

Air for life

## Installation regulations

Sonair English



## Installation regulations

Sonair

CE

UK CA

Store near the appliance

This appliance may be used by children as of 8 years of age, persons with reduced physical or mental capacities, and persons with limited knowledge and experience if they are supervised or have received instructions on how to use the appliance safely and are aware of the possible dangers.

Children younger than 3 years of age must be kept away from the appliance, unless they are under constant supervision.

Children between the ages of 3 and 8 may only switch the appliance on or off, but only if supervised or if they have received clear instructions on the safe use of the appliance and understand the possible dangers, on the condition that the appliance has been placed and installed in the normal position for use. Children between the ages of 3 and 8 may not insert the plug into the socket, nor clean or make changes to the settings of the appliance, nor carry out any maintenance on the appliance that would normally be carried out by the user. Children may not play with the appliance.

If you need a new power cable, always order the replacement from Brink Climate Systems B.V. To prevent dangerous situations, a damaged mains connection must only be replaced by a qualified expert!

Country: GB

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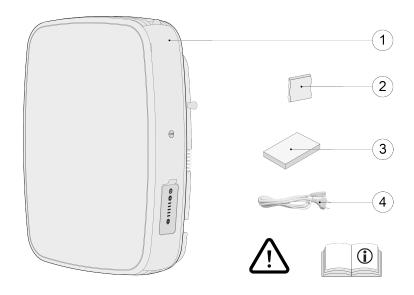
# 1 Delivery

## 1.1 Delivery size

Before installation of the Sonair is started, check that it has been supplied in complete and undamaged condition.

The delivery size of the appliance type Sonair consists of the following components:

- 1. Appliance Sonair
- 2. Mounting set
- 3. Documentation set consisting of:
  - 1x installation instructions
  - 1x drilling template
- 4. Power cord



# 2 General

## 2.1 Introduction

Congratulations with the purchase of the Sonair ventilation system.

Your Sonair will provide you with a constant supply of fresh and clean air to create a healthy and comfortable indoor climate. Your Sonair filters dust particles from the air and prevents noise from entering your home. Using your Sonair also prevents unnecessary energy loss through uncontrolled ventilation.

The Sonair is available in two types:

- The "Sonair"
- The "Sonair with CO<sub>2</sub>-sensor "

In the Sonair, the flow can only be set manually.

In the version with  $CO_2$  sensor, the flow can either be set manually or automatically controlled by the built-in  $CO_2$  sensor ( $\rightarrow$ -> Switching appliance on and off -> page 14).

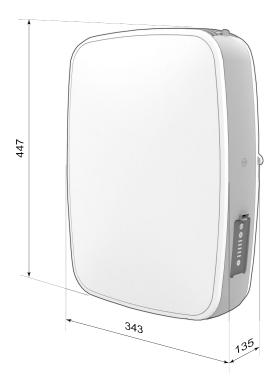


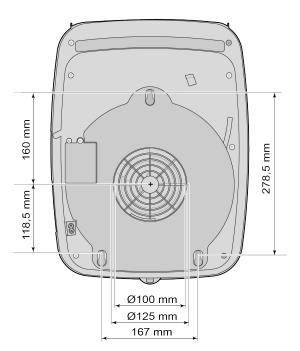
If the Sonair has been voltage-free, the Sonair must always be switched on again by pressing the  $\bullet$ -button on the controller!

Even after removing the outlet, for example to change the filter, the Sonair must always be switched on again by pressing the 0-button on the controller!

