence 081547.

When the lock function is enabled, the touch panel can be locked directly by tapping the lock symbol. If the symbol is not tapped, the air purifier will automatically lock after the time specified in settings.

To unlock the touch panels, press the red lock symbol. The unlock code must be entered on the number pad that appears. Tick to confirm.

The lock symbol changes colour to green to signal that the touch panel can be operated again. The touch panel will be locked again when the pre-set automatic lock time is reached. Press X to return without making changes.

6.4.4 Settings

The settings symbol is always grey. By pressing once, the sub menu opens.

6.4.4.1 Clock

Current time setting (hour/min./sec.). By pressing the individual clock fields, a number pad appears where the corresponding hour, minute or seconds can be entered. Tick to confirm the entries. Entries are replaced by the highest possible number. Press X to return without making changes.

6.4.4.2 Date

Date setting (day/month/year). By pressing the individual date fields, a number pad appears where the corresponding date, month or year can be entered. Tick to confirm the entries. Impermissible entries are replaced by the highest possible number. Press X to return without making changes.

6.4.4.3 Brightness

Adjusts the brightness of the touch panel. The brightness is adjusted by moving or tapping the slider control.

6.4.4.4 Cleaning interval

Group settings.

The cleaning interval symbol is pressed to set the appropriate group according to air purifier use. See Point 6.1 for specification. The symbol changes colour according to the group. Group G3 is set as default.

 The cleaning interval limits are automatically adjusted for each filter component.

6.4.4.5 UV-C lamp

UV-C lamp is disabled/enabled by tapping the symbol.

Symbol grey = UV-C lamp / function disabled
Symbol green = UV-C lamp / function enabled

6.4.4.6 Operating hours

Provides information about unit operating hours. Since all indoor air purifiers are subjected to an endurance test, the operating hours counter shows max. 30 hours on delivery.

6.4.4.7 Sleep mode panel

Touch panel sleep mode. Sleep mode is enabled or disabled by pressing the sleep mode symbol.

Symbol green = sleep mode enabled
Symbol grey = sleep mode disabled

Via the input field, a number pad opens where the time until touch panel switch-off can be set in minutes. Tick to confirm the entries. Impermissible entries are replaced by the highest possible number (60 min.). Press X to return without making changes.

Sleep mode is cancelled by tapping the symbol on the touch panel. Sleep mode is enabled again after the last operation and expiry of the set time.

6.4.4.8 Child safety lock

The lock symbol enables the touch panel operating lock. The automatic lock activates after the individually set time. The touch panel operating locking function is enabled/disabled by tapping the child safety lock symbol.

Grey symbol = locking function disabled
Green symbol = locking function enabled

Via the input field, a number pad opens where the time until automatic touch panel locking can be set in minutes. Tick to confirm the entries. Impermissible entries are replaced by the highest possible number (60 min.). Press X to return without making changes.

6.4.4.9 Unlock code



Shows the current child safety lock unlock code and enables the entry of a customized unlock code.

The current code is displayed in the information field. A customized one- to six-digit code can be entered in two input fields. A number pad opens for each where the code is entered. Tick to confirm. Press X to return without making changes.

Once the new code has been entered in both input fields, the code entry must be confirmed by ticking the box. The new code will be displayed in the information field and is confirmed with OK in the input field. In the event of an error, the word "Error" appears and the entry must be repeated.

The default unlocking code is 4321.



If the individual unlock code is unknown, the code can be reset to the default 4321 by entering the number sequence 081547.

6.4.4.10 Warning signal



A signal tone is emitted with air purifier error messages. See Point 8.

The warning signal can be switched on and off using the sound switch.

Symbol green = sound enabled
Symbol grey = sound disabled

6.4.4.11 Touch tone



A signal tone confirms that a button has been pressed as acoustic feedback.

The signal tone can be switched on and off using the sound switch.

Symbol green = sound enabled
Symbol grey = sound disabled

6.4.5 Air output



Shows the set air output.

The air output is adjusted by moving or tapping the green bar. It is adjusted in increments of 50 m³/h. Settings of 200 up to max. 1000 m³/h are possible. The currently set air output is shown.

To determine air output, see Point 4.3.

6.4.6 Weekly schedule



Using the weekly schedule, automatic switch-on and switch-off times can be programmed for the air purifier.



It is only possible to switch on the weekly schedule function when the air purifier is off. The on/off symbol is grey.

The weekly schedule is enabled or disabled by pressing the weekly schedule symbol.

Symbol grey = function disabled
Symbol green = function enabled

The weekdays open by pressing and holding the weekly schedule symbol. Select the relevant weekday to program it individually. The input window for the configurable function times and air output will open.

Five individual time and air output settings can be programmed per weekday.

