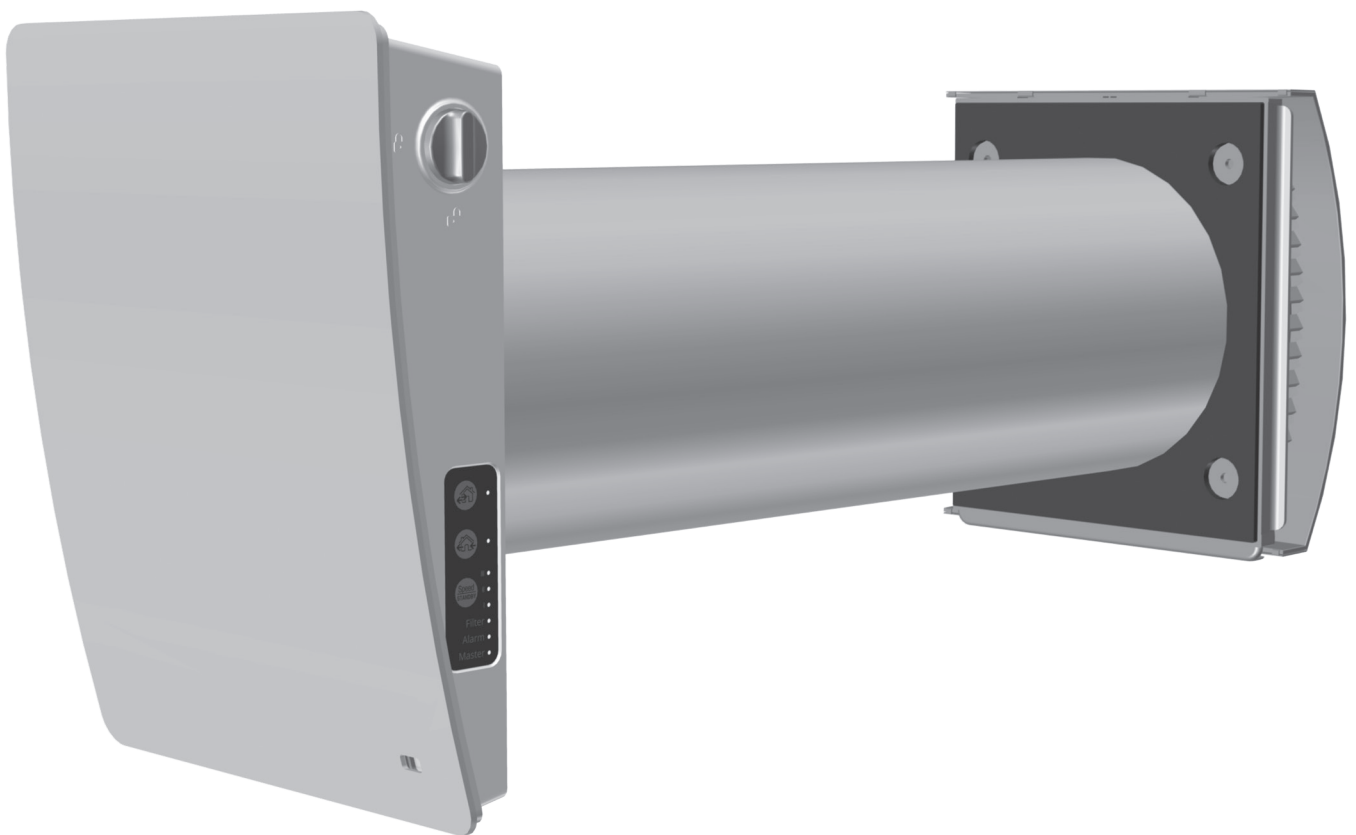


USER'S MANUAL



SIKU SPHERE Comfort 100
SIKU SPHERE WiFi 100
SIKU SPHERE Comfort 160
SIKU SPHERE Comfort 160 Basic
SIKU SPHERE WiFi 160



Single-room reversible energy recovery ventilator

CONTENTS

SAFETY REQUIREMENTS	02
PURPOSE	04
DELIVERY SET	04
DESIGNATION KEY	04
TECHNICAL DATA	05
UNIT DESIGN AND OPERATING PRINCIPLE	07
INSTALLATION AND SET-UP	09
CONNECTION TO POWER MAINS AND CONTROL	14
TECHNICAL MAINTENANCE	21
STORAGE AND TRANSPORTATION REGULATIONS	23
MANUFACTURER'S WARRANTY	24
CERTIFICATE OF ACCEPTANCE	25
SELLER INFORMATION	25
INSTALLATION CERTIFICATE	25
WARRANTY CARD	25

This user's manual is a main operating document intended for technical, maintenance, and operating staff. The manual contains information about purpose, technical details, operating principle, design, and installation of the **SIKU SPHERE WiFi 100/160 / SIKU SPHERE Comfort 100/160 (Basic)** unit and all its modifications.

Technical and maintenance staff must have theoretical and practical training in the field of ventilation systems and should be able to work in accordance with workplace safety rules as well as construction norms and standards applicable in the territory of

the country. The information in this user's manual is correct at the time of the document's preparation. The Company reserves the right to modify the technical characteristics, design, or configuration of its products at any time in order to incorporate the latest technological developments. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means in any information search system or translated into any language in any form without the prior written permission of the Company.

SAFETY REQUIREMENTS

All user's manual requirements as well as the provisions of all the applicable local and national construction, electrical, and technical norms and standards must be observed when installing and operating the unit. Disconnect the unit from power supply prior to any connection, servicing, maintenance, and repair operations.

Only qualified electricians with a work permit for electrical units up to 1000 V are allowed for installation and maintenance. The present user's manual should be carefully read before beginning works.

- Check the unit for any visible damage of the impeller, the casing, and the grille before starting installation. The casing internals must be free of any foreign objects that can damage the impeller blades.
- While mounting the unit, avoid compression of the casing! Deformation of the casing may result in motor jam and excessive noise.
- Misuse of the unit and any unauthorized modifications are not allowed.
- Do not expose the device to adverse atmospheric agents (rain, sun, etc.).

- Transported air must not contain any dust or other solid impurities, sticky substances, or fibrous materials.
- Do not use the unit in a hazardous or explosive environment containing spirits, gasoline, insecticides, etc.
- Do not close or block the intake or extract vents in order to ensure the efficient air flow.
- Do not sit on the unit and do not put objects on it.
- The information in this user's manual was correct at the time of the document's preparation.
- The Company reserves the right to modify the technical characteristics, design, or configuration of its products at any time in order to incorporate the latest technological developments.
- No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means in any information search system or translated into any language in any form without the prior written permission of the Company.

WARNING! Similar to the use of any other household electrical appliances when operating this fan, the following basic rules must be followed:

- Never touch the fan with wet or damp hands.
- Never touch the fan when barefoot.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

The connection to the supply mains must be made through a mean for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III conditions, incorporated in the fixed wiring in accordance with the wiring rules.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Ensure that the appliance is switched off from the supply mains before removing the guard.

Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other fuel-burning appliances.



THE PRODUCT MUST BE DISPOSED SEPARATELY AT THE END OF ITS SERVICE LIFE. DO NOT DISPOSE THE UNIT AS UNSORTED DOMESTIC WASTE.

PURPOSE

The ventilator is designed to ensure continuous mechanical air exchange in flats, cottages, hotels, cafés and other domestic and public premises. The ventilator is equipped with a regenerator that

enables supply of fresh filtered air heated by means of extract air heat energy recovery. The ventilator is designed for wall flush mounting. The unit is rated for continuous operation.

DELIVERY SET

	NUMBER
INDOOR UNIT OF THE VENTILATOR	1 pcs.
AIR DUCT	1 pcs.
SOUND INSULATION MAT	1 pcs.
ASSEMBLED FAN UNIT	1 pcs.
ASSEMBLED HEAT EXCHANGER UNIT	1 pcs.
CARTRIDGE	-
OUTER HOOD	1 pcs.
REMOTE CONTROL	1 pcs.
CARDBOARD MOUNTING TEMPLATE	1 pcs.
MOUNTING SET	2 packs
FOAM WEDGES	1 set
INSTALLATION INSTRUCTION	1 pcs.
PACKING BOX	1 pcs.

DESIGNATION KEY

SIKU SPHERE Comfort / WiFi

Basic

Air damper opening / closing method

_ : automatic/manual

Basic: only manual

Ventilation system model range

SIKU Sphere Comfort 160: Series of reversible ventilation systems with a duct diameter of 160 mm and a nominal delivery rate of 50 m³/h, Length of the ventilation pipe: 500 mm

SIKU Sphere Comfort 100: Series of reversible ventilation systems with a duct diameter of 100 mm and a nominal delivery rate of 30 m³/h, Length of the ventilation pipe: 500 mm

SIKU SPHERE WiFi 160: Series of reversible, WiFi-controlled ventilation systems with a duct diameter of 160 mm and a nominal delivery rate of 50 m³/h, Length of the ventilation pipe: 500 mm

SIKU SPHERE WiFi 100: Series of reversible, WiFi-controlled ventilation systems with a duct diameter of 100 mm and a nominal delivery rate of 30 m³/h, Length of the ventilation pipe: 500 mm

TECHNICAL DATA

The ventilation system can be used in closed rooms at temperatures from -1°C to $+40^{\circ}\text{C}$ and a relative humidity of maximum 65% (no condensation buildup).

