TION.

USER MANUAL

Compact Ventilation Unit
Tion O$_2$ Breezer

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Download User Manual (English)

Dear Customer,
Thank you for your purchase of the Tion O$_2$ Breezer compact ventilation unit.

1. GENERAL

> **WARNING!** Tion O$_2$ Breezer can be used by children aged from 8 year and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction beforehand by a person responsible for their safety concerning use of the appliance in a safe way and understand the hazard involved. Children shall not play with the device or its cord. Cleaning and user maintenance shall not be made by children without supervision.

The Compact Ventilation Unit Tion O$_2$ Breezer («the device» in what follows) is designed to ensure a healthy and comfortable microclimate in rooms by means of active fresh air supply into the building and air filtration. This involves the following:

- the air is cleaned from all types of contaminants with a three-stage filtration system (this applies to the Tion O$_2$ MAC and Tion O$_2$ Standard versions; other device lines provide a single filtration stage),
- fresh air is continuously supplied by a low-noise fan from outside in a controlled flow,
- when necessary, the climate-control feature is activated to heat air (except for Tion O$_2$ Lite version),
- the device is compatible with MagicAir smart microclimate system (section 5.4; this applies to the Tion O$_2$ MAC and Tion O$_2$ MAC Base configurations; other versions can be optionally upgraded with this compatibility feature).

Technical and user-defined parameters may vary depending on the particular set purchased, installation and operating environment, and filter configuration and condition.

The Manufacturer reserves the right to introduce necessary changes into the device or into the design of its separate parts, without detracting from the performance of the equipment.

The device is not intended to be used for heating premises.

Developed by: Tion Smart Microclimate JSC, Russia, 630090, Novosibirsk, Inzhenernaya 20

Assembled in China. For more details about the product, manufacturer, sales and service center adress and contact information please visit

tion.global

2. PACKING LIST

Version	Tion O₂ MAC	Tion O₂ Standard	Tion O₂ MAC Base	Tion O₂ Base	Tion O₂ Lite
Device	•	•	•	•	•
F7 base filter	•	•	•	•	•
High efficiency E11 (H11) filter	•	•	–	–	–
Adsorption-catalytic filter	•	•	–	–	–
Air heating system with climate control feature	•	•	•	•	–
Remote control*	•	•	•	•	•
Interface Unit (compatibility with MagicAir)	•	–	•	–	–
User Manual	•	•	•	•	•
Mounting template	•	•	•	•	•
Anchor bolt, 2 pcs	•	•	•	•	•
Warranty card	•	•	•	•	•
Shipping package	•	•	•	•	•

* Set of batteries included.

The version of the device is indicated on the package bar-code, in the warranty card and in the certificate of purchase, included in this Manual.

In the Tion O₂ MAC and Tion O₂ Standard versions (configuration sets), the devices cleans the air from all types of contaminants, heats it and supplies it into the room. They are recommended for use in all regions, especially in locations with unfavorable environmental conditions.

The Tion O₂ Lite version is recommended for use in regions with warm climate (see outdoor temperature applicability chart in Section 4, Table of Technical Parameters). Tion O₂ Lite, Tion O₂ Base and Tion O₂ MAC Base versions are recommended for use in environmentally clean regions. To ensure enhanced air cleaning. The Tion O₂ Lite, Tion O₂ Base, Tion O₂ MAC Base devices should be outfitted with the appropriate additional filters.

The Tion O₂ MAC and Tion O₂ MAC Base versions include an interface module for connection to the MagicAir smart microclimate control system (section 5.4). All other versions can be updated to install such an interface unit at any authorized service center of the Manufacturer.

The Tion O₂ Lite version can be upgraded to Tion O₂ Base upon the user's request. Please contact any authorized service center of the Manufacturer to install the optional climate control system (at additional cost).

The user can upgrade the Tion O₂ Base version to Tion O₂ Standard without specialist assistance, by adding additional filters. The Tion O₂ MAC Base version can be similarly upgraded to Tion O₂ MAC with additional filters.

The filters are available from the official Tion online store or from authorized dealers.

3. SAFETY REQUIREMENTS

1. The device should be installed in a location that ensures free and safe access.
2. Do not use in premises with indoor temperature below 5°C or above 40°C.
3. Do not use in premises with relative humidity above 80 % at 20°C.
4. During a lightning storm, turn the device off and unplug it from the mains supply.
5. The device should be unplugged from the power supply system prior to maintenance or scheduled servicing.
6. The device must not be used without F7 base filter.
7. The user is not authorized to perform any repairs or alterations to the device design.
8. No foreign objects or water should be allowed to get into the device.
9. The device must not be used if the power cord insulation or any part of the housing are damaged.
10. If any damage or possible signs of abnormal operation are detected, unplug the power cord and contact an authorized service center for advice on further operation of the device.