Yellow-outlined field = group input field

By tapping on the desired area of the group input field, the enabled field is highlighted green. The values can be changed using the arrow buttons.

Overlapping time entries are possible. In such cases, the earliest switch-on time and the latest switch-off time will be used. The last programmed air output is applied.

Invalid entries will have a yellow outline.
Enabled entries will have no outline.
Enabled entries can be deleted via the trash symbol.

Once programming has been completed, press either the back arrow button to return to the weekday display or the home symbol to go back to the start menu.

6.4.7 Timer



Shows whether a timer is enabled.

The timer switches the air purifier off after the set time.



The timer function disables the weekly schedule function.

The timer is enabled or disabled by pressing the timer symbol.

Symbol grey = function disabled
Symbol green = function enabled

The input interface appears by pressing and holding the timer symbol. The time shown in the information field can be changed using the arrow buttons. Time can be set in 15-minute intervals. Once the settings have been made, press the home symbol to return to the start menu.

The timer retains the last set time.

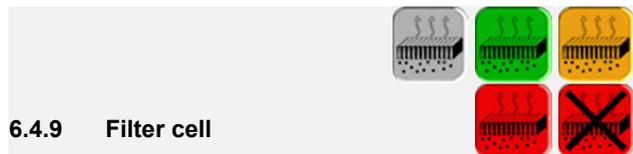
6.4.8 Fan



The fan information field shows whether the fan is in operation.

Symbol grey = fan out of operation
 Symbol green = fan in operation

The fan cannot be switched off separately. The speed is automatically set via the air output control.



6.4.9 Filter cell

The filter cell symbol shows the current status of the filter cell.

The current operating hours status is shown with traffic light colours in the start menu. The change in filter level symbol colour ensures that you are promptly informed of any impending cleaning. Through the use of digitally controlled high-voltage technology, the filter cell is always maintained at the ideal operating point.

 The air purifier cannot be switched on without a filter cell! The filter cell symbol is crossed out in red. 

The current filter cell operating hours are shown graphically. Depending on the operating hours and configured group, the filter cell will be shown in green, orange or red.

Symbol grey = filter cell out of operation.
 Symbol green = filter cell in operation. The clocked operating hours are within 0-72% of the maximum operating hours.
 Symbol orange = filter cell in operation. The clocked operating hours are within 73-92% of the maximum operating hours. The filter cell must be cleaned soon!
 Symbol red = filter cell in operation. The clocked operating hours are within 93-100% of the maximum operating hours. Clean the filter cell! Once the maximum operating hours have been reached, the air purifier will go out of operation and can no longer be switched on.
 Symbol with red strikethrough = filter cell out of operation or not inserted.

⇒ **WARNING:** Air purifier cannot be switched on.

The maximum operating hours depend on the cleaning interval group set, see Point 6.1.

 Once the maximum operating hours have been reached, the air purifier will switch off!

Filter cell cleaning and operating hours reset: see filter cell cleaning Point 7.3.

By tapping the filter cell symbol, the filter cell operating hours status menu opens.

The home symbol leads back to the start menu.



6.4.10 UV-C lamp

The UV-C lamps shows the status of the UV-C lamps.

The current operating hours status is shown with traffic light colours in the start menu. The change in filter level symbol colour ensures that you are promptly informed of any impending replacement.

 In order to achieve the optimal sterilisation of the filter cell, the UV-C lamps remain in operation for 60 seconds after the air purifier has been switched off.

The current UV-C bulb operating hours are shown graphically. Depending on the operating hours, the UV-C symbol will change from green to orange to red.

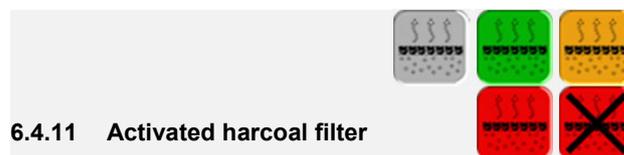
Symbol grey = UV-C lamps disabled in settings.
 Symbol green = UV-C lamps in operation. The clocked operating hours are within 0-72% of the maximum operating hours.
 Symbol orange = UV-C lamps in operation. The clocked operating hours are within 73-92% of the maximum operating hours. Please order replacements in good time!
 Symbol red = UV-C lamps in operation. The clocked operating hours are within 93-100% of the maximum operating hours. Replace the UV-C bulb. You should have a replacement ready!

The maximum UV-C lamp operating hours are 8000 hours.

Replace the UV-C bulb and reset the operating hours. See UV-C bulb replacement, Point 7.5.

By tapping the UV-C lamp symbol, the UV-C lamp operating hours status menu opens.

Tap the home symbol to return to the start screen.



6.4.11 Activated charcoal filter

The activated charcoal symbol shows the current status of the activated charcoal filter level.