## 2.2 Technical infomation

Sonair											
Power input [V/Hz]					220 - 240 VAC/ 50-60 Hz						
Dimensions (w x h x d) [mm]					343 x 447 x 135						
Duct diameter [mm]					ø100 -125						
Weight [kg]					4.5						
Filter class					ISO Coarse 60% (ISO ePM1.0 50% optional)						
Protection degree					IP20						
Rated power [W]					23						
Materials housing				Plastic (ABS)							
Colour housing				white (RAL 9010) & grey (RAL 9006 )							
Battery type controller				CR2032 - 3V							
Operation conditions				Indoors in a area under temperature conditions of 0 to 50 °C with a relative humidity of 0 to 90%.							
Fan speed	0	1	2	3	4	5	6	7	8	9	10
Flow [m <sup>3</sup> /h]	0	20	30	40	50	60	70	85	105	125	150
Rated power [W]	0.5	1.2	1.5	1.9	1.9	1.9	4.2	5.9	9.3	13,9	22.7
Rated current [A]	<0.03	0.03	0.03	0.03	0.03	0.03	0.05	0.06	0.08	0.11	0.18
Sound power Lwa [dB(A)]	-	<14,5	<15	<18,5	24	28	32,5	37,0	42,5	47	52,5
Lpa [db(A)] (1m; Lpa 10m2)	-	<12,0	<12,5	<16,0	21,5	25,5	30,0	34,5	40,0	44,5	50,0





# 3 Operation

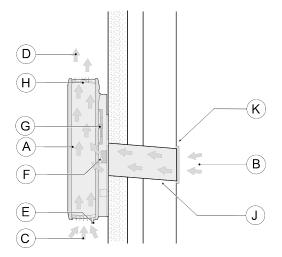
## 3.1 How the Sonair works

Your Sonair should be installed by a qualified Installer. A hole is drilled in the outside wall of your home and a duct (not supplied) is placed to create a direct connection with the outdoor air. A grille (this must be ordered separately) is mounted on the outside wall and the Sonair is mounted inside your home.

A fan in your Sonair sucks unfiltered air (outside air) through a duct and passes it through a filter to clean it before blows the air into the room, resulting in a healthy and comfortable indoor climate.

With a recirculation value it is possible to mix the outside air with the recirculation air from the room. In this way the temperature of the air which comes out of the Sonair can be raised and the indoor air will be filtered as well. The supply of outdoor air can be controlled by an air inlet shutter value.

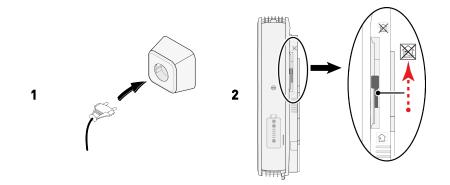
Due to the properties of the Sonair, noise is prevented from entering the room.





### 3.2 Emergency mode

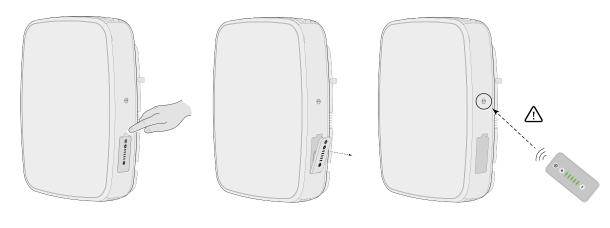
- 1 In case of an emergency such as e.g. fire, pull the 230 V power plug from the electric system. The appliance is now free of voltage.
- 2 Close the air inlet vale; move position of the air inlet valve operation handle to up position.



## **3.3 Product overview**

### 3.3.1 Overview and controller

The Sonair comes with a controller. This controller can be easily removed from the Sonair device. To switch on and operate the Sonair by means of the controller, see  $\rightarrow$ -> <u>Switching appliance on and off</u> -> page 14. The transmission range of the control is up to 3 meters without any obstacles! Always point the controller at the filter replacement indicator on the right side of the Sonair.

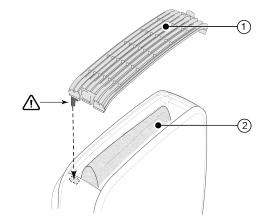


### 3.3.2 Outlet

The outlet (1) holds the filter (2). The filtered air is blown through the outlet into the room.

The outlet can only be mounted in 1 way! Note the position of plastic tab.

Take care of the correct position of the outlet; when outlet is not mounted or mounted in a wrong position the Sonair will not operate!



### 3.3.3 Filter

The outdoor and indoor air is cleaned by the filter before it is blown into the room. See  $\rightarrow$ -> Replace filter -> page 16 how to replace the filter.