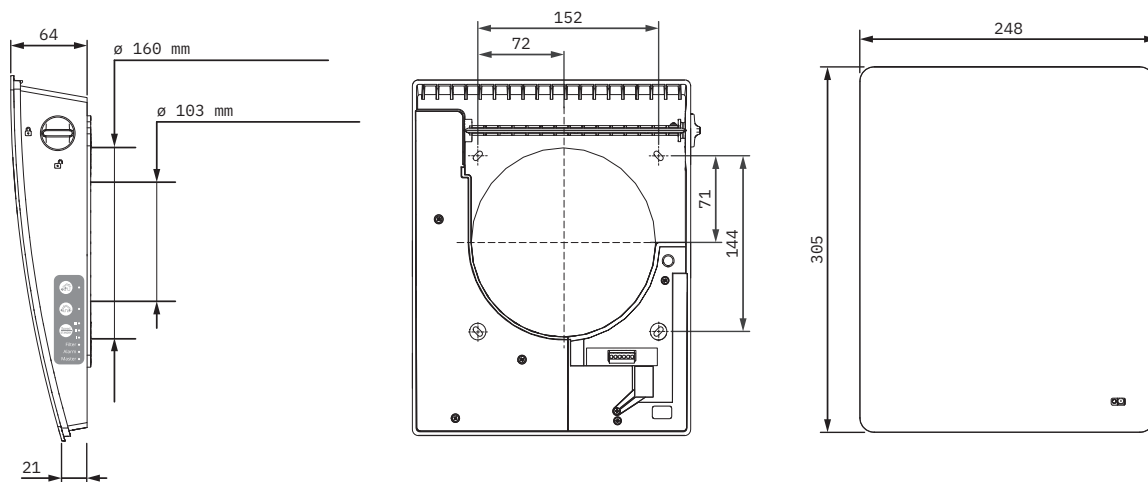
The ventilation system is one of the electrical Class II ventilation systems.

Degree of protection against ingress of foreign bodies and Water: IP24.

The model of the ventilation hood and the length of the Ventilation pipe depend on the device model (see Designation key).

The construction of the ventilation system is constantly developed and optimized further, which is why some Models may differ from the description.

OVERALL DIMENSIONS OF THE INDOOR UNIT, MM



TECHNICAL DATA

MODELS	SIKU SPHERE COMFORT 100			SIKU SPHERE COMFORT 160		
	1	2	3	1	2	3
VENTILATION LEVEL	1	2	3	1	2	3
SUPPLY VOLTAGE (V/HZ)	100 - 240V ~ 50/60 Hz					
POWER CONSUMPTION (W)	1,10	2,40	3,80	2,00	3,50	5,50
CURRENT CONSUMPTION (A)	0,02	0,03	0,05	0,03	0,03	0,06
DELIVERY RATE IN VENTILATION MODE (M ³ /H)	10	20	30	15	35	50
DELIVERY RATE IN HEAT RECOVERY MODE (M ³ /H)	5	10	15	8	15	25
CONVEYOR TEMPERATURE (°C)	-15...+40			-20...+40		
FILTER	G3			G3 (F8 optional)		
SOUND PRESSURE LEVEL AT 1M DISTANCE (DBA)	30	37	40	10	28	35
SOUND PRESSURE LEVEL AT 3M DISTANCE (DBA)	21	28	31	1	19	26
EXTERIOR NOISE INSULATION (DBA)	42			44		
HEAT RECOVERY EFFICIENCY (%)	≤ 81			≤ 90		

TECHNICAL DATA

MODELS	SIKU SPHERE WIFI 100			SIKU SPHERE WIFI 160		
VENTILATION LEVEL	1	2	3	1	2	3
SUPPLY VOLTAGE (V/Hz)	100 - 240V ~ 50/60 Hz					
POWER CONSUMPTION (W)	1,80	3,00	4,40	2,00	3,50	5,50
CURRENT CONSUMPTION (A)	0,03	0,04	0,05	0,03	0,03	0,06
DELIVERY RATE IN VENTILATION MODE (M ³ /H)	10	20	30	15	35	50
DELIVERY RATE IN HEAT RECOVERY MODE (M ³ /H)	5	10	15	8	15	25
CONVEYOR TEMPERATURE (°C)	-15...+40			-20...+40		
FILTER	G3			G3 (F8 optional)		
SOUND PRESSURE LEVEL AT 1M DISTANCE (DBA)	30	37	40	10	28	35
SOUND PRESSURE LEVEL AT 3M DISTANCE (DBA)	21	28	31	1	19	26
EXTERIOR NOISE INSULATION (DBA)	42			44		
HEAT RECOVERY EFFICIENCY (%)	≤ 81			≤ 90		

TECHNICAL DATA FOR WLAN

STANDARD	IEEE 802,11, b/g/n
FREQUENCY BAND (GHZ)	2,4
TRANSMISSION POWER (MW, DBM)	100 (+20)
NETWORK	DHCP
WIFI SECURITY	WPA, WPA2

DESIGN AND FUNCTION

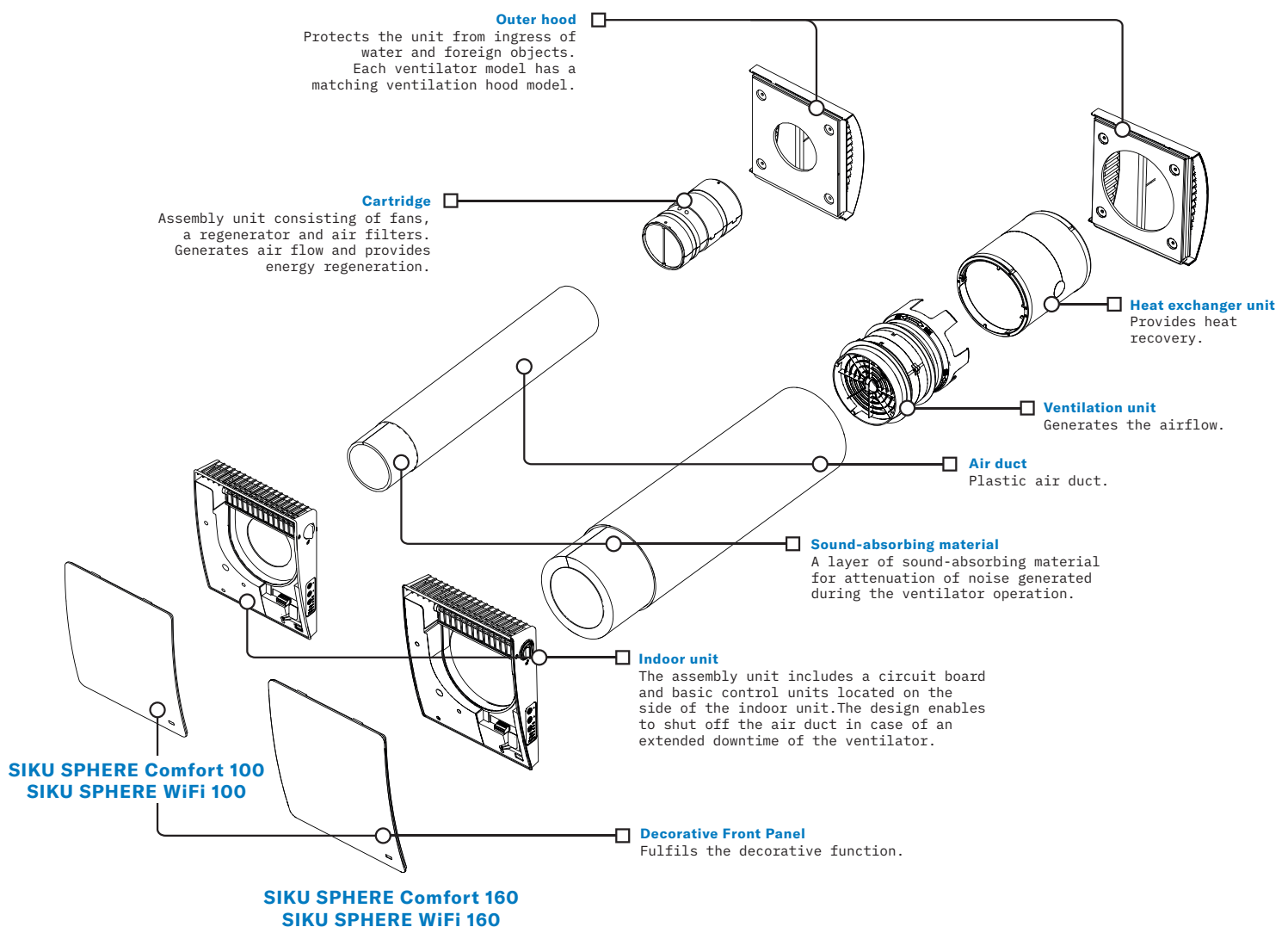
The ventilation system consists of an inner element with a decorative cover, a cartridge, a ventilation pipe and an external hood.

The cartridge is the most important component of the ventilation system. The cartridge consists of a fan, a heat exchanger and two coarse filters that prevent

dust and foreign bodies from entering the heat exchanger and the fan.

The inner element is equipped with an air flap. The external hood is mounted on the outside of the building to prevent water and coarse foreign bodies from entering the ventilation system.

CONSTRUCTION OF THE VENTILATION SYSTEM



AIR DAMPER OPERATING PRINCIPLE

The indoor unit of the ventilators has an air damper. The vertical position of the handle corresponds to the position OPEN, the horizontal one to the position CLOSED.

The indoor unit of the **SIKU SPHERE Comfort / WiFi** ventilator is equipped with an automatic air damper. It opens at the beginning of the ventilator's operation and lets the air flow freely through the ventilator.