The current operating hours status is shown with traffic light colours in the start menu. The change in the charcoal filter level symbol colour ensures that you are promptly informed of any impending replacement.



The air purifier cannot be switched on without charcoal pads! The charcoal filter symbol is crossed out in red.



After a positive activated charcoal query, the filter cell and UV-C lamps switch on. The corresponding symbols change from grey to green.

The current activated charcoal operating hours are shown graphically. Depending on the operating hours, the activated charcoal symbol will change from green to orange to red.

- Symbol grey = activated charcoal not present or in testing.
- Symbol green = activated charcoal in use. The clocked operating hours are within 0-72% of the maximum operating hours.
- Symbol orange = activated charcoal in use. The clocked operating hours are within 73-92% of the maximum operating hours. Please order a replacement in good time!
- Symbol red = activated charcoal in use. The clocked operating hours are within 93-100% of the maximum operating hours. Replace the activated charcoal inserts! Once the maximum operating hours have been reached, the air purifier will go out of operation and can no longer be switched on. You must have a replacement ready!
- Symbol red strikethrough = activated charcoal out of operation or not inserted.

⇨ **WARNING:** Air purifier cannot be switched on.

The maximum operating hours depend on the cleaning interval group set, see Point 6.1.



Once the maximum operating hours have been reached, the air purifier will switch off!

Activated charcoal insert replacement and operating hours reset: see charcoal filter pad replacement Point 6.4.

By tapping the activated charcoal symbol, the activated charcoal operating hours status menu opens.

Tap the home symbol to return to the start screen.

7 Cleaning and replacement



WARNING! **Danger due to insufficient air purification!**

Spent or dirty filter components no longer ensure optimal air purification. This may lead to a concentration of undesirable particles in the room.

- Always operate the air purifier with complete filter components!
- Replace or clean filter components when indicated in the start menu.
- In order to ensure the service life of the filter cell, the pre-filter should be regularly checked for coarse dirt particles and cleaned if necessary.



WARNING! **Danger due to dirty filter inserts!**

The particles filtered by the filter inserts, such as fine dust, pollen, viruses, etc. may lead to allergic or health reactions.

- Do not shake or tap the filter components.
- Clean filter components, see Point 7.3 ff.
- Use suitable personal protective equipment.

7.1 External cleaning

In case of external soiling:

Wipe the housing clean using a clean, soft cloth and domestic cleaning agents. Do not use scouring agents. Check compatibility on an inconspicuous area beforehand. Do not use pointed or sharp objects for cleaning. Do not pour any liquid into the filter housing from above.



Only clean the touch panel with a soft, dry cloth!

7.2 Opening the maintenance door

The filter inserts can be accessed by removing the maintenance door on the back of the air purifier.



WARNING!
Risk of injury when the maintenance door is open!

- Disconnect the mains plug before opening the maintenance door!

To open the maintenance door:

1. Always switch off the air purifier at the on/off switch and disconnect the mains cable.
2. Use a large slotted screwdriver to open the two locks on the maintenance door on the back of the air purifier, see Illustration 5. Push the lock inwards and turn. Note the direction of rotation, see Illustration 6. Hold the door to prevent uncontrolled tilting.
3. Now tilt the maintenance towards you and lift it from the brackets, see Illustration 7.



Illustration 5: Opening the locks



Illustration 6: Lock direction of rotation



Illustration 7: Maintenance door removal



WARNING!
Risk of injury from falling maintenance door!

The maintenance door may slip when opening and lead to personal injury.

- Place the maintenance door flat on a firm and clean surface. Do not stand the door upright!

7.3 Pre-filter cleaning

In order to ensure the service life of the filter cell, the pre-filter should be regularly checked for coarse dirt particles and cleaned if necessary. A conventional vacuum cleaner can be used to clean it.



Check the pre-filter for dirt regardless of cleaning interval.

7.4 Filter cell cleaning

The start menu displays the filter cell symbol in traffic light colours to show whether the filter cell requires cleaning, see Point 6.4.9.



The pre-filter and afterfilter must be cleaned along with the filter cell!

- 1) Switch off the air purifier, disconnect the mains plug and open the maintenance doors as described in Point 7.2.
- 2) Remove the pre-filter and afterfilter, see Illustration 8.