Your Sonair can be fitted with different types of filter. The print on the filter shows what type of filter is installed in your Sonair.

We recommend that you replace the filter in your Sonair every 6 months or when the filter message indicator appears. You can order the filters at your dealer. The old filter can be disposed of with the household rubbish.

### Standard filter

Your Sonair is standard fitted with a ISO Coarse 60% filter. This filter is used under normal dust load conditions. The ISO Coarse 60% filter captures 60% of the particles larger than 10 µm.

### Fine dust particle filter ISO ePM1.0 (option)

The fine dust particle fine filter ISO ePM1.0 is used when the dust load is moderate to high. This filter captures 99% of all dust particles larger than 10 µm and 95-99% of all particles larger than 5 µm.

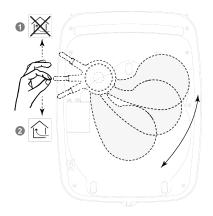
### Carbon filter PM1 (option)

The carbon filter is used when there is moderate to high dust exposure. This filter removes 99% of all dust particles, including pollen, spores, hair, sand and textile threads, cement dust, pollen and dust mite droppings. The filter also features carbon to absorb nuisance odors.

### 3.3.4 Inlet valve

The supply of outdoor air can be controlled by the air inlet valve. On the side of your Sonair you can see the position of the inlet valve handle. When the handle is at the bottom, the air inlet is open. When the handle is at the top, the air inlet is closed. This way you can control the amount of outdoor air entering the room. When the inlet valve is closed, the appliance should not be in automatic mode!

The knob allows you to adjust the ratio of outdoor and indoor air being blown through the filter and into the room or to close off the air inlet completely (in case of emergency, like a fire).



1 = inlet valve completely closed 2 = inlet valve fully open

### 3.3.5 Recirculation valve

The recirculation valve is used in combination with the inlet valve to control the ratio of outdoor air and indoor air passed through the Sonair.

The recirculation valve can be adjusted using the tab at the bottom of the Sonair. Pulling the tab out opens the valve, pushing the tab up closes the valve. To adjust the ratio of indoor air and outdoor air first open the recirculation valve completely then adjust the inlet valve on the side of the Sonair.



### 3.3.6 Filter replacement indicator

If the filter replacement indicator flashes red, we advise you to replace the filter. This appears after the first 180 days of use or 180 days after the filter indicator reset has been reset. Read the instructions  $\rightarrow$ -> Replace filter -> page 16 to see how to replace the filter and also how to reset the filter replacement indicator.

### 3.3.7 CO<sub>2</sub> sensor (option)

When a Sonair is equipped with a  $\text{CO}_2$  sensor (1), it is mounted at the rear.

To let the Sonair ventilate automatically according to the  $CO_2$  sensor, use the controller to position 5 (2). Position 5 on the controller activates the  $CO_2$ -sensor. See also  $\rightarrow$ -> Switching appliance on and off -> page 14 for more information about setting to position 5. In automatic mode it will adjust the flow between 20

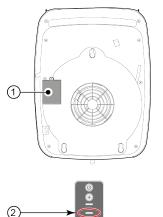
m<sup>3</sup>/h and 60 m<sup>3</sup>/h proportionally between 600 and 1200 ppm.

If automatic mode is selected, the inlet valve must be open!

Once the product has been set up it will work fully automatically.

The speed of the fan will increase/decrease gradually and automatically according to the  $\rm CO_2$  level present in the environment.





# 4 Installation

## 4.1 Mounting of the product

A qualified installer must install your Sonair.

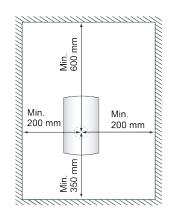
The Sonair ventilation unit supplies fresh, clean air to rooms in homes and buildings. To do this, the Sonair must be installed on the inside of an outside wall, and nearby a power socket/ supply. Before this is done, a hole must be drilled in the outside wall, a duct must be placed in the hole, and a grille must be placed on the outside wall.