4. TECHNICAL PARAMETERS

Version	Tion O$_2$ MAC	Tion O$_2$ Standard	Tion O$_2$ MAC Base	Tion O$_2$ Base	Tion O$_2$ Lite
Power consumption (min./max.), W	18/1450	18/1450	18/1450	18/1450	18/30
Ambient temperature applicable for use, °C	-40...+50	-40...+50	-40...+50	-40...+50	0*...+50
Noise level, dB	32/39/45/ 52	32/39/45/ 52	32/39/45/ 52	32/39/45/ 52	32/39/45/ 52
Air flow rate**, m³/h	35/60/75/ 120	35/60/75/ 120	40/65/85/ 120	40/65/85/ 120	40/65/85/ 130
Power supply	~220 B, 50 Hz	~220 B, 50 Hz	~220 B, 50 Hz	~220 B, 50 Hz	~220 B, 50 Hz
Net weight, kg	8,0	8,0	7,4	7,4	6,8
Housing dimensions (H x W x D), mm	514 x 454 x 163	514 x 454 x 163	514 x 454 x 163	514 x 454 x 163	514 x 454 x 163
Product lifetime	5 years	5 years	5 years	5 years	5 years
Warranty period***	1 year	1 year	1 year	1 year	1 year
Compatibility with MagicAir	Yes	No	Yes	No	No

The use of Tion O$_2$ Lite version at negative ambient air temperatures may cause reduction of its service life.
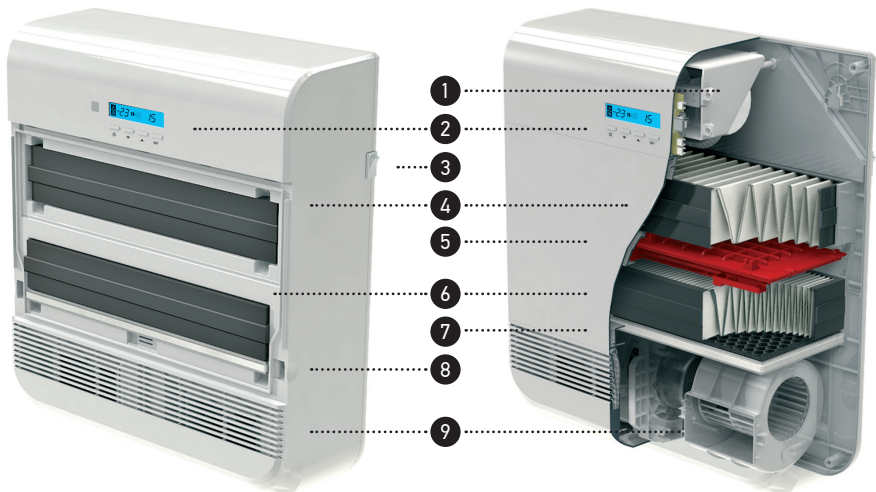
*** Recommended inlet air flow is 30 m³/h per person.*

*** If not otherwise specified by the regulations of the country where warranty obligations are to be administered.*

5. SCHEMATIC DIAGRAM AND OPERATING PRINCIPLE

5.1. Schematic diagram
A schematic diagram of the device with maintenance panel removed (the Tion O₂ Standard version) is shown below.

1. Air duct flap
2. Control buttons and LCD display
3. Power switch
4. Base filter F7 (retaining coarse dust)
5. Air heating with climate control system

6. High-efficiency HEPA H11 filter (retaining fine dust)
7. Adsorption-catalytic filter AK (absorber of noxious gases)
8. Maintenance panel latches
9. Fan compartment and outlet grating

PLEASE NOTE! The device is equipped with an electromechanically driven air duct flap (the «flap» in what follows). It opens the air inlet duct, when the device is turned on. After the device is turned off, the flap closes the channel to prevent cold air penetrating into the room. The flap takes 7-10 sec to open/close. If the flap is not fully closed because of some unexpected failure, a double warning beep is issued.

5.2. Operating principle

Oxygen-rich air from the outside is pulled into the air intake pipe of the device. The air intake section prevents rainwater from penetrating into the housing. The air is then fed into the device through the flap valve, via a heat insulated channel. If the device is turned off, the flap closes the path for outer air into the device. Air is cleaned inside the device, as follows:

1. The F7 base filter traps coarse and medium size dust particles, lint, soot and allergens with efficiency up to 90 %. It extends the service life of the high-efficiency HEPA filter H11.

2. If necessary, the heating system with climate control function will heat the intake air up to the required temperature. The climate control unit automatically adjusts the heater capacity.

3. The high efficient HEPA filter H11 traps the finest particles of dust, allergens, bacteria, viruses, mold spores with efficiency above 95 %. The H11 filtration grade is the air cleaning standard for medical facilities. Only H11 grade filters can entrap hazardous microorganisms (lower class filters cannot stop them).

4. The adsorption-catalytic filter AC performs a deep air cleaning from exhausts, industrial emissions, odors and smoke.

5. The cleaned air at comfortable-temperature is fed into the room with a fan.

The H11 HEPA filter can be replaced with an absorption catalytic AK-XXL filter with enhanced performance. After installing the AK-XXL filter the device will clean the air from noxious substances in tenfold concentrations above permissible levels. Strong unpleasant odors are removed as well. The dust filtration performance remains at 80-90 % level.

5.3. Control and indication

The user interface of the device consists of the following elements:

• Liquid crystal display (LCD display),

• Control panel buttons,

• Remote control (RC),

• Sound warnings.

These elements help set the parameters of the device and adjust its settings as required.

If the device is coupled with a MagicAir system (section 5.4), the device is then controlled automatically. Switching between automatic and manual control can be done in one of the following ways:

• double-pressing any button on the control panel or remote control,

• pressing and holding any button on the control panel.

5.3.1. LCD display

All relevant information with current device settings is indicated on the LCD display. The LCD backlighting turns on immediately after any button is pressed on the control panel or remote control (with the exception of turning the device off with the Power button ⏻ and automatically turns off after 10 seconds. If the device is under automated control of the MagicAir system, the backlighting is disabled.

LCD messages are explained below.