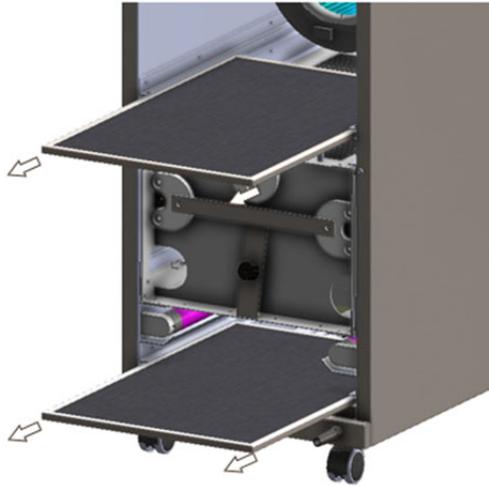


Illustration 8: Pre- and afterfilter removal

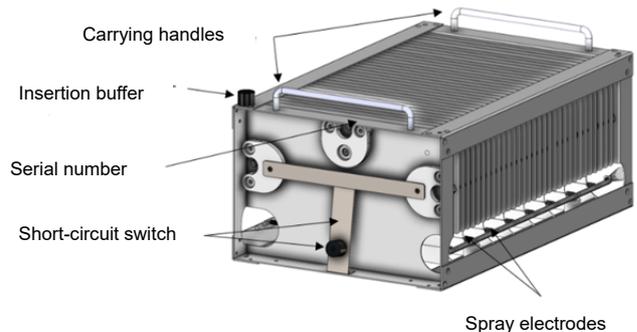


Illustration 9: Filter cell removal



A dishwasher may only be used if the crockery holders have been completely folded down or removed!

Front



Back

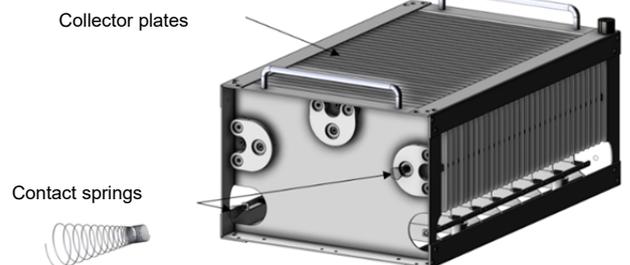


Illustration 10: Filter cell structure



CAUTION!
Risk of injury from filter cell

The filter cell is essentially made of thin-walled stainless steel boards. Due to its weight, it may slip out of the hand when removed or cause injuries as a result of its thin edges.

- Take special care when removing the filter cell.
- Only transport it using the carrying handles.

- 3) Remove the filter cell using the carrying handle, see Illustrations 9 and 10.
- 4) Exercise caution when removing: the filter cell must not be dropped onto the floor. Weight approx. 14 kg.
- 5) Only transport the filter cell using both carrying handles. Handle with care!
- 6) Remove any coarse dirt from the pre-filter and afterfilter (e.g. using a vacuum cleaner).
- 7) Soak and wash the filter cell, pre-filter and afterfilter in hot, soapy water at a temperature of at least 60°C. They can also be cleaned in a commercially available dishwasher at 60° to 90°C (hygiene or intensive wash cycle). Care should be taken to ensure that the collector plates and spray electrodes are not damaged by the crockery holders in the dishwasher rack. Granule dishwashers must not be used for cleaning!
- 8) Spray electrodes, collector plates and springs must not be damaged, bent or removed, see Illustration 10.
- 9) The filter cell and pre-filter and afterfilter may only be re-inserted when completely dry.



NOTICE!

- Spray electrodes, springs and collector plates must not be damaged or bent. This may lead to flashovers. Flashovers can be recognised by a “clicking” noise, see Points 8.3. and 8.5.
- Only insert the filter cell, pre-filter and afterfilter when completely dry. Failure to do this may lead to flashovers. Flashovers can be recognised by a “clicking” noise, see Points 8.3. and 8.5.

- 10) After cleaning the filter cell, pre-filter and afterfilter, insert them again and close the maintenance door.

 The insertion buffer prevents the incorrect insertion of the filter cell, see Illustration 10.

- 11) The operating hours display must be reset when the unit is restarted.
 - a) By tapping the filter cell symbol in the start menu, the filter cell operating hours status menu opens. This shows the current number of operating hours clocked before cleaning.
 - b) By tapping the grey reset symbol, a number pad appears. Use this to enter the maintenance reset code 1925. Tick to confirm. Press X to return without making an entry.

 Maintenance interval display reset code: 1925

- 12) Once the maintenance reset has been executed, the filter cell symbol in the start menu will change to green and the cleaning interval counter starts again.



NOTICE!

If maintenance is missed, the air purifier automatically switches off and cannot be switched on again. Only after replacement/cleaning has been carried out can the air purifier be restarted by entering the maintenance reset code.

7.5 Charcoal filter pad replacement

The start menu displays the activated charcoal symbol in traffic light colours to show when the charcoal pads need to be replaced, see Point 6.4.11.

- 1) Switch off the air purifier, disconnect the mains plug and open the maintenance doors as described in Point 7.2.
- 2) Remove both charcoal pads, see Illustration 11.