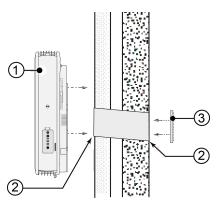
### Safety instructions

- You should use the Sonair with care.
- Allow the Sonair to acclimatize for at least one hour.
- The Sonair may only be mounted in clean, dry, even and dust-free interior.
- There must be a minimum amount of free space around the unit.
- In the proximity of the device, a wall outlet should be present (Supplied power cord has a length of 1.9 m.).
- On the outside of the wall, a grille with sufficient free passage must be fitted to the duct.
- No pipes may run into the wall at the installation location.
- Make sure that the wall duct is free of debris and other dirt.

### **Mounting instructions**

- 1. Determine where the Sonair (1) is to be mounted.
- 2. Take into account the distance to the nearest wall socket; the supplied power cord has a length of 1.9 m.
- 3. Observe the minimum clearance arount the Sonair.
- 4. Stick the supplied drilling template with adhesive tape at the desired location.
- 5. It is recommended to use the special Brink sound insulating tube; diameter 100 mm; Brink article code: 110361
- 6. Using the drilling template, drill the hole for the outside air supply from the inside to the outside at an angle of at least 5° downwards to prevent ingress of water.
- The diameter depends on the type of tube and can vary between 102 and 127 mm. Ensure that the hole is large enough (including tolerances) to fit the duct.
- 8. Using the drilling template, drill the three holes for the fastening screws Ø8 mm, at least 45 mm deep. Insert plugs into the holes
- 9. Tighten the screws, let them protrude 12 mm.
- Determine the length of the duct and cut it to the right length. The pipe must not protrude on the inside and outside and must be flush with the wall.
- 11. Remove any burrs with a file.
- 12. Seal the pipe at both ends (2).
- 13. On the outside of the wall, place the inlet grille (3) over the duct tube.
- 14. Gently press the Sonair (1) against the wall and slide it down over the screws.





## 4.2 Electrical connection



Important

Prevent water or other fluids from entering the Sonair. The appliance is not waterproof!



### Warning!

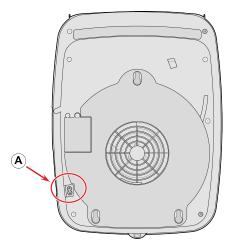
At all times disconnect the power cable from the power socket for a filter change or troubleshooting.

Your Sonair is fitted with a separate power cable.



This power cable of the Sonair should be connected to an easily accessible wall socket.

The electric installation must comply with the requirements of your power company and the local regulations!



A = power connection at the back of the appliance

# 5 Starting appliance

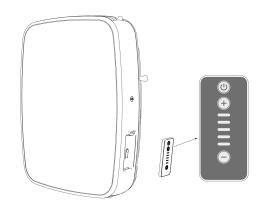
## 5.1 Switching appliance on and off

To switch on/off the Sonair on you must use button 0 on the controller. All 5 LED lights are visible for a short moment.

The two control buttons on the controller allow you to set the ventilation speed manually. By pressing the plus button (+) you can increase the fan speed. By pressing the minus button (-) you can reduce the fan speed.

The LED lights on the controller indicate which of the 10 ventilation speeds the Sonair is set.

**Important!** With every change / adjustment by means of the controller you will hear a "bleep" in response; if you do not hear this, adjustment has not been made.



Flow setting 1	Flow setting 6
20 m <sup>3</sup> /h	70 m <sup>3</sup> /h
Flow setting 2	Flow setting 7
30 m <sup>3</sup> /h	85 m <sup>3</sup> /h
Flow setting 3	Flow setting 8
40 m <sup>3</sup> /h	105 m <sup>3</sup> /h
Flow setting 4	Flow setting 9
50 m <sup>3</sup> /h	125 m <sup>3</sup> /h
Flow setting 5 60 m <sup>3</sup> /h or automatic ventilation according the optional fitted CO <sub>2</sub> -sensor	Flow setting 10 150 m <sup>3</sup> /h

\* The flow settings stated in this table have been measured with a Brink supply pipe Ø100mm and standard Brink grille.