LCD display elements:
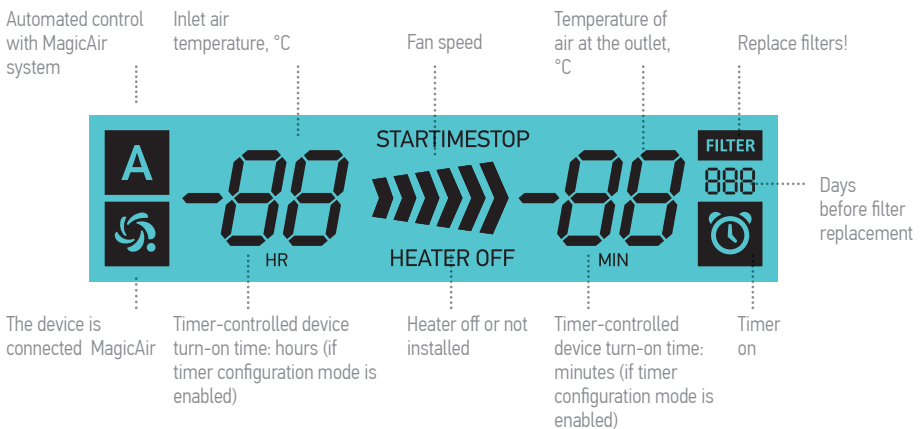
LCD display, when the device is under automated control of MagicAir system (section 5.4):

> **PLEASE NOTE!** The accuracy of inlet and outlet air temperature measurement is ±3°C.
> The device is not intended for maintaining a constant temperature inside the room.

LCD display, when the device is connected to MagicAir system (section 5.4), but remains under manual control:
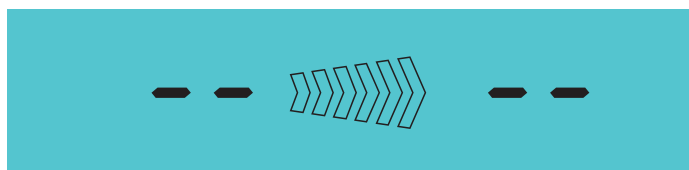

LCD display, when the device is under manual control and filters need replacement (this indication appears 30 days before scheduled filter replacement, see section 5.3.13):

LCD display, when the device is under automated control of MagicAir system (section 5.4), heater is off or not installed in this configuration (section 5.3.9):
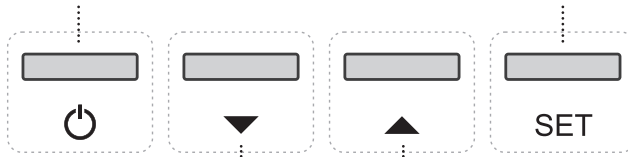

LCD display in standby mode (section 5.3.5):

5.3.2. Control panel buttons

«Power». Switching between standby and active mode

«SET». Selection of parameters to be adjusted

«[-]». Decrease value or deactivate

«[+]». configuration Increase value or activate

5.3.3. Remote control (RC)

The remote control unit is used for manual remote control of the device:

- switching the device between standby and active mode (section 5.3.5),
- adjusting air flow (section 5.3.6),
- adjusting target temperature (section 5.3.8),
- adjusting current time (section 5.3.10),
- configuring timer settings for turning the device on/off (section 5.3.11),
- adjusting minimal admissible air temperature (section 5.3.12),
- adjusting filter replacement warning schedule (section 5.3.13).

«[+]». Increase value or activate

«SET». Selection of parameters

«Power». Switching between standby and active mode

«[-]». Decrease value or deactivate

5.3.4. Sound signals

The meaning of sound signals is given in the table below. If desired, sound notifications can be switched off completely. To do so, press simultaneously and hold for 2 seconds the buttons [SET], [-] and [+] (not available for RC).

Sound signals are inactive when the device is in automatic mode (section 5.4).

Type	Meaning
1 signal	«Command recognized», «Function enabled»
2 signals	«Function disabled»
4 signals	«Filter lifetime timer is reset»

5.3.5. Standby mode

In the standby mode the device does not perform its operating functions (the flap is closed, the fan is off), but the power is still connected, and the control circuitry is enabled. The standby mode is indicated on the LCD display with blinking dashes (encircled on the Figure below):

Blinking dashes
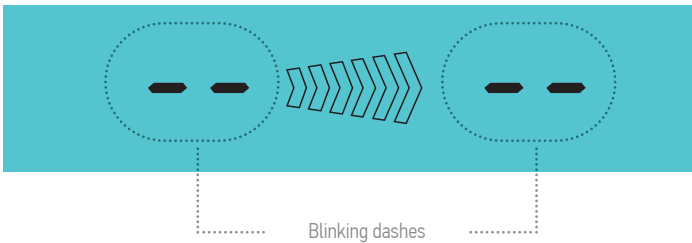
Standby mode as indicated on the LCD display, if timer is on (section 5.3.11):

Blinking dashes
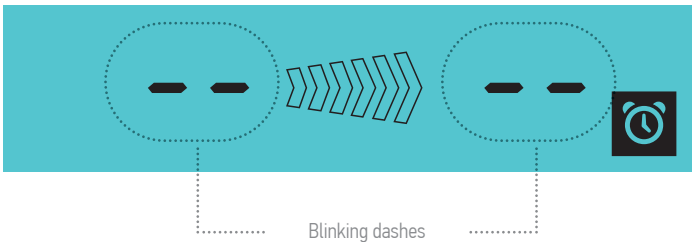
Switching between standby and active modes is performed by one of the following actions:

- pressing the ⏻ button on the device control panel,
- pressing the ⏻ button on the remote control,
- timer-driven turning on/off,
- automatic turning on/off with MagicAir system (section 5.4).

Device activation (switching from standby to active mode) is accompanied by a single beep, device deactivation by a double beep (in manual control mode, if sound signals are enabled). All user configured values are retained upon switching between modes.