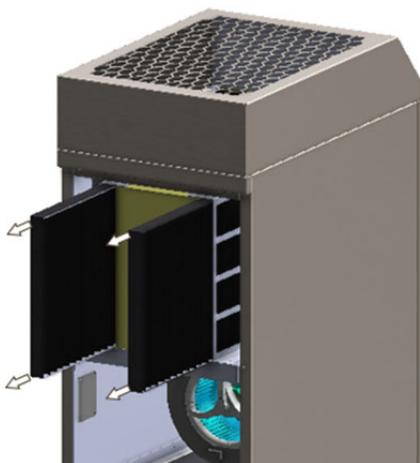


Illustration 11: Removing charcoal pads

- 3) Insert the new charcoal filter pads. Both pads must always be replaced together.
- 4) Lock the maintenance doors after replacing the charcoal filter pads.
- 5) The operating hours display must be reset when the unit is restarted.
 - a) By tapping the charcoal filter symbol in the start menu, the charcoal filter operating hours status menu opens. This shows the current number of operating hours clocked before replacement.
 - b) By tapping the grey reset symbol, a number pad appears. Use this to enter the maintenance reset code 1925. Tick to confirm. Press X to return without making an entry.

 Maintenance interval display reset code: 1925

- 6) Once the maintenance reset has been executed, the charcoal filter symbol in the start menu will change to green and the cleaning interval counter starts again.

 Dispose of charcoal pads in commercial residual waste.

 New activated charcoal may have a characteristic smell which some may find unpleasant. This odour is not harmful and will disappear after a short time in operation.



NOTICE!

If maintenance is missed, the air purifier automatically switches off and cannot be switched on again. Only after replacement/cleaning has been carried out can the air purifier be restarted by entering the maintenance reset code.

7.6 UV-C bulb replacement

The start menu displays the UV-C lamp symbol in traffic light colours to show whether the UV-C bulbs require replacement, see Point 6.5.

- 1) Switch off the air purifier, disconnect the mains plug and open the maintenance doors as described in Point 7.2.
- 2) Remove the pre-filter, afterfilter and filter cell, see Illustration 8 and 9.
- 3) Remove both UV-C bulbs, see Illustration 12. Turn the UV-C bulbs 90° in their socket and remove from the side.
- 4) Insert the new UV-C bulbs and turn 90° until they click into place, see Illustration 12. Both bulbs must always be replaced together.
- 5) Once the UV-C bulbs have been replaced, insert the filter cell, pre-filter and afterfilter and close the maintenance door.
- 6) Make sure that the pre-filter has been inserted.

- 7) The operating hours display must be reset when the unit is restarted.
 - a) By tapping the UV-C lamp symbol in the start menu, the UV-C lamp operating hours status menu opens. This shows the current number of operating hours clocked before replacement.
 - b) By tapping the grey reset symbol, a number pad appears. Use this to enter the maintenance reset code 1925. Tick to confirm. Press X to return without making an entry.
- 8) Once the maintenance reset has been executed, the UV-C symbol in the start menu will change to green and the cleaning interval counter starts again.



Maintenance interval display reset code: 1925



WARNING!
Skin and eye damage due to UV-C radiation!

The radiation emitted by the UV-C lamps has extremely high energy and may cause personal injury.

- Disconnect the mains plugs before replacement.
- Do not remove the UV-C lamps and use in other bulb sockets.
- Only use original spare parts for replacement.
- Only operate the filter with complete filter inserts.



NOTICE!

If maintenance is missed, the air purifier automatically switches off and cannot be switched on again. Only after replacement/cleaning has been carried out can the air purifier be restarted by entering the maintenance reset code.



After replacement, dispose of the UV-C bulb at the local electrical and electronic waste collection point.

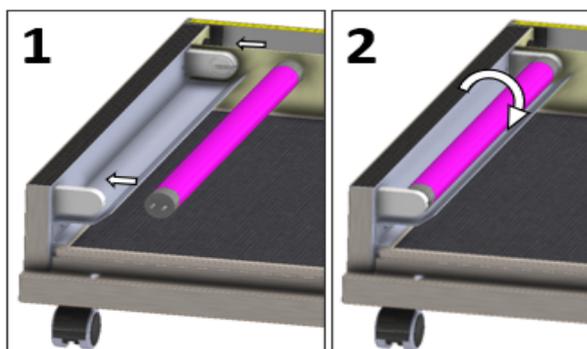


Illustration 12: Pre-filter & afterfilter removal

7.7 Filter cell replacement

If the filter cell is so damaged that it cannot be repaired, it must be replaced.

- 1) Switch off the unit, open the maintenance door and remove the filter cell, see Point 7.2 and Illustrations 8 and 9.
- 2) Insert the new filter cell. Observe the installation direction, see Illustration 10.