After switching off the ventilator, the damper closes automatically. The air damper opening and closing process can take up to five minutes.

Caution! If the power supply is cut off during operation of the ventilator, after five minutes, the damper can be manually moved to the CLOSED position

using the handle to prevent drafts.

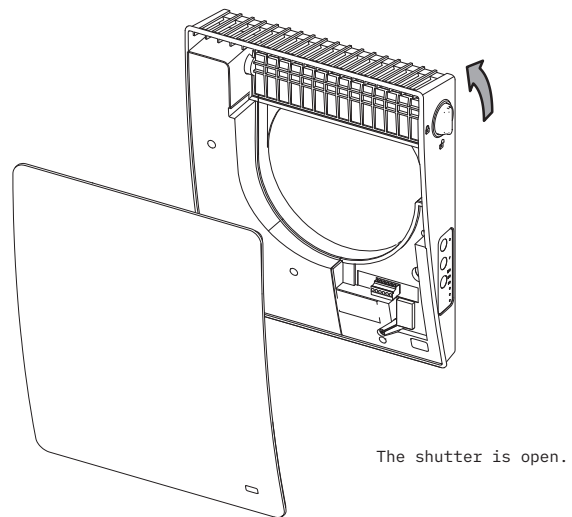
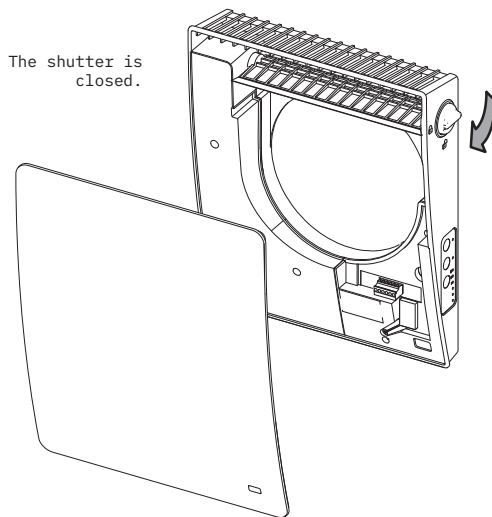
Later, when the ventilation system is switched on, the damper opens automatically.

The figure below shows the closed and open positions of the damper and the lever.

The inner element of the **SIKU Sphere Comfort Basic** does not have an automatic opening / closing of the flap. The flap of this Models can be used regardless of the operating mode of the Ventilation system only manually with the lever can be set.

Warning! Opening or closing the air flap does not switch the ventilation system on or off!

The figure below shows the closed and open positions of the flap and the lever.



VENTILATOR OPERATION MODES

Ventilation: the ventilator runs either in air extraction or air supply mode at a set speed. In this mode some of the ventilators in the network run in air supply mode and the other ones in air extraction mode, depending on the position of the DIP switch No. 3 (see section „**Setting the ventilator operation mode using DIP switches**“).

Boost: the ventilator goes to the maximum speed without changing the operation mode.

Regeneration: the ventilator runs in two cycles, 70 seconds each, with heat and humidity regeneration.

Cycle I. Warm stale air is extracted from the room and flows through the ceramic regenerator, which gradually absorbs heat and humidity. In 70 seconds, as the ceramic regenerator gets warmed, the ventilator is switched to supply mode.

Cycle II. Fresh intake air from outside flows through the ceramic regenerator, absorbs accumulated moisture and is heated up to the room temperature. In 70 seconds, as the ceramic regenerator gets cooled down, the ventilator is switched to air extraction mode and the cycle is renewed. If two ventilators are installed, they operate with opposite rotation directions in this mode. While one ventilator supplies air, the other one extracts it.

Air supply: the ventilator operates in supply mode irrespective of the position of the DIP switch No. 3 (see section „**Setting the ventilator operation mode using DIP switches**“).

MOUNTING AND SET-UP



READ THE USER'S MANUAL BEFORE INSTALLING THE UNIT.

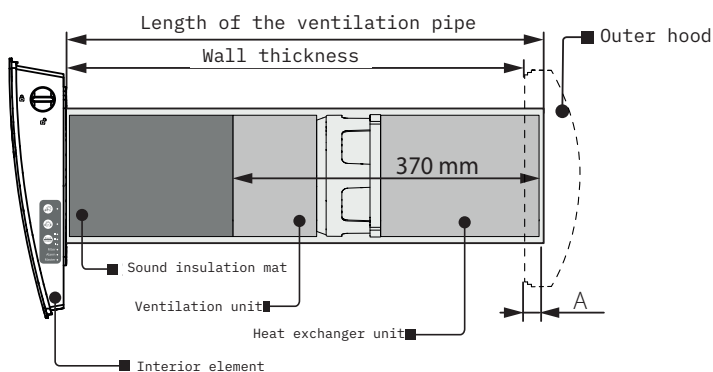


DO NOT BLOCK THE AIR DUCT OF THE INSTALLED VENTILATOR WITH DUST ACCUMULATING MATERIALS, SUCH AS CURTAINS, CLOTH SHUTTERS, ETC. AS IT PREVENTS AIR CIRCULATION IN THE ROOM.

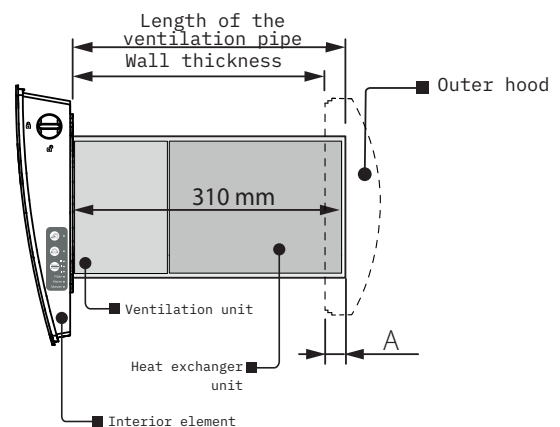
The figure below shows a schematic representation of the interior elements of the ventilation system according to the wall thickness. The ability to mount the ventilation system in the wall depends on the Length of the inner elements and the required overhang A.

The length of the internal elements, the diameter of the required hole and the minimum wall thickness in which the ventilation system can be installed when using different external ventilation hoods are given in the following table.

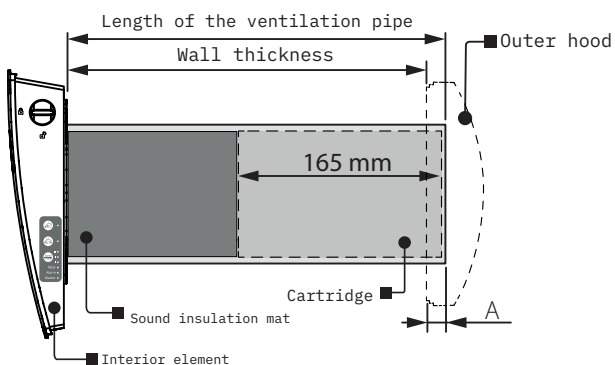
SIKU SPHERE COMFORT/WIFI 160 WALL THICKNESS IS GREATER THAN THE MAXIMUM LENGTH OF THE PIPE



SIKU SPHERE COMFORT/WIFI 160 WALL THICKNESS CORRESPONDS TO THE MINIMUM LENGTH OF THE PIPE



SIKU SPHERE COMFORT/WIFI 100 WALL THICKNESS IS GREATER THAN THE MAXIMUM LENGTH OF THE PIPE



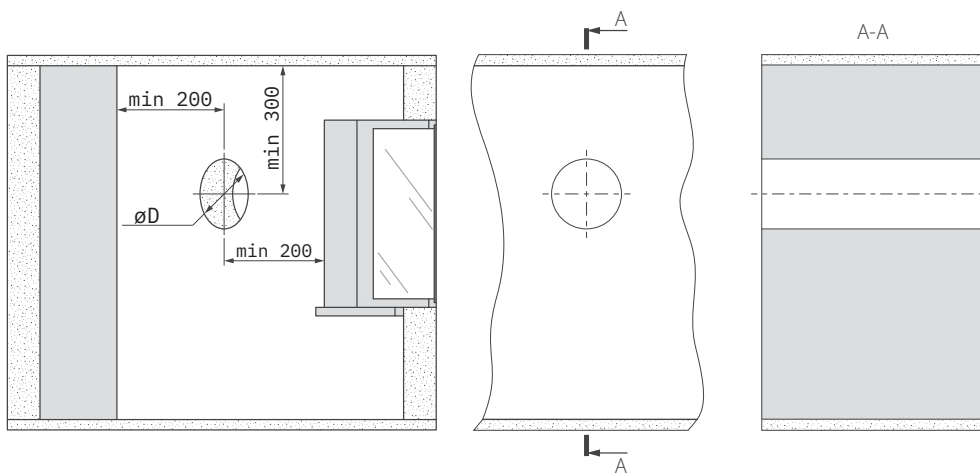
If the wall thickness is less than when the units were arranged in the wall, you can use the Loosen the fine filter holder and mount the ventilation system without it and without soundproofing material, as shown in the picture above.

With this installation variant, the recovery efficiency can decrease and the ingress of road noise increase in the room. It also increases the noise level of the ventilation system itself.