If the device in active mode was disengaged with the switch button on the device side panel or by disengagement from the power supply, its reengagement will bring it into standby mode.

5.3.6. Air flow setting

Four air flow settings are provided. The air flow rate is adjusted manually (using control panel or remote control) or automatically with MagicAir system (section 5.4).

In manual mode the adjustment is performed with the [–] and [+] buttons on the control panel or remote control.

Pressing the [–] or [+] buttons decreases or increases the air flow, if no other settings are adjusted at the same time (section 5.3.7).

Air flow indication on the LCD display:

first speed   second speed   third speed   «turbo» speed

The «turbo» mode is used for enhanced, rapid aeration of a room after a longer period of not being used by people.

Under low outside air temperatures, the device may automatically decrease the fan speed to ensure proper air heating and optimal energy consumption. Consequently,the ability to increase the fan speed will be disabled. Should this happen, any attempt to boost the fan speed will result in a double beep, the LCD display will warn about unavailability of this function with blinking active elements of air flow indication. All fan speeds will remain available, if heater mode is off.

5.3.7. Adjusting the settings with [SET], [–] and [+] buttons

The device settings are adjusted manually (using control panel or remote control) or automatically with MagicAir system (section 5.4).

To select a system parameter you want to change, press the [SET] button. Switching between the parameters is also carried out by sequential pressing of the [SET] button. When selecting a parameter, its icon on the LCD display will start blinking.

If the parameter value can be set, then one pressing of the [–] and [+] button changes the value by one unit of measurement. To change the parameter value by several units press and hold the [–] or [+] button for more than one second until you reach the desired value.

№	Parameter	Button functions
1	Target air temperature*	[-]: –1°C | [+]: +1°C
	Climate control system*	[-] and [+] 2 sec.: on / off
2	Current time**	[-]: +1 h | [+]: +1 min
3	Timer on / off***	[+] or [-]: on / off
4	Timer start time***	[-]: +1 h | [+]: +5 min.
5	Timer stop time***	[-]: +1 h | [+]: +5 min.
6	Minimal admissible inlet air temperature****	[+]: next value | [-]: previous value
7	Time left before filter maintenance	[+]: +30 days | [-]: –30 days; [-] and [+] for 2 sec: 360 days
8	(back to target air temperature)	–

*The climate control system is not installed in Tion O2 Lite version.

** If MagicAir is connected, this parameter can not be adjusted.

*** If the device is under control of MagicAir, this parameter can not be adjusted.

**** The parameter can take the following discrete values: –25°C, –30°C, –35°C, –40°C.

The target temperature and fan speed have limiting values which can not be looped after achieving the maximal value, further pressing of the [+] button will not cyclically bring the parameter to its minimal value, and the maximal value will be kept. All other parameters are looped, that is after attaining their maximal values further pressing of the [+] button will set the parameter cyclically to its minimum.

To accept and save the settings and move on to another parameter, do one of the following:

- press and hold the [SET] button for 2 sec. (this action is not available from RC),

- do not press any other buttons for 10 sec.

A single beep will sound, confirming the changes are saved and updated.

Simultaneously pressing 4 buttons: [SET], [-], [+] and   (not available from RC) will reset all user settings to factory defaults. This function is not available in the mode of adjustment of any parameter.

5.3.8. Setting the climate control target temperature (except Tion O₂ Lite version*)

The target temperature of the outlet air is adjusted in manual mode (using control panel or remote control) or automatically with MagicAir system (section 5.4).

Target temperature adjustment range: from -20°C to +25°C. The new target temperature is attained in 1-5 minutes.

Factory setting: +20°C.

Press the [SET] button; the target value on the LCD display will start blinking. With the [-] or [+] buttons select the required target temperature. If the heater is off, pressing either of the [-] or [+] buttons will have no action.

PLEASE NOTE!

- If the inlet air temperature is above the target value (no heating is needed), the target temperature is not displayed. To review the set temperature, press the [SET] button.

- If the ambient air temperature decreases below its minimum value, specified by the "minimum admissible temperature" parameter (section 5.3.12), the device will automatically shut down. The warning message «EC02» will be displayed (section 7.2), and the flap will close. Should this happen, to restart the device for normal operation it should be unplugged from the power supply and turned on again a few seconds later

If you are using the Tion O₂ Lite version, the device should be turned off in case of condensate or frost formation, and it is recommended to resume operation only after its temperature warms up to room temperature and traces of frosting disappear. To prevent the frosting or condensate formation in the future, contact any authorized Service Center of the Manufacturer to upgrade the installation with climate control system (at additional cost).

5.3.9. Deactivating the climate control system (except for Tion O$_2$ Lite*)

The climate control system can be turned off manually using the control panel.

To turn off the climate control, press the [SET] button to go to target temperature adjustment (section 5.3.7). Press the [-] and [+] buttons simultaneously and hold for 1 second or more (option unavailable if using remote control). The «HEATER OFF» warning will be displayed and a single sound beep will be issued. Instead of target temperature value blinking «- -» dashes will be displayed, and target temperature adjustment will be disabled. In the operating mode the target temperature is not indicated.

To turn the climate control on, repeat the same actions. The target temperature will be shown on the display instead of «--» dashes, and a single beep will sound.

> **PLEASE NOTE!**
> - It is not recommended to deactivate the climate control system if the inlet air temperature is below 0°C, as this can cause frosting up of the device, resulting in decreased performance and greater noise.
> - Under increased humidity conditions in the room, for a certain range of outlet air temperatures, condensate may accumulate on the external surfaces of the device. In this case, turn on the climate control system and, if necessary, increase the target temperature up to 10°C.