8 Error messages and malfunctions

The following error messages may appear in the start menu:

8.1 Maintenance door error message



The maintenance door on the back of the air purifier is not closed properly.

8.2 Activated charcoal error message



Shows a charcoal pad error.

Error message	
<i>"Activated charcoal not detected"</i>	
Possible cause	Solution
- The charcoal pads are not inserted.	- Disconnect the air purifier from the power supply for a few seconds and switch on again. - Insert charcoal pads. - If charcoal pads have been inserted, please contact support.

Error message	
<i>"Max. activated charcoal operating hours reached. Please replace!"</i>	
Possible cause	Solution
- The charcoal pads have reached their maximum operating time.	- Insert new charcoal pads and reset, see Point 7.4.

8.3 Filter cell error message



Shows a filter cell error.

Error message	
<i>"Filter cell not detected!"</i>	
Possible cause	Solution
<ul style="list-style-type: none"> - The filter cell has not been inserted. - The filter cell has not been inserted properly. - Contact springs 	<ul style="list-style-type: none"> - Disconnect the air purifier from the power supply for a few seconds and switch on again. - Insert filter cell. - Insert filter cell correctly. - Check the contact springs and replace if damaged. - If the filter cell is inserted, please contact support.

Error message	
<i>"Max. filter cell operating hours reached. Please clean!"</i>	
Possible cause	Solution
<ul style="list-style-type: none"> - The maximum filter cell operating time has been reached. 	<ul style="list-style-type: none"> - Clean the filter cell, see Point 7.

Error message	
<i>"Short-circuit in the filter cell!"</i>	
Possible cause	Solution
<ul style="list-style-type: none"> - There is a short-circuit in the filter cell. This may cause a clicking noise. - Foreign objects in the filter cell - Torn wire - Faulty filter cell 	<ul style="list-style-type: none"> - Removing and reinserting the filter cell often eliminates the cause. - Check and clean pre-filter. - Disconnect the air purifier from the power supply for a few seconds and switch on again. - Remove foreign objects. The collector plates must not be damaged or bent. - Clean the filter cell, see Point 7.4. - Contact support.

Error message	
<i>"Filter cell function impaired!"</i>	
Possible cause	Solution
<ul style="list-style-type: none"> - Moisture has not fully dried after cleaning. - Pre-filter dirty. Coarse dust particles may be sucked through the metal mesh and cause flashovers in the filter cell. 	<ul style="list-style-type: none"> - Leave the filter cell to dry. - Remove and clean pre-filter. Check the filter cell.

8.4 UV-C bulb error message

Error message	
<i>"Max. UV-C bulb operating hours reached. Please replace!"</i>	
Possible cause	Solution
<ul style="list-style-type: none"> - The UV-C bulbs have reached their maximum operating time. 	<ul style="list-style-type: none"> - Use new UV-C bulbs and reset, see Point 7.5.



The air purifier cannot be switched on if error messages are displayed!

8.5 Malfunctions

Malfunction	Cause/solution
Clicking can be heard in the filter cell	<p>Flashovers in the filter cell are not dangerous.</p> <ul style="list-style-type: none"> • Dirt in the filter cell. <ul style="list-style-type: none"> - Clean the filter cell, pre-filter and afterfilter. - Insert the filter cell, pre-filter and afterfilter when dry. • Ionisation wire torn, must be replaced. <ul style="list-style-type: none"> - Contact support. • Collector plates bent. <ul style="list-style-type: none"> - Contact support.
Air purifier does not start	<ul style="list-style-type: none"> • Timer/weekly schedule is enabled or set incorrectly. <ul style="list-style-type: none"> - Check programming • Time has been incorrectly set. <ul style="list-style-type: none"> - Check programming • Maintenance door is not inserted properly. <ul style="list-style-type: none"> - Insert door correctly. • The maintenance door lock is not fully engaged. <ul style="list-style-type: none"> - Close lock completely. • Charcoal filter pads are not inserted. <ul style="list-style-type: none"> - Insert charcoal pads.

- Filter cell is not inserted.
- Insert filter cell.
- The operating hours of a filter component have been exceeded.
- Clean/replace the affected components.

Please contact us in the event of any other malfunctions, see Point 10.



NOTICE!

Depending on the environment, the pre-filter may become clogged with dust. The pre-filter should be checked for dirt regardless of the cleaning intervals.

Clean dirty pre-filters with a vacuum cleaner.

9 Maintenance and repair

9.1 Air purifier maintenance

- 1) The connection cable and mains plug must be checked regularly for mechanical damage.
- 2) Regularly check the correct functioning of castor brakes.
- 3) DGUV inspections may be necessary for compliance with national or internal requirements.



DANGER! **Risk of injury in case of damage**

Do not operate the air purifier if visible damage is detected!