MODEL OF THE VENTILATION HOOD	SIKU SPHERE COMFORT/WIFI 100	SIKU SPHERE COMFORT/WIFI 160	SIKU SPHERE COMFORT/WIFI 160 WITH MINIMUM WALL THICKNESS
LENGTH OF THE CARTRIDGE OR THE FAN AND HEAT EXCHANGER UNIT	165 mm	370 mm	310 mm
BORE DIAMETER (D)	120 mm	180 mm	180 mm
MINIMUM WALL THICKNESS WHEN USING OUTER HOODS FOR NORMAL WALL THICKNESS (INCLUDING FROST)	ab 155 mm	ab 360 mm	ab 300 mm
MINIMUM WALL THICKNESS WHEN USING OUTER HOODS FOR THIN WALLS	ab 45 mm	ab 260 mm	ab 200 mm

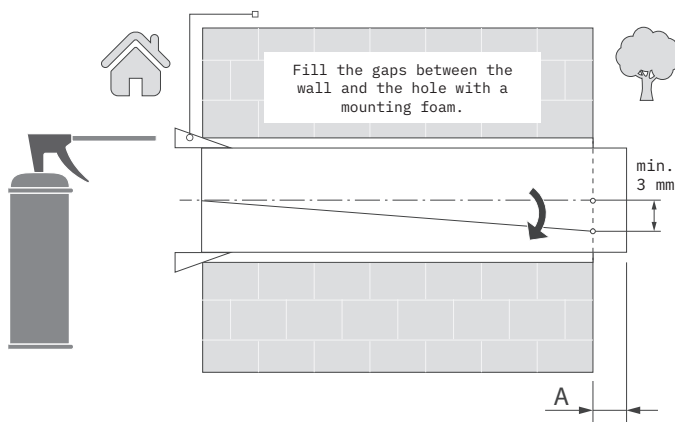
1. Prepare a round core hole in the outer wall. The figure below shows the minimum distance from the hole to the surrounding objects. The hole diameter

depends on the specific ventilator model. The corresponding values are given in the table.



2. Insert the ventilation pipe into the wall. Use the supplied assembly wedges to make assembly easier. On the outer wall, the ventilation pipe must protrude

from the wall by the distance A, which is required for the assembly of the external ventilation hood. **The distance A is 0-10 mm.**



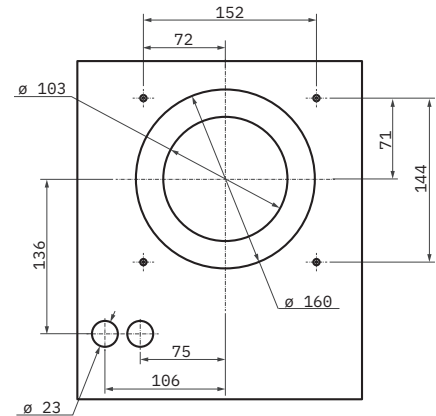
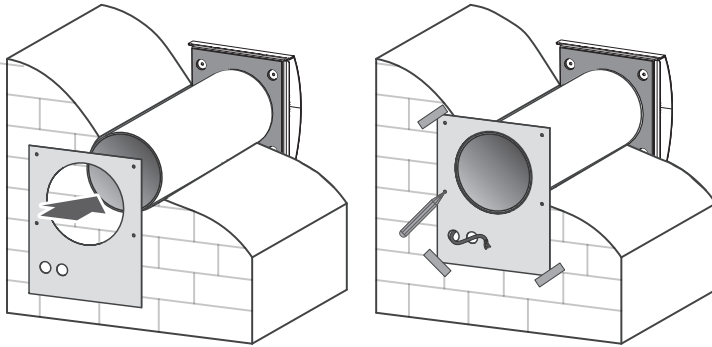
Install the air duct with the minimum slope of 3 mm downwards from the outer wall side.

The air duct can be cut by calculating the required length or after fixing the air duct on the wall (in this case, it is necessary to have access to the outside part of the wall).

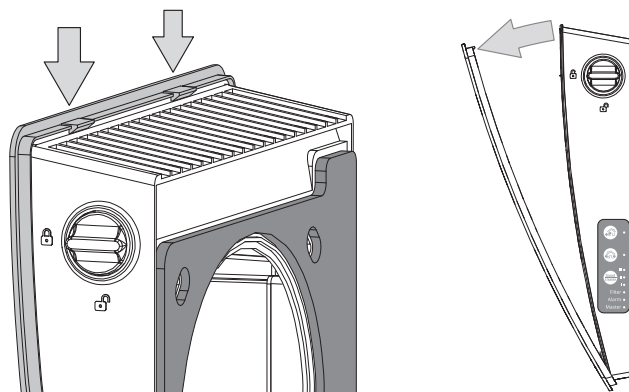
3. Insert the external ventilation hood.

4. Stick the delivered cardboard master plate on the indoor wall using a mounting tape. The large opening in the master plate must be axially aligned with the air duct. Align the master plate horizontally with a

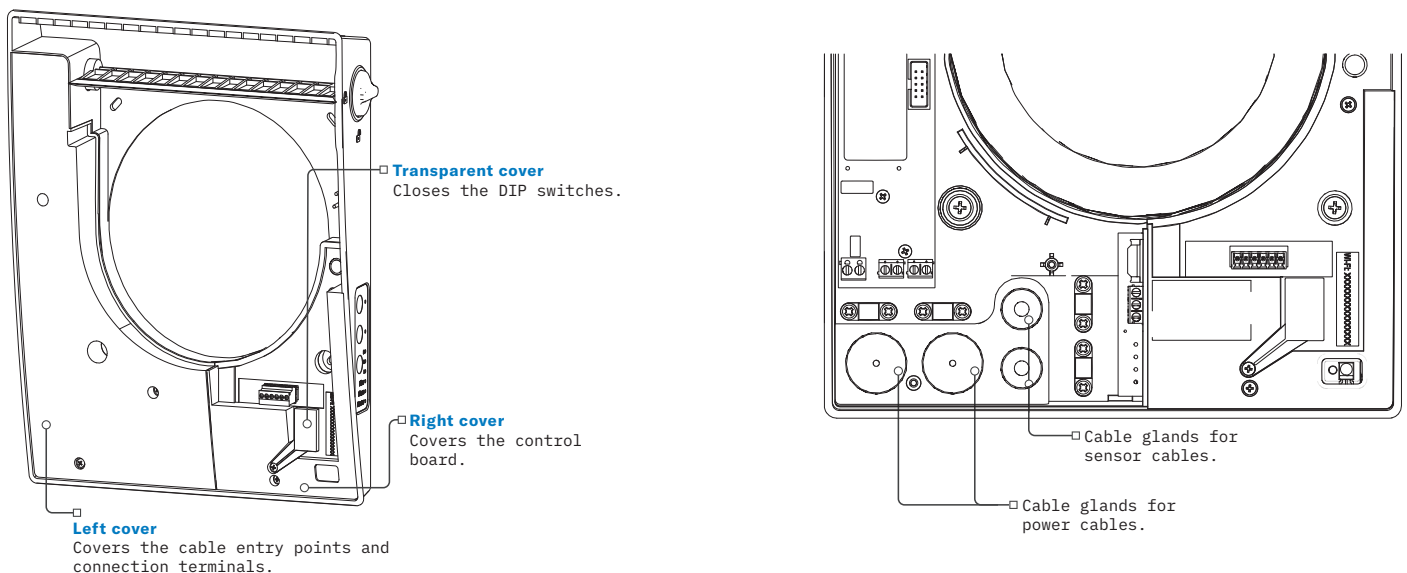
building level. Then mark the fastening holes for installation of the supplied dowels and drill the holes to a required depth. Route the power cable from the wall through the marked opening on the template.



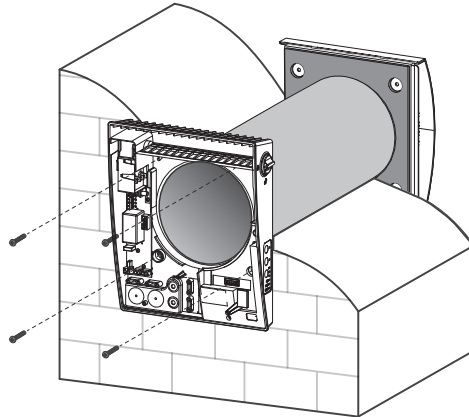
5. Separate the front of the inner panel from the back. Carefully lift the latches on the top that secure the front section and open it as shown in the following illustration.



6. Remove the three retaining screws from the left cover to enable access to the terminals. Route the power wires through the appropriate cable glands.

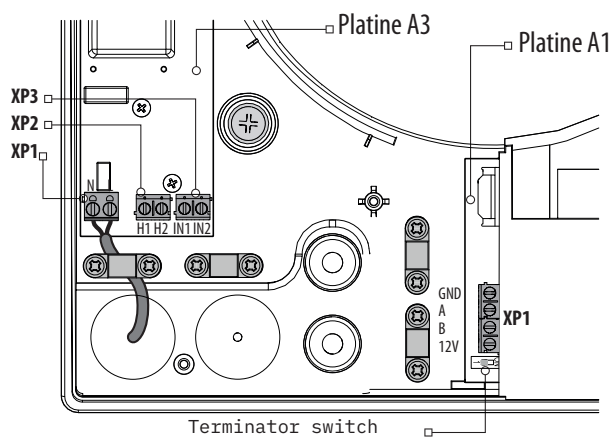


7. Fix the back part of the indoor unit on the wall with the screws supplied with the mounting kit of the ventilator.

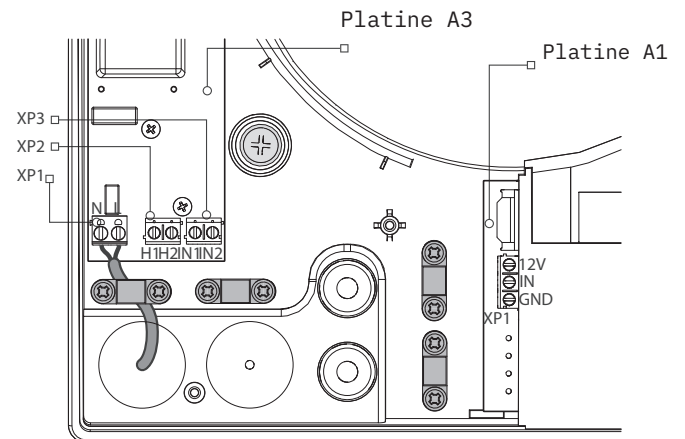


8. Lay the power cable as shown here. Connect the air handling unit to the power supply in accordance with the external connection scheme (see the "Power connection" section). Fix the power cable with a cable clamp.