* The climate control system is not installed in Tion O$_2$ Lite version.

5.3.10. Current time

Time adjustment can be performed manually (using control panel or remote control), if the MagicAir (section 5.4) is not connected.

The «current time» set point is used in the timer function (section 5.3.11).

To adjust the parameter select it with the [SET] button (section 5.3.7).

Press the [-] button to increment the hours value by +1 h and [+] to increment the minutes value by +1 min.
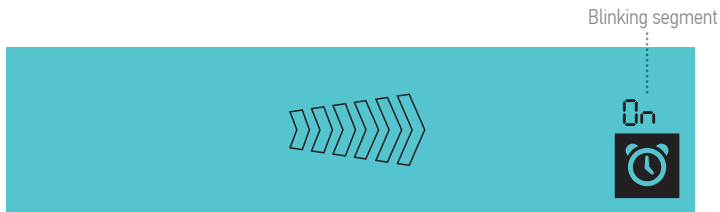
If maximal time value is attained (23 h or 59 minutes), then subsequent pressing of the button will loop the indication to the minimal value (00 h or 00 min.)

5.3.11. Timer

The timer is used for turning the device on and off (switching to/from the standby mode) at a predefined moment.

The timer can be configured from control panel or remote control, only if the device is not under auto-mated MagicAir control. If the device is controlled by MagicAir, all previous timer setting become inactive.

Select the parameter «Timer on/off» with the [SET] button (section 5.3.7) in the manual control mode. Press the [+] or [-] buttons to switch between timer enabling/disabling. The timer mode is displayed as «ON» / «OFF» indication:

Blinking segment

After selecting («ON») press [SET] to go to timer adjustment. The LCD display is then in the mode of configuring the start time for timer-based operation (blinking segment are shown circled on the Figure below):

Blinking segments

START

HR   MIN
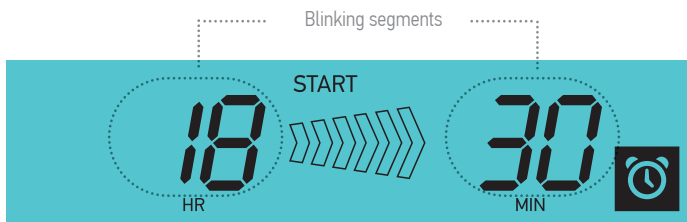
Press the [-] button to increment the hours value by +1 h and the [+] button to increment the minutes value by +5 min.

To adjust the stop time for timer-based operation, press the [SET] button once again; the display is then in the time adjustment mode (blinking segments are shown are circled on the Figure below):
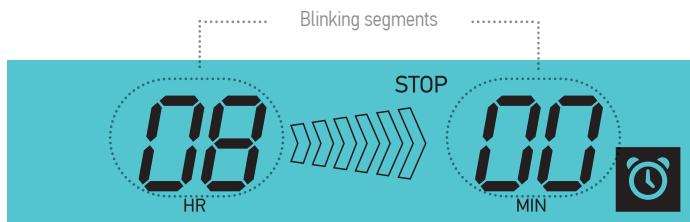
If maximal hours value is attained (23 h), then subsequent pressing of the [-] button will loop the indication to the minimal value (00 h).

Upon timer activation the device will be engaged with the same settings as before going into standby mode

5.3.12. Minimum admissible temperature

This function is used for selecting the minimum ambient temperature, below which the device shuts down.

The minimum admissible temperature is configured in manual mode (with control panel or remote control).

The device will switch to standby mode, if the outdoor temperature drops below this configured value and the warning message «EC02» will blink (section.7.2).

Factory setting: -30°C.

To adjust the parameter select it with the [SET] button (section 5.3.7).

Press the [+] or [-] button on the control panel to select the next or previous value from the predefined set.

This parameter can take on the following values: -25°C, -30°C, -35°C, -40°C.

5.3.13. Filter replacement warning schedule

The filter replacement warning function helps keep track of proper maintenance.

The filter replacement warning message can be set in manual mode (with control panel or remote control).

This function activates the countdown from the user defined value down to zero. The counter records the time only when the device is turned on and operating (flap is open and fan is blasting air in).

If the device is in standby mode or switched off with the button on the side panel, the counter stops the countdown.

This parameter is factory preset at the maximal value of 360 days.

To adjust the parameter select it with [SET] button (section 5.3.7).

Press [+] or [–] button to increase/decrease this parameter by +/–30 days.

After the counter reaches the value 30 days a warning message «FILTER» will be displayed indicating the number of days before planned filter replacement.

After the counter reaches zero, the warning message «FILTER» and air flow rate indication will start blinking (see Figure below, where blinking segments are circled):
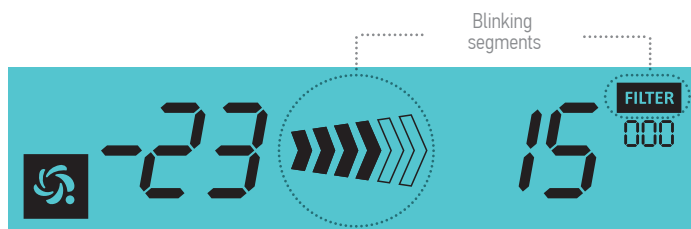
The device should then be switched off and the filters replaced, as described in section 7.1.

To reset the counter after filter replacement go to the configuration mode, then press simultaneously [+] and [–] buttons on the control panel and hold at least for 2 sec. (option unavailable from remote control). The «FILTER» message will disappear from the LCD display.