# 6 Fault

## 6.1 Solving problems

### Warning

Do not attempt to repair the Sonair yourself under any circumstances, as this will make the guarantee void. If the system problem persists, please contact your dealer.

At all times disconnect the power cable from the power socket for a filter change or troubleshooting.

#### My Sonair does not ventilate.

- Check if the power cable is plugged into the power socket.
- Check if the air inlet handle is in open position.
- Check if the recirculation valve is in closed position.
- Check if the outside grille is blocked.
- Check if the duct is blocked.
- Check if the outlet is fitted and mounted in the correct position  $\rightarrow$ -> <u>Outlet</u> -> page 9.

#### My Sonair does not recirculate.

- Check if the power cable is plugged into the power socket.
- Check if the air inlet is in the desired position.
- Check if the recirculation valve is in opened position.

#### My Sonair make more noise than usual.

- Check the filter, probably the filter is full and needs replacing. See →-> <u>Replace filter</u> -> page 16 to see how to do this.
- Check if the air inlet is opened.
- Check if the recirculation valve is closed.
- Check if the outside grille is blocked.
- Check if the duct is blocked.

#### The power cable is damaged

Do no try to repair this, it should be replaced by your dealer.

# 7 Maintenance

## 7.1 Replace filter

We recommend that you replace the filter in your Sonair every 6 months or when the filter replacement indicator appears.



**Important** It is not permitted to use the Sonair without filter!



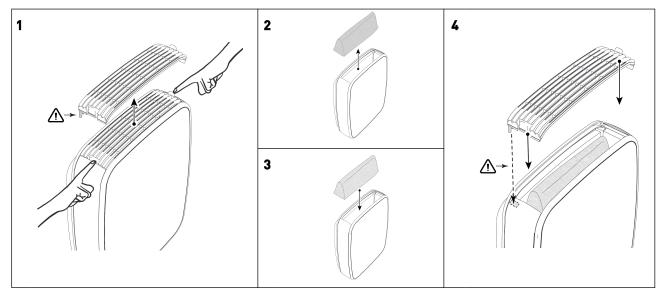
**Warning!** Remove the power cable from the power socket before replacing the filter.

### Filter replacement indicator

This icon "FILTER" flashes when we advise you to replace the filter.

This appears after the first 180 days of use of 180 days after the filter indicator has been reset.

### Filter replacement



### **Reset filter replacement indicator**

If Sonair has been voltage-free, always switch the Sonair on again using the O-button on the controller  $\rightarrow$ -> <u>Switching appliance on and off</u> -> page 14. After the filter has been replaced, simultaneously press and both the O button and the O - button on the controller and hold for 3 seconds. When successfully, the filter replacement indicator will disappear. After removing the outlet to change the filter, the Sonair

must always be switched on again by pressing the  $\dot{\mathbb{O}}$ -button on the controller!



A = Hold both buttons for 3 seconds to reset B = Filter replace indicator position

### Sonair 616595-L

### 7.2 Maintenance - instructions



### Warning!

Make sure that the electrical connection in the installation room is disconnected before the maintenance operations.

It is recommended to clean the product at least once every year .

During the first months of running, it is also recommended to periodically control the conditions of the machine so that to establish a proper slot time according to the environmental conditions in which the product is installed.

# 8 Service articles

## 8.1 Order parts

When ordering parts, in addition to the article code , please state the appliance type, the serial number, the year of production and the name of the part:

### i Note

**N.B.:** Appliance type, serial number and year of production are stated on the identification plate on the bottom of the appliance.

Example				
Appliance type	: Sonair			
Serial Number	: 352004213501			
Year of production	: 2021			
Part	: Controller			
Article code	: 535110			
Quantity	:1			

Appliance type, serial number and year of production are stated on the identification plate on the Sonair.