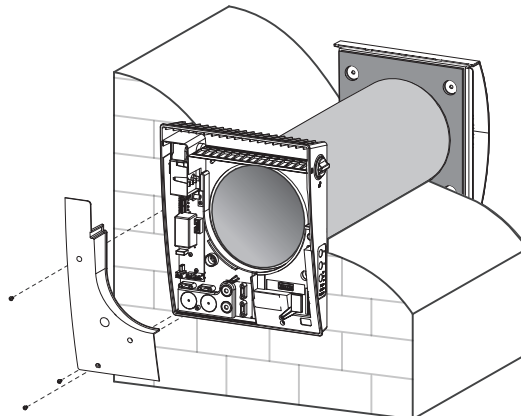
SIKU SPHERE COMFORT



SIKU SPHERE WIFI

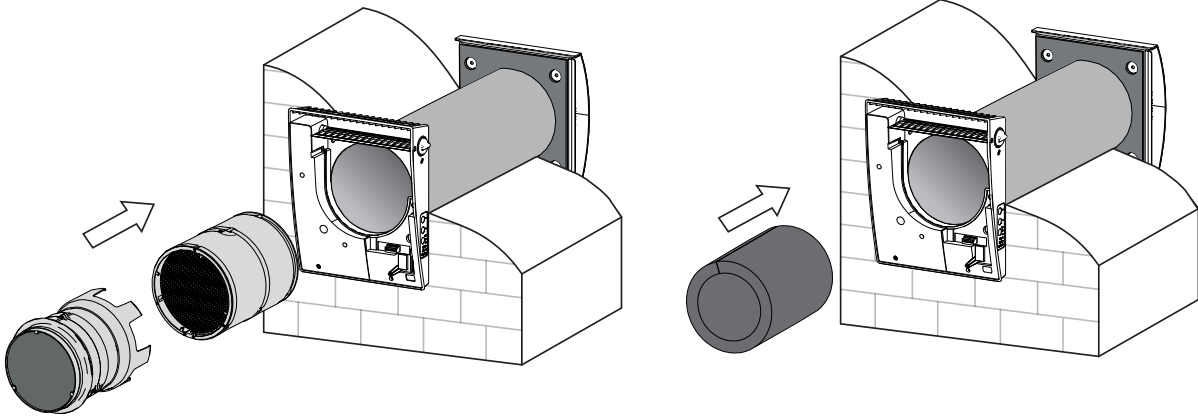


9. After completion of the electrical connection reinstall the left cover in site.

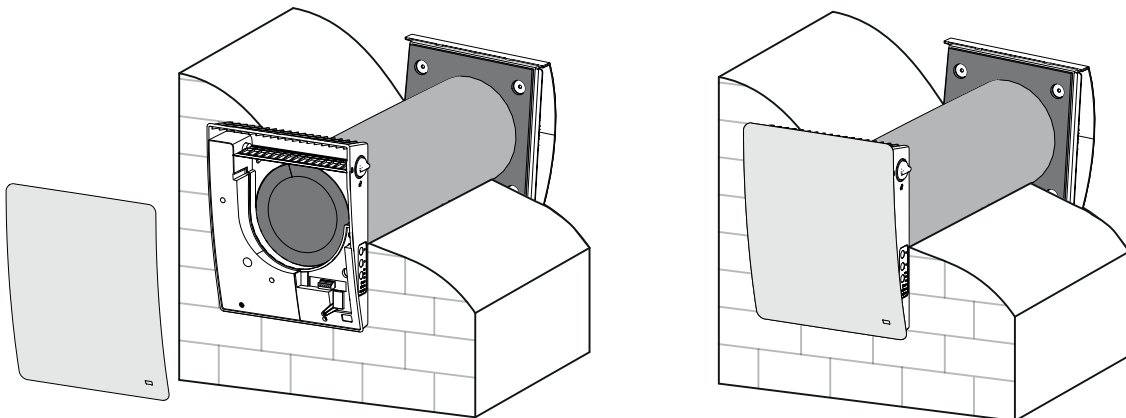


10. Install the cartridge into the air duct as figured below and connect the connector to the board. Insert the sound-absorbing layer in the air duct. Roll the layer of the sound absorbing material to match the air duct diameter. The protecting paper

layer must be outside. Insert the sound absorbing roll into the cartridge against stop. Make a mark at the end of the air duct, remove the material and cut the roll as marked. Insert the sound absorbing roll into the air duct.



11. Install the front panel of the indoor unit.

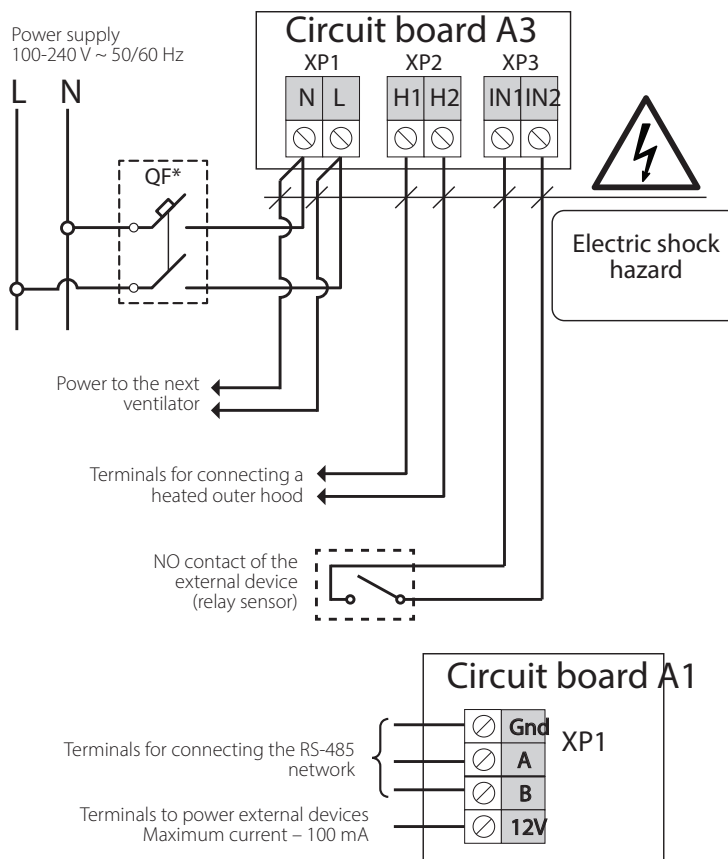


CONNECTION TO POWER MAINS SIKU SPHERE COMFORT



POWER OFF THE POWER SUPPLY PRIOR TO ANY OPERATIONS WITH THE UNIT. THE UNIT MUST BE CONNECTED TO POWER SUPPLY BY A QUALIFIED ELECTRICIAN. THE RATED ELECTRICAL PARAMETERS OF THE UNIT ARE GIVEN ON THE MANUFACTURER'S LABEL.

The ventilator is rated for connection to single-phase AC 100-240 V/50 (60) Hz power mains. For electric installations use insulated, flexible conductors (cables, wires) with the minimum cross section of 0.5 up to 0.75 mm² for power cables and 0.25 mm² for sensor cables. The cable cross section is given for reference only. The actual conductor cross-section selection must be based on its type, maximum permissible heating, insulation, length and installation method. Use copper wires for all the electric connections! Connect the unit to power mains via the terminal block installed in the power board (A3) in compliance with the wiring diagram and terminal designation. Connect the unit to power mains through the external circuit breaker with a magnetic trip integrated into the fixed wiring system. The tripping current of the circuit breaker is selected based on the electrical characteristics shown on the label of the fan casing. The ventilator design enables connecting any external controls with a normally opened contact (NO contact), such as an external CO₂ sensor, a humidity sensor, a switch, etc. When the NO contact of the external device is closed, the unit changes to the maximum speed. An analogue sensor with output voltage 0-10 V is also compatible with the unit.



*The circuit breaker is not included in the delivery set.