PLEASE NOTE! Do not reset the counter without replacing filter. Operating the device with used filters can decrease performance, increase fan noise and cause device failure.

5.3.14. Saving the settings in memory

All parameters retain the configured values upon switching to and from the standby mode as follows:

• upon pressing the ⏻ button on the control panel or remote control,

• when the timer is used,

• at automated control by MagicAir,

• at power off with the switch on the device right panel,

• at power outage.

5.3.15. Device shutdown, power off

To switch the device off for a short period, press the ⏻ button on the control panel or remote control.

The fan will turn off and the flap will close. If a fault occurs during flap closure (flap remains open) a double beep will sound. In this case turn the device on and then off. If the problem persists, contact the service center.

> **PLEASE NOTE!** If you plan to turn the device off for a longer period, press first the ⏻ button on the control panel or remote control and wait 25 sec (till the flap is closed), then turn off the power switch on the right panel and pull the power cord out of the socket. Failure to do so will lead to incomplete closure of the flap, and the air from outside will be drawn into the room.

> **PLEASE NOTE!** If the device was is left off with closed flap for a prolonged period of time under negative outdoor air temperatures, it is possible working parameters may deviate from nominal values after it is turned on again, for example with increased noise and decreased performance. To resume operation in these ambient conditions do the following:
> - Turn on the power switch on the device side panel.
> - Wait for the device to warm up to room temperature.
> - Turn on the device using the ⏻ button on the control panel or remote control.

> **PLEASE NOTE!** If a double beep was issued after turning the power off (signaling that the flap is not completely closed), do the following:
> - Disconnect the device from mains supply (pull out the power plug) and place the device in a warm location inside the room (far from the operating place);
> - wait for device to warm up to room temperature;
> - install the device back to the place of operation;
> - reconnect the device to the mains supply;
> - turn on the power switch on the device side panel.

5.4. Functioning with MagicAir

5.4.1. About MagicAir system

MagicAir is a smart microclimate system. The MagicAir base station monitors the room environment using a set of designated sensors. The collected sensor data are sent to a cloud server and then retrieved by smartphone. With the free MagicAir mobile application the user can follow and control the microclimate from the Internet, at any time and from any place. In accordance with programmed parameters, the MagicAir base station issues commands to the connected climate control units. As a result, a healthy environment can be automatically maintained.

By default the Tion O₂ MAC and Tion O₂ MAC Base Breezers are equipped with an interface module for connection with Magic Air system. All other Breezer versions can be upgraded with this module at any authorized service center of the Manufacturer.

Functioning of Tion O₂ Breezer with MagicAir system:

- Transfer the challenge of optimal microclimate maintenance to an automated system. The MagicAir base station collects environmental data and autonomously controls the Tion O₂ Breezer device.
- Control healthy microclimate in living and office spaces with a mobile application.

5.4.2. Connecting the device to the MagicAir system

To use the device with the MagicAir system, first connect the device to it. Only devices with the designated interface unit can be connected to Magic Air.

To connect the device to the MagicAir base station press simultaneously the [+] and [SET] buttons on the device panel and hold for 2 sec. The LCD will be blinking during the connecting process. After a successful connect, a single beep will sound. The connection process takes at most 30 sec. In the case of a connection failure, double warning beep is issued.

After a successful connect, the MagicAir logo will be displayed (section 5.3.1). For the connected device the time adjustment is disabled from the panel (time settings are then taken from MagicAir system).

If «no rF» error occurs (section 7.2), turn the device off with power switch on the side panel, then reengage it and start connecting process from the beginning. If the error persists (interface unit fails to connect), contact the Service Center.

5.4.3. Control modes

After connection to the MagicAir system you can switch to the device automatic mode (use the designated mobile application MagicAir). In the automatic control mode the sound indication and LCD highlighting is disabled. The automatic control sign will be displayed (see section 5.3.1).

For manual adjustment of the fan speed, timer, environmental parameters (from control panel or remote control) disable first the automatic control mode. To do so press any button (except ⏻) either on the control panel, or on the remote control. The automatic control mark will disappear from the LCD display.

## 6. GETTING STARTED

6.1. Unpacking and visual inspection

Remove the transportation packaging and examine the device carefully to make sure it has no damage caused by improper transportation or storage. If you notice any damage, consult the service center of your Vendor to decide whether it is safe to use the device.

If the temperature of the housing of the device before installation is below +10°C (after storage or transportation in cold environment), first keep the device for 2 hours in a warm room inside the packing film to bring its temperature up to room conditions. Failure to do so can cause the device breakdown damage its plastic parts during installation or lead to condensate formation.

Depending on the factory sealing procedure the device filters (base F7, HEPA H11 and adsorption catalytic AK filter) may be supplied in protective plastic packaging. Therefore, please do the following before installation:

1.   Remove maintenance panel:

- Press on the left and right latches towards each other, releasing panel bottom corners.
- Pull the panel, overcoming the force of the magnet lock, located at the bottom of the mainte-nance panel.