9.2 Air purifier repair

Repairs may only be carried out by trained professionals. Damage caused by improper repair will invalidate the warranty.



WARNING! **Danger due to unauthorised repair attempts!**

Unprofessional repair can cause unforeseen hazards.

- Repairs should only be carried out by the manufacturer's trained professionals.

9.3 Spare parts

The following information is required when ordering spare parts:

- Designation of spare part
- Article number
- Date of manufacture of the unit
- Quantity

See the Service Information System on the Internet (www.bpro-solutions.com)

10 Support

B.PRO GmbH
P.O. Box 13 10
75033 Oberderdingen
Phone 07045 44-81416
Fax 07045 44-81508
E-mail service@bpro-solutions.com
Internet www.bpro-solutions.com

11 Recycling and disposal

UV-C bulbs must be disposed of at the local electrical and electronic waste collection point.

The filter cell is made of high-quality stainless steel and is to be disposed of via the local scrap metal trade or recycling centres/systems in accordance with the general and regional regulations.

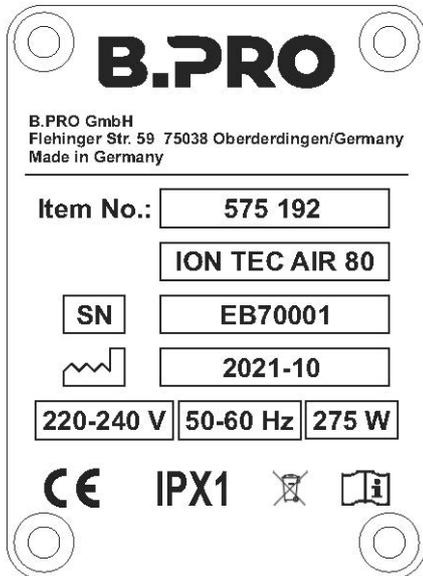
Dispose of charcoal filter pads in commercial residual waste.

Before disposing of the air purifier, it must be dismantled by trained professionals. All general accident prevention regulations must be observed.

In order to ensure environmentally sound disposal, materials must be dismantled according to material groups and their basic materials and disposed of via appropriate recycling centres/systems in accordance with general and regional regulations. Electrical and electronic components must be disposed of at the local electrical and electronic waste collection point.

12 Rating plate

The rating plate is located behind the maintenance door on the inner left-hand side of the housing in the fan area.



12.1 Serial number

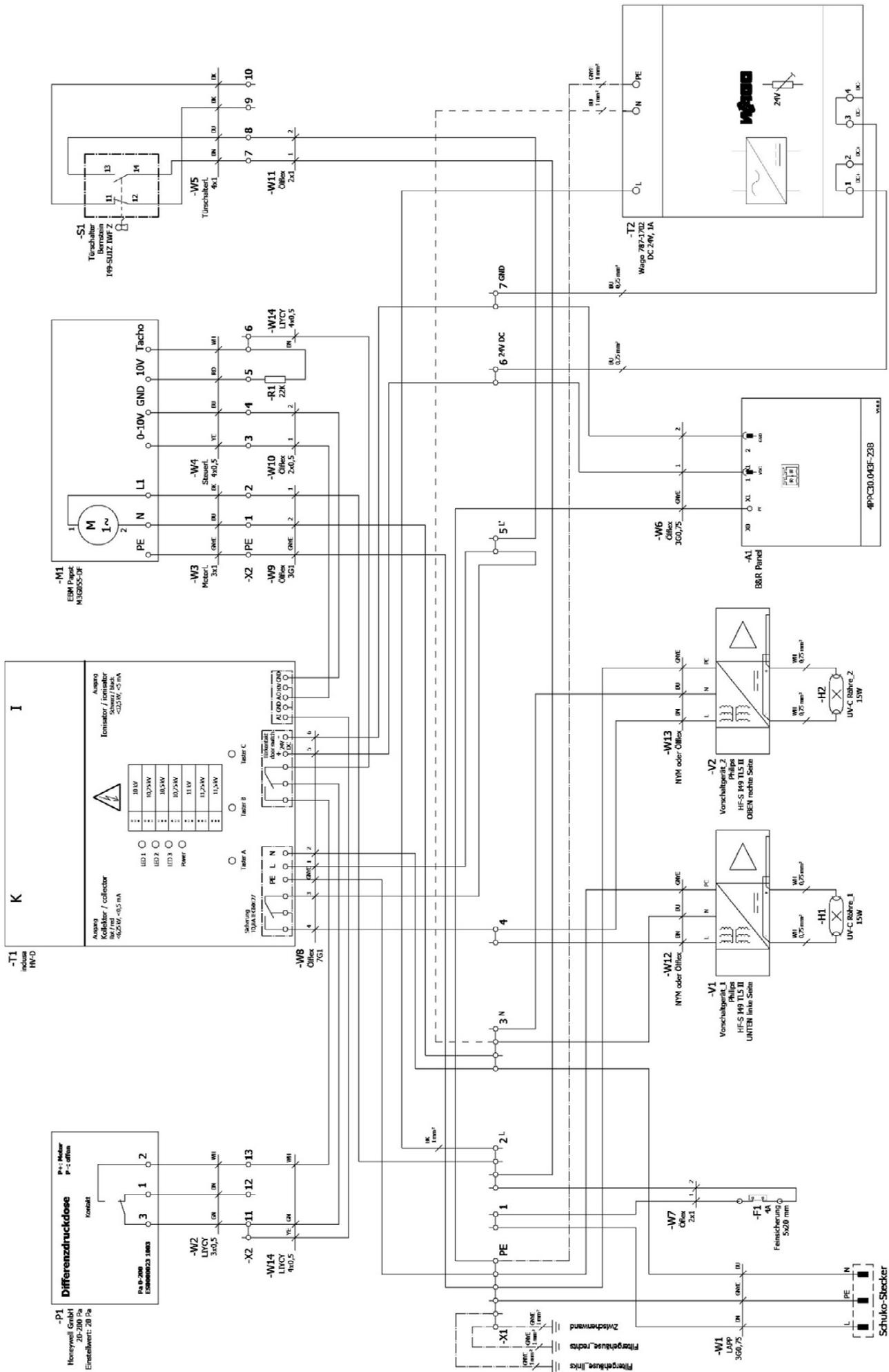
The serial number of the air purifier is specified on the rating plate.