CONNECTION TO POWER MAINS SIKU SPHERE WIFI

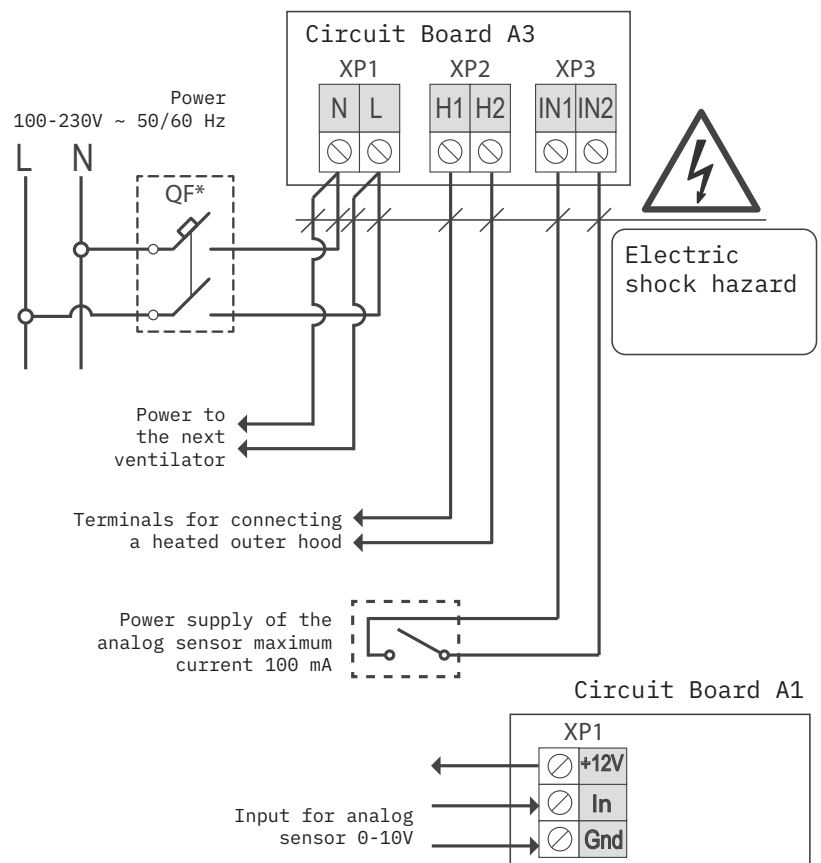


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EXTERNAL CONNECTIONS DIAGRAM



INTEGRATION OF VENTILATION SYSTEMS IN A NETWORK

For the coordinated control of several ventilation systems, these must be networked.

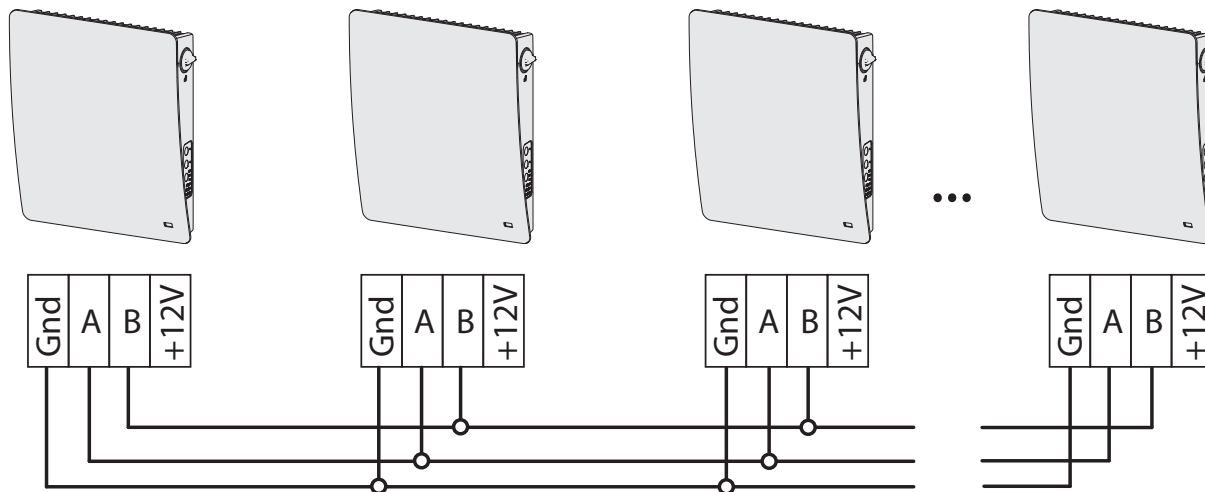
All ventilation systems must be connected to an RS-485 network via a multi-drop bus.

There can only be one ventilation system with the „Master“ setting and up to 15 ventilation systems with the „Slave“ setting in a network.

If two or more ventilation systems in a network are randomly activated in master mode, the Errors accompanied by short beeps.

For RS-485 bus connections, avoid the Use of cables that are longer than 200 m.

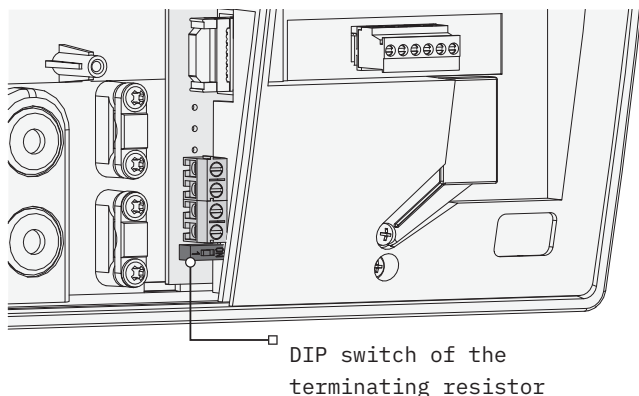
The integration scheme is shown below.



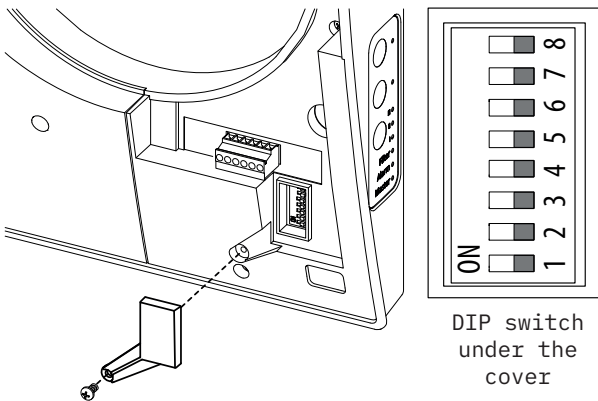
WARNING! Combining + 12V power lines from multiple ventilation systems is strictly prohibited.

ADJUSTING THE TERMINATING RESISTOR DIP SWITCH

The DIP switch of the terminating resistor must be on (switched on) if the ventilation system is the first or the last system in an RS-485 network.



SETTING THE VENTILATOR OPERATION MODE USING DIP SWITCHES



Prior to operating the ventilator set it up using the DIP switch. It is located on the controller circuit board. To access the DIP switch, take off the front panel of the indoor unit and uplift the rubber plug that covers the switch.

SETTING THE ROLE OF THE VENTILATOR IN THE NETWORK

	1	ON: Slave-Anlage
	1	OFF: Master-Anlage

The slave system only receives control signals from the master system. All other signals from other control devices are ignored. In this operating mode, the slave ventilation systems ignore all sensor signals. If longer than 20 seconds there is no connection to the master system, the system automatically switches to standby mode.

SETTING THE STANDBY MODE

	2	Min: The ventilation system runs in standby mode in the first ventilation stage.
	2	OFF: The ventilation system is switched off in standby mode .

ADJUSTMENT OF THE AIR FLOW DIRECTION OF THE FANS

	3	ON: In ventilation mode , the ventilation system ensures the air supply in the room. In heat recovery mode , the ventilation system first begins to run in supply air mode.
	3	OFF: In ventilation mode , the ventilation system runs in exhaust air mode. In heat recovery mode , the ventilation system first begins to run in exhaust air mode.

To achieve optimal ventilation operation, it is recommended to use either one or an even number of Use ventilation systems in series. The setting is made so that during each operating interval one Half of the ventilation systems are in supply mode and the other half in extract air mode.

ADJUSTMENT OF THE HUMIDITY SENSOR

	6			6			6			6			6			6	
	5	80%		5	70%		5	60%		5	50%		5	40%		5	OFF
	4			4			4			4			4			4	

When the room humidity rises above the setpoint, the ventilation system switches to the third ventilation level. After the room humidity has fallen below the setpoint, the switch-off delay for the boost mode is activated. After the switch-off delay has elapsed, the ventilation system switches to the previously set ventilation level.

SETTING THE SWITCH-OFF DELAY FOR THE BOOST MODE

	8	30 Min.		8	15 Min.		8	5 Min.		8	0 Min.
	7			7			7				

The switch-off delay for the **Boost mode** defines the switch-off delay time for the boost mode after one of the sensors has returned to the standard state.

ATTENTION!

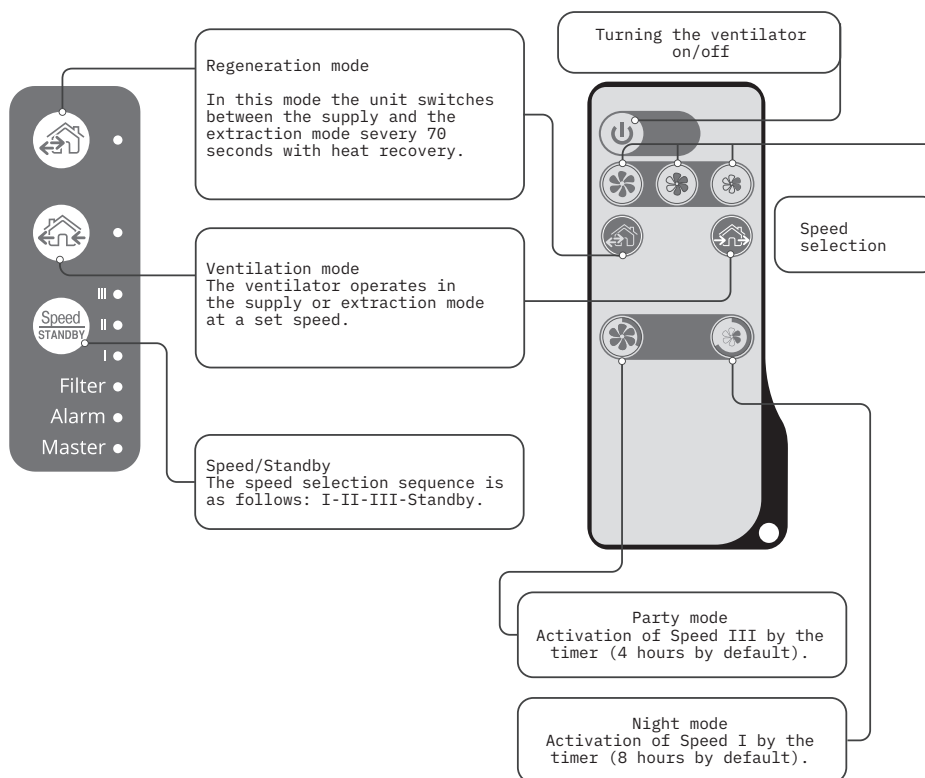
The positions of the WiFi series DIP switches can be found in the SIKU WiFi App operating instructions.