No.	Article description	Article code
1	S. Sonair – Controller	535110
2	S. Sonair – filter	535083
3	S. Sonair – Fan	535112
4	S. Sonair – PCB	535117
5	S. Sonair – CO <sub>2</sub> -sensor	535118
6	S. Sonair – power cable 1.8 m	540220

# 9 Conformity declaration

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Manufacturer:	Brink Climate Systems B.V.		
Address:	P.O. Box 11 NL-7950 AA, Staphorst, The Netherlands		
Product:	Sonair Sonair Sonair with CO2-sensor		

The product described above complies with the following directives:

◆ 2014/35/EU	(OJEU L 96/357; 29-03-2014)
◆ 2014/30/EU	(OJEU L 96/79; 29-03-2014)
◆ RoHS 2011/65/EU	(OJEU L 174/88; 01-07-2011)
◆ 2009/125/EU	(OJEU L 285/10; 31-10-2017)
◆ 2017/1369/EU	(OJEU L 198/1; 2807-2017)

Staphorst, 15-11-2021

Y

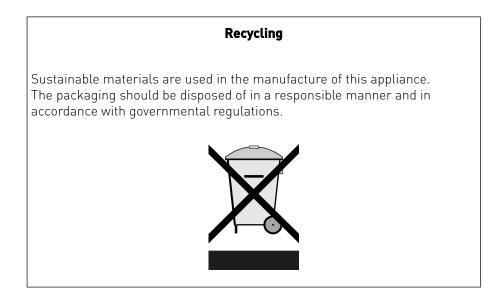
A. Hans *Technical Director* 

# 10 ERP values

Manufactu	rer.	e with Ecodesign (ErP), no. 1254/2014 (Annex IV) Brink Climate Systems B.V.							
Model:		-	Sonair/ Sonair with CO <sub>2</sub> sensor						
Climate zone:	Type of control	SEC Value in kWh/m²/a	SEC Class	Annual electricity consumption (AEC) in kWh	Annual heating saved (AHS) in kWh				
Average	Manual	- 13.95	E	155	1715				
	Local control with sensor	- 26.69	В	92	2830				
	Manual	- 24.98	С	692	3355				
Cold	Local control with sensor	- 48.38	A+	629	5536				
llat	Manual	- 5.00	F	110	776				
Hot	Local control with sensor	- 11.63	E	47	1280				
Type of ven	tilation unit:	Non-ducted RVU	J						
Fan:		EC - fan with var	EC - fan with variable speed						
Type of hea	t exchanger:	none	none						
Thermal efficiency		n.a.							
Maximum flow rate:		150 m <sup>3</sup> /h	150 m <sup>3</sup> /h						
Maximum r	ated power:	23 W	23 W						
Sound powe	er level Lwa:	47 dB(A)	47 dB(A)						
Reference f	low rate:	105 m <sup>3</sup> /h	105 m <sup>3</sup> /h						
Reference p	ressure:	0 Pa	0 Pa						
Specific Pov	ver Input (SEL):	0.09 Wh/m <sup>3</sup>	0.09 Wh/m <sup>3</sup>						
Control fact	or	1.0 without CO <sub>2</sub>	1.0 without CO <sub>2</sub> -sensor						
Control lact	01.	0.65 for unit with CO <sub>2</sub> -sensor							
Leakage Internal		4.1%							
Leunage	External	4.1%							
Position dir	ty filter indication:	Attention! For a	optimal ener	and side of the appliance rgy efficiency and a proper operatio acement is necessary.	n, a regular filter				
Internet address for instructions:		http://www.brir	http://www.brinkclimatesystems.nl/support/downloads						
Sensitivity t	hrough pressure change:	± 15% per 20 Pa	± 15% per 20 Pa						
Airtightness :		2.1%	2.1%						

Classification from 1 January 2016			
SEC class (Average climate zone) SEC value in kWh/m²/a			
A+ (most efficient)	SEC < - 42		
A	- 42 ≤ SEC < - 34		
В	- 34 ≤ SEC < - 26		
C	- 26 ≤ SEC < - 23		
D	- 23 ≤ SEC < - 20		
E (least efficient)	- 20 ≤ SEC < - 10		

# 11 Recycling





### Brink Climate Systems B.V.

Wethouder Wassebaliestraat 8, NL-7951SN Staphorst T: +31 (0) 522 46 99 44 E. info@brinkclimatesystems.nl www.brinkclimatesystems.nl