2.   Take out all filters present for the given versions from the packaging.

3.   Unwrap each filter from the protective plastic film.

4.   Install each filter into the device.

5.   Reinstall the maintenance panel and make sure that both right and left latches are clamped shut.

PLEASE NOTE! Avoid applying force on latches during panel reinstallation, as this may damage the device.
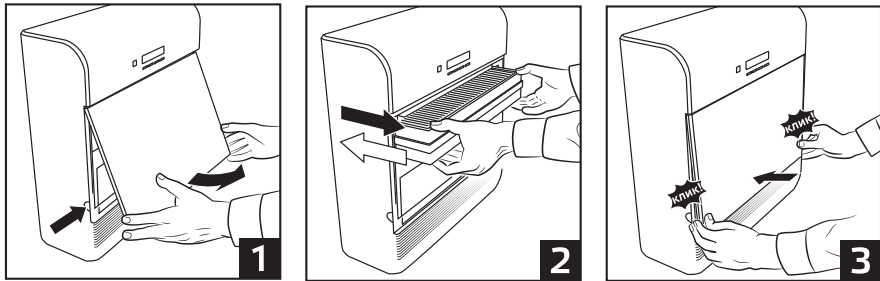
> **PLEASE NOTE!** The filters installed into the device may be wrapped in protective plastic bags. Make sure to remove the protective film before starting operation. If the device is turned on with plastic bags on filters, this may cause its damage and voiding of warranty obligations. The protective package does not impact the filter quality or their storage life inside the device.

6.2. Placement guidelines

The device is needed in rooms where people spend most of their time, that is, the rooms most affected by breathing: bedrooms, children's rooms, living rooms, etc. The required number of the devices can be estimated from Table in Section 4 of this Manual.

Select the location of the unit taking into account its dimensions (height 514 x width 454 x depth 163 mm). At least 50 mm clearance from the floor, walls and ceiling must be provided. The distance between the window jamb and central point of the opening in the outer wall must be at least 500 mm. The device may be positioned at any height, since it can be controlled by a remote control unit. The composition of the wall behind it must allow for a ventilation duct to be drilled. There must be no service lines (electric wires, heating and water pipes etc) in the drilling area.

6.3. Installation

1. Make sure that the device will be freely accessible in the planned location and there is enough space in front of the maintenance panel to perform maintenance.

2. Follow the detailed installation guidelines on the mounting template.

3. The factory warranty covers only devices mounted by the Manufacturer's certified installation experts.

4. Please pay careful attention to the correct installation of the device, which is crucial for ensuring both its proper operation and for our warranty obligations. Make sure that the installation expert to fill all necessary installation information into the Service Ticket.

6.4. Electric wiring

Before operation, the device must be connected to the electrical mains supply.

Power parameters: single phase, 220 V, 50 Hz. The power capability of the line must be at least 2 kW.

After connection to the mains supply turn on the power switch on the right panel. The device then goes into standby mode (section 5.3.5).

7. MAINTENANCE

Maintenance of the device consists in scheduled replacement of filters in accordance with their natural wear-off.

The base filter is to be replaced once yearly, provided that the surface of the base filter is regularly cleaned, if necessary. To clean the base filter you can use a home vacuum cleaner. If regular base filter cleaning can not be provided, it should be replaced once every 6 months depending on the operating conditions.

> **PLEASE NOTE!** Do not use any detergents for filter cleaning, do not wash or flush with water. Make sure not to damage the filtering surface when cleaning!

Replacement of H11 HEPA filter must be performed at least once a year. However if the base filter F7 is cleaned and/or replaced on a correctly scheduled basis, the H11 HEPA filter replacement can be carried out once every two years (depending on the operating conditions).

The AK and AK-XXL adsorption catalytic filters must be replaced at least once a year, depending on the operating conditions.

It is possible to manually adjust the schedule of filter replacement, programming the countdown timer to indicate the scheduled date (section 5.3.13): for example, a 30 days warning can be configured as a reminder to perform regular F7 filter cleaning.

7.1. Filter replacement

The filters should be replaced after their natural lifetime expires, or if optionally the H11 HEPA filter is replaced with an adsorption catalytic AK-XXL filter.

1. Turn off the device with switch button on the side panel and pull out the power cord from the socket.
2. Remove maintenance panel:

- Press on the left and right latches towards each other, releasing panel bottom corners,
- Pull the panel, overcoming the force of the magnet lock, located at the bottom of the mainte-nance panel.

3. Pull out the old filter and insert the new filter until it stops in position.
4. Reinstall the maintenance panel. Make sure that both right and left latches are clamped shut.

> **PLEASE NOTE!** Avoid applying force on latches during panel reinstallation, as this may damage the device.

5. Put the used filter into a bag and dispose of it.

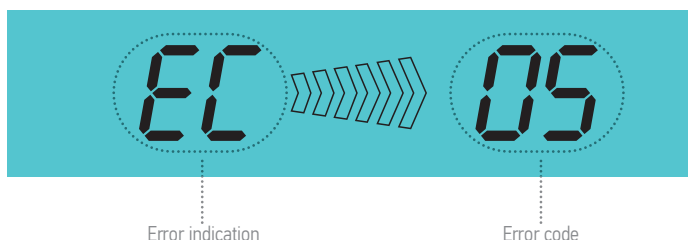No special measures for filter disposal are needed.
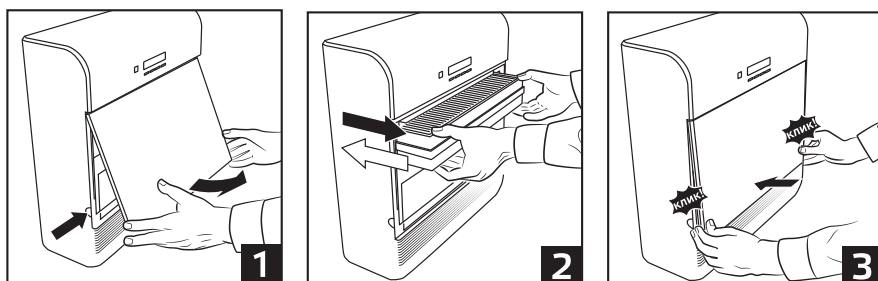
7.2. Troubleshooting

The LCD display will warn of any malfunction or contingency.