VENTILATOR CONTROL

The ventilator is operated with:

- infra-red remote control
- control buttons located on the side of the indoor unit (see the figure below)
- „SIKU WIFI“ application from a mobile device (smartphone or tablet)

VENTILATOR CONTROL WITH THE BUTTONS ON THE INDOOR UNIT



DESCRIPTION OF THE BUTTONS ON THE INDOOR UNIT






The speed selection sequence is follows: I-II-III-Standby. All the units integrated in a single network operate according to the speed settings of the Master unit.

I: permanent indicator glowing indicates operation of the unit at Speed I.
Indicator blinking indicates activation of the **Night mode timer**.








I and II: permanent glowing of these indicators indicates operation of the unit at Speed II.

I, II and III: permanent glowing of these indicators indicates operation of the ventilation unit at Speed III. Synchronous blinking of the indicators I, II and III indicates activation of the timer in **Party** mode or the turn-off delay timer in the Boost mode in case of actuation of the connected external sensors or the integrated humidity sensor. Alternate blinking of the indicators I, II and III indicates that the ventilator runs at the speed set with the mobile application using the slider selector for manual speed setting or that the **Weekly Schedule mode** is activated.

	<p>Regeneration mode</p> <p>The rotation direction of both fans changes to opposite every 70 seconds. Heat recovery is performed in this mode. To enable reverse phase operation of the ventilators, change the position of the DIP switch No. 3.</p>
	<p>Ventilation mode</p> <p>The ventilator operates in the supply or extraction mode at a set speed. The fan rotation direction depends on the position of the DIP switch No. 3.</p> <p>Reset of all parameters to factory settings</p> <p>To reset all parameters to factory defaults, press and hold this button on the master air handling unit indoor panel for 5 seconds until you hear a beep.</p>
<p>No glowing of the indicators „Regeneration“ and „Ventilation“ indicates forced operation of the ventilation unit in the air supply mode. This mode may be activated only via the mobile application.</p>	
<p>ADJUSTMENT OF THE AIR FLOW DIRECTION OF THE FANS</p>	
<p>FILTER</p>	<p>90 days after installation of the cartridge the filter replacement indicator starts glowing. In this case, clean or replace the filters (see section Technical maintenance). After replacement or cleaning of the filters reset the timer using the mobile application</p> <p style="text-align: center;">  </p> <p>or by pressing and holding the button on the Master ventilator indoor unit for 5 seconds until a signal sounds.</p>
<p>ALARM</p>	<p>Alarm indicator</p> <p>In case of failure, the Alarm indicator on the indoor unit glows or blinks. Reasons of Alarm blinking:</p> <ul style="list-style-type: none"> • Battery charge is below the low level. • No connection between the Master unit and the router. <p>Alarm shutdown of the ventilator.</p> <p>The alarm display indicates the emergency shutdown of the ventilation system.</p> <p>SIKU SPHERE Comfort</p> <p>In the event of a failure, the alarm indicator on the interior element of the ventilation system lights up or flashes. If several interconnected ventilation systems are running in a network, In the event of an alarm in a ventilation system, all other ventilation systems in the series are switched switched off. The alarm display of the faulty ventilation system flashes. At the same time flashes on the switched off connected ventilation systems (Slave systems) the master display.</p> <p>SIKU SPHERE WiFi</p> <p>If several connected ventilation systems are running in a network, the master unit and all other ventilation systems in the series are also switched off in the event of an alarm. The alarm indicator of the faulty ventilation system flashes. At the same time, the master display flashes on the connected ventilation systems that have been switched off. In case of communication loss of the Master unit with the router for longer than 20 seconds, the Master unit switches to Standby mode (Alarm indicator blinking) and the Slave units will signal that there is no communication with the Master unit (see the description of the Master indicator). After resuming communication, the Slave units are automatically synchronised with the Master unit.</p>

MASTER	<p>If the display lights up continuously, this indicates that the ventilation unit is the Master-system in the ventilation network.</p> <p>The flashing display shows that the ventilation unit is a Slave-system in the ventilation network and has lost the connection to the Master-system.</p> <p>If the master display does not light up, this means that the ventilation unit is a Slave-system in the ventilation network and is connected to the Master-system.</p>
<p>The synchronous flashing of all displays on the housing of the ventilation unit indicates that the setup mode is activated.</p>	

DESCRIPTION OF THE BUTTONS ON THE REMOTE CONTROL

	<p>ON/Standby</p> <p>The Standby mode depends on the position of the DIP switch 2 (see section Setting the ventilator operation mode using DIP switches). The same button is used to reset alarms (Alarm) and to turn off the timers.</p>
	<p>Ventilator speed selection: Speed III-II-I respectively.</p>
	<p>Regeneration mode</p> <p>The rotation direction of both fans changes to opposite every 70 seconds. Heat recovery is performed in this mode. The fan rotation direction depends on the position of the DIP switch 3.</p>
	<p>Ventilation mode</p> <p>The ventilator operates in the supply or extraction mode at a set speed. The fan rotation direction depends on the position of the DIP switch 3.</p>
  	<p>Timer control buttons</p> <p>Party mode: the timer activates operation of the unit at Speed III for a set time period, 4 hours by default. The timer setting may be changed during setup of the unit on the mobile device.</p> <p>Night mode: the timer activates operation of the ventilation unit at Speed I for a set time period, 8 hours by default. The timer setting may be changed during setup of the unit on the mobile device. The ventilation unit reverts to operation with a previous speed setting upon elapse of the set time period. Press any speed setting key to</p>
<p>When activating several mutually exclusive operating modes at the same time, the operating mode is selected according to the following priority:</p> <ol style="list-style-type: none"> 1. Post-operation timer or party operation timer 2. Standby. 3. Boost operation 4. Standard operation 	

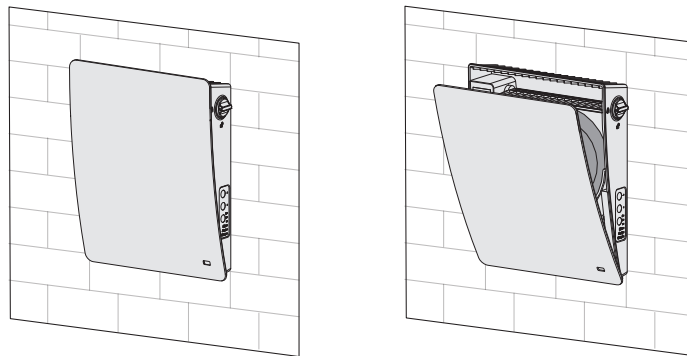
TECHNICAL MAINTENANCE



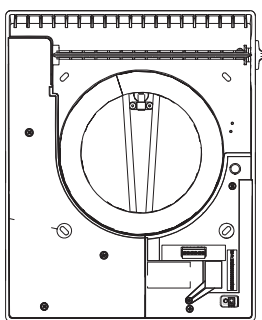
DISCONNECT THE UNIT FROM POWER SUPPLY BEFORE ANY MAINTENANCE OPERATIONS!

Maintenance of the ventilator means regular cleaning of the ventilator surfaces of dust and cleaning and replacement of the filters. To enable access to the main units, follow the procedure described below. The ventilator must be previously turned off using the remote control or the buttons on the indoor unit. Then turn off power supply completely.

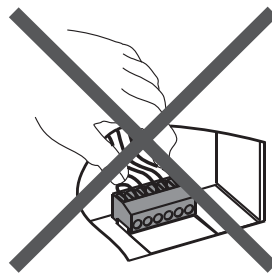
1. Remove the front part of the indoor control unit as shown in step 5 of the „**Mounting and Set-up**“ section. Move the air damper to the horizontal position using the handle.



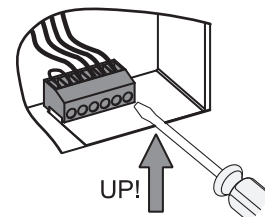
2. Disconnect the connector from the circuit board. Do not remove the connector by pulling the wires. Use a flat screwdriver to uplift it, if required.