13 Ordering information

ION TEC AIR 80

Article number: 575192; 575194

14 Circuit diagram





EU - Konformitätserklärung
EU - Declaration of Conformity

Hersteller / Manufacturer: B.PRO GmbH
Flehinger Straße 59
75038 Oberderdingen / Germany

Produktbezeichnung / Product: Raumlufreiniger / Room air cleaner

Typenbezeichnung / Type designation: ION TEC AIR 80

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller.
This declaration of conformity is issued under the sole responsibility of the manufacturer.

Der oben beschriebene Gegenstand der Erklärung erfüllt die einschlägigen Harmonisierungsvorschriften der Union.
The object of the declaration described above is in conformity with the relevant Union harmonization legislation;

2006/42/EG **Maschinenrichtlinie**, EU-Abl. L 157/24 vom 9.6.2006 /
Machinery Directive, OJ L 157/24 of 9.6.2006

2014/35/EU **Niederspannungsrichtlinie**, EU-Abl. L 96/357 vom 29.3.2014 /
Certain Voltage Limits Directive, OJ L 96/357 of 29.3.2014

2014/30/EU **EMV-Richtlinie**, EU-Abl. L 96/79 vom 29.3.2014 /
Electromagnetic Compatibility Directive, OJ L 96/79 of 29.3.2014

2011/65/EU **RoHS-Richtlinie**, EU-Abl. L 174/88 vom 1.7.2011 /
RoHS Directive, OJ L 174/88 of 1.7.2011

Angewandte harmonisierte Normen / Applied harmonized standards:

EN 60335-1:2012-01 + COR 2014 :2014-01 + A11: 2014-08 + A13:2017-10 + A14:2019-08 + A1:2019-08 -
A2:2019-08
EN 60335-2-65:2003-07 + A1:2006-07 + A11:2012-08
EN 62233:2008-04 + COR 2008:2008-08
EN ISO 12100:2010-11
EN 61000-6-2:2005-08 + COR 2005:2005-09
EN 61000-6-4:2007-01 + A1:2011-02

Bei einer mit uns nicht abgestimmten Änderung der oben genannten Produkte, verliert diese Erklärung ihre
Gültigkeit.
If a product is modified without the coordination of the manufacturer, this declaration shall become invalid.

Dokumentationsbevollmächtigter /
Person authorized for documentation: Leiter Forschung + Entwicklung
Director Research + Development
B.PRO GmbH
Flehinger Straße 59, 75038 Oberderdingen / Germany

Unterzeichnet für und im Namen von /
Signed for and on behalf of

B.PRO GmbH

Oberderdingen, 2021-08-19

Dr.-Ing. A. Hillenmeier
Leiter Forschung + Entwicklung /
Director Research + Development

R. Keller
Qualitätsmanagement /
Quality Management

B.PRO GmbH
P.O. Box 13 10
75033 Oberderdingen
GERMANY
Phone +49 (0)7045 44 - 81416
Fax +49 (0)7045 44 - 81508
Email service@bpro-solutions.com
Internet www.bpro-solutions.com

B.PRO
CATERING SOLUTIONS