Should an abnormal situation occur:

- the device will automatically switch to standby mode,
- The LCD display will appear as shown on the Figure below (error code «EC05», blinking segments circled):

Error indication   Error code

If the «EC01» or «EC03» error message is displayed, make sure that the outdoor air temperature is within the range, indicated in the technical parameters.

If the «EC02» error message is displayed, make sure that the outer air temperature is above the value, preset by the "minimum admissible temperature" parameter (section 5.3.12).

If the outer air temperature conforms with the specified range, please contact the Service Center by phone, as indicated on the Warranty Card. If the temperature is beyond the permissible range, wait for weather warming/cooling and then try turning the device on.

If the «EC05», «EC06», «EC07», «EC08», «EC09» or «EC10» error message is displayed, turn the device off with the power switch on the side panel and contact the Service Center.

 If the «EC04» error message appears: increase the target temperature (section 5.3.8). Should the indication persist, contact the Service Center.

If the «EC11» indication appears: turn the device off, disconnect it (pull the power cord out of the socket) for several seconds and turn it on again. Should the indication persist, contact the Service Center.

If «no rF» indication appears (interface unit fails to connect), turn the device off with the power switch on the side panel and then reengage it to reset the error message.

> **PLEASE NOTE!** If turning the device off and on (with switch button on the side panel) resets the user settings, contact the service center.

8. STORAGE, TRANSPORTATION, DISPOSAL

Prior to being installed for operation, the device should be stored and transported in the original packing. The device may be stored and warehoused in non-heated rooms with temperature from −20°C to +40°C and relative humidity up to 80 % at +20°C.

If filters are stored separately from the device, observe the following prescriptions:

• the filters must be stored in a dry room, protected from direct sunlight, at a distance at least 1 m from heating devices at temperature not exceeding +30°C and relative humidity not exceeding 80 %;

• do not store filters in a room where chemicals are stored.

If these rules are carefully observed, the filter storage life is unlimited.

During transportation, ensure protection against shocks, falls and adverse climatic factors.

After expiration of the planned service life please discontinue the use of the device and contact the Service Center of the Vendor to get advice as to the possibility of further use of the device or its disposal.

9. WARRANTY

Tion Smart Microclimate JSC as developers and manufacturers of the Tion O$_2$ Breezer compact ventilation unit congratulate you on your choice of this device and thank you for your purchase.

The planned service life of the device from AO Tion Smart Microclimate is 5 years, subject to the installation and operation rules.

Before placing the device into operation, please read carefully the User Manual, warranty terms and inspect the completeness of the packing list and device appearance.

Should any objections arise as to the incompleteness of the packing list and/or device appearance, please notify the Vendor at purchase.

If the package appears damaged during shipping please unpack the device and examine its intactness promptly. Shipping damage to the device must be recognized by the Carrier in written form to ensure proper processing of the claims for damage reimbursement.

Warranty conditions

The warranty is valid only if a duly filled in warranty card, sales receipt, cash voucher or other document is presented, which certifies the device purchase and the date of procurement.

- If the purchase date can not be ascertained, the warranty period starts from the device manufacture date in accordance with consumer protection legislation.
- The warranty terms cover manufacturing or design defects of the device. The warranty obligations include performing repair work either at a Service Center, or at the Purchaser's site (at discretion of the service office).
- The warranty does not cover scheduled maintenance with filter replacement, or any cases of device misuse , violating the requirements of this User Manual

The warranty service obligation is void in the following cases:

- if the warranty sticker on the device rear panel is not intact;
- if there is evidence of non-authorized installation, repair, dismantling, device alteration or treatment at non-authorized service centers;
- if the serial number of the device is not readable (wiped off, erased, corrected or destroyed);
- if the device was damaged by natural disasters (fire, inundations, etc) or other causes beyond the control of the Vendor (Manufacturer) and Purchaser;
- if the device contains mechanical damages (chipping, cracks, etc.) due to the application of excessive force, corrosive chemicals or elevated temperature, or if any of these have caused device failure;
- if the failure is caused by incorrect connection to the power mains;
- if failure and/or damage are caused by foreign objects, liquids, insects or their products, etc. getting inside the device casing;
- if the device was not duly stored.

Dear Customers,

To claim the fulfillment of warranty obligations for the device please contact the device Vendor.

Tion Smart Microclimate JSC hereby confirms its obligations to satisfy the warranty conditions imposed by current legislation, in case of detected device defects due to the Manufacturer's fault. Tion Smart Microclimate JSC reserves the right of denial of warranty terms, should the above mentioned conditions not be duly fulfilled. The warranty period is 1 year* from the purchase date, on condition that the operating instructions are duly followed.

Service office E-mail : service@tion.global
tion.global

* If not otherwise specified by the regulations of the country, where warranty obligations are to be administered.

ACCEPTANCE CERTIFICATE

Compact ventilation unit Tion O$_2$ Breezer
corresponds to Technical Specifications TU 3646-001-66248641-2015 and is acceptable for operation.

Manufacturing date _____

QC stamp

SALES CERTIFICATE

Version: Tion O$_2$ MAC / Standard / MAC Base / Base / Lite (please underline)

Serial number (to be entered at purchase):
_____

Vendor: _____

_____
_____

Sale date   «_____» _____ 20____

Vendor's signature and stamp   _____ / _____

Stamp

PLEASE NOTE! The "SALES CERTIFICATE" field must be duly filled as a necessary confirmation of the warranty obligations.

Version 1.5.03

NOTES