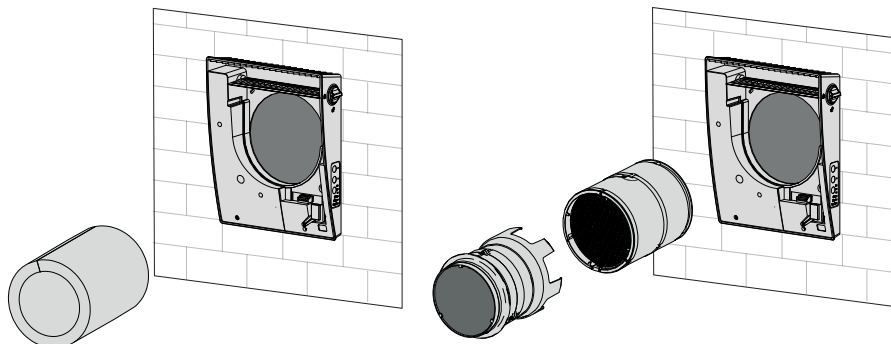
Do not pull on the electric cable.



Use a flat screwdriver to disconnect the socket.



3. Remove the sound-insulation material from the duct, then remove the cartridge.

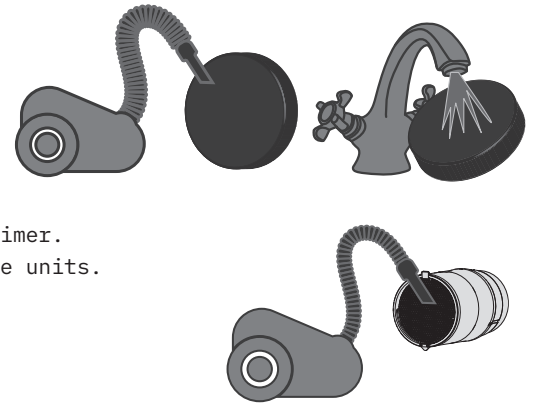


4. Clean the filters as required (at least every 3 months).
After 90 days of continuous operation, the lights up
Filter change indicator (filter) on the ventilation system.



Press the button on the inner element of the master system
for 5 seconds until the acoustic signal sounds to reset the filter timer.
The filter timer should be reset at the same time on master and slave units.

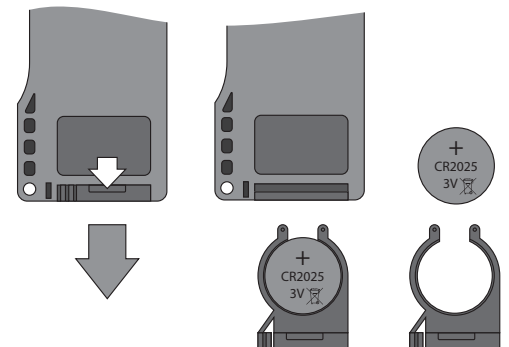
- Wash the filters and let them dry.
- Put the dry filters back into the ventilation pipe.
- Cleaning with a vacuum cleaner is permitted.
- The filter life is 3 years.
- Contact the dealer for replacement filters.



Even with regular maintenance on the filter, dust particles can get onto the heat exchanger and fans.

- The heat exchanger requires regular cleaning to maintain the high efficiency of the heat recovery.
- Clean the heat exchanger once a year with a vacuum cleaner.

5. Replacement of the remote control battery (if necessary).
In case of a long operation of the remote control the battery must
be replaced.No response of the unit for pressing the remote
control buttons indicates the need to replace the battery.
The battery type is CR2025.
Remove the holder with the battery from the lower part of the
remote control. Replace the battery and install the holder with
a new battery back to the remote control.



POSSIBLE REASONS AND TROUBLESHOOTING

PROBLEM	POSSIBLE REASONS	TROUBLESHOOTING
When switching on the ventilator, the fan does not start.	No power supply.	Make sure the power supply line is connected correctly, otherwise troubleshoot the connection error.
	The motor is jammed, the impeller blades are soiled.	Turn the ventilator off. Troubleshoot the motor jam and impeller clogging. Clean the blades. Turn the ventilator on.
Circuit breaker tripping during the ventilation unit start-up.	Overcurrent as a result of short circuit in the electric line.	Turn the ventilator off. Contact the Seller for further information.
Low air flow.	Low set fan speed.	Set higher speed.
	The filters, the fan or the regenerator are clogged.	Clean or replace the filter. Clean the fan and the heat exchanger.
Noise, vibration.	The impeller is clogged.	Clean the impeller.
	Loose screw connection of the unit casing or the outer ventilation hood.	Tighten the screws of the ventilator or the outer ventilation hood.
The filter timer can not be reset directly on a slave unit.	-	The slave unit as the master unit reconfigure. The filter timer using the button on the Inner element of the plant for 5 seconds up Hold down to the beep. Configure the unit as a slave system and connect to the mastver system.

STORAGE AND TRANSPORTATION REGULATIONS

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range from +5 °C to + 40 °C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapors and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures, allow the unit to warm up at operating temperature for at least 3-4 hours.

MANUFACTURER'S WARRANTY

The product is in compliance with EU norms and standards on low voltage guidelines and electromagnetic compatibility. We hereby declare that the product complies with the provisions of Electromagnetic Compatibility (EMC) Directive 2014/30/EU of the European Parliament and of the Council, Low Voltage Directive (LVD) 2014/35/EU of the European Parliament and of the Council and CE-marking Council Directive 93/68/EEC. This certificate is issued following test carried out on samples of the product referred to above. The manufacturer hereby warrants normal operation of the unit for 24 months after the retail sale date provided the user's observance of the transportation, storage, installation, and operation regulations. Should any malfunctions occur in the course of the unit operation through the Manufacturer's fault during the guaranteed period of operation, the user is entitled to get all the faults eliminated by the manufacturer by means of warranty repair at the factory free of charge. The warranty repair includes work specific to elimination of faults in the unit operation to ensure its intended use by the user within the guaranteed period of operation. The faults are eliminated by means of replacement or repair of the unit components or a specific part of such unit component.

The warranty repair does not include:

- routine technical maintenance
- unit installation/dismantling
- unit setup

To benefit from warranty repair, the user must provide the unit, the user's manual with the purchase date stamp, and the payment paperwork certifying the purchase. The unit model must comply with the one stated in the user's manual. Contact the Seller for warranty service.

The manufacturer's warranty does not apply to the following cases:

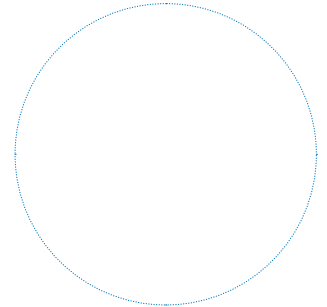
- The consumer does not submit the fan completely, as stated in the operating instructions, including the components of the device dismantled by the consumer.
- Model or device inconsistent with the information on the packaging and in the operating instructions.
- Failure to timely technical maintenance of the device by the consumer.
- In the event of external damage to the housing and internal units caused by the consumer (except for external changes to the device that are necessary for installation).
- Changes to the construction of the device or technical changes to the device.
- Replacement and use of units or parts that are not intended by the manufacturer.
- Inappropriate use of the device.
- Violation of the assembly instructions for the device by the consumer.
- Violation of the regulations for controlling the device by the consumer.
- Connection of the device to a power supply system with a voltage other than that specified in the operating instructions.
- Failure of the device due to voltage jumps in the power grid.
- Repairs to the device by persons who are not authorized by the manufacturer.
- The device's warranty period has expired.
- Violation of applicable regulations for the transport of the device by the consumer.
- Violation of the regulations on the storage of the device by the consumer.
- Unlawful acts by third parties in relation to the device.
- Failure of the device as a result of force majeure (fire, flood, earthquake, war, military action of any kind, blockages).
- The seals are missing if the operating instructions provide for them.
- Failure to present the operating instructions with the date of purchase.
- Missing receipt with the purchase date, which confirms the purchase.

CERTIFICATE OF ACCEPTANCE

UNIT TYPE	Single-room reversible energy recovery ventilator
MODEL	SIKU Sphere
SERIAL NUMBER	
MANUFACTURE DATE	
QUALITY INSPECTOR'S STAMP	

SELLER INFORMATION

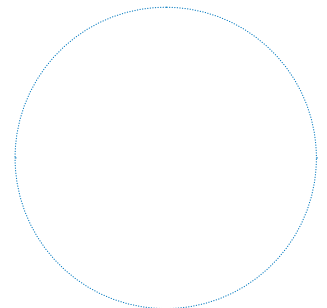
SELLER	
ADDRESS	
PHONE NUMBER	
E-MAIL	
PURCHASE DATE	
This is to certify acceptance of the complete unit delivery with the user's manual. The warranty terms are acknowledged and accepted.	
CUSTOMER'S SIGNATURE	



Seller's Stamp

INSTALLATION CERTIFICATE

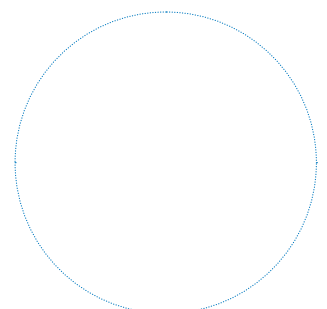
The SIKU Sphere _____ unit is installed pursuant to the requirements stated in the present user's manual.	
COMPANY NAME	
ADDRESS	
PHONE NUMBER	
INSTALLATION TECHNICIAN'S FULL NAME	
INSTALLATION DATE	SIGNATURE
The unit has been installed in accordance with the provisions of all the applicable local and national construction, electrical and technical codes and standards. The unit operates normally as intended by the manufacturer.	
SIGNATURE	



Installation Stamp

WARRANTY CARD

UNIT TYPE	Single-room reversible energy recovery ventilator
MODEL	SIKU Sphere _____
SERIAL NUMBER	
MANUFACTURE DATE	
PURCHASE DATE	
WARRANTY PERIOD	
SELLER	



Seller's Stamp



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