## TwinFresh Expert RW-30 V.2



Single-room reversible energy recovery ventilator





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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 TwinFresh Expert RW-30 V.2 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.

## **SAFETY REQUIREMENTS**

This unit 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 unit by a person responsible for their safety. Children should be supervised to ensure that they do not play with the unit.

This appliance can be used by children aged from 8 years 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 concerning use of the appliance in a safe way and understand the hazards involved.

Cleaning and user maintenance shall not be made by children without supervision. Children shall not play with the appliance.

Connection to the mains must be made through a disconnecting device, which is integrated into the fixed wiring system in accordance with the wiring rules for design of electrical units, and has a contact separation in all poles that allows for full disconnection under overvoltage category III conditions.

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 safety hazard.

Ensure that the unit 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.



All operations described in this manual must be performed by qualified personnel only, properly trained and qualified to install, make electrical connections and maintain ventilation units.

Do not attempt to install the product, connect it to the mains, or perform maintenance yourself. This is unsafe and impossible without special knowledge.

Disconnect the power supply prior to any operations with the unit.

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 the power supply prior to any connection, servicing, maintenance, and repair operations.

Connection of the unit to power mains is allowed by a qualified electrician with a work permit for the electric units up to 1000 V after careful reading of the present user's manual.

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 unauthorised modifications are not allowed.

Do not expose the unit 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.

Never touch the unit with wet or damp hands.

Never touch the unit when barefoot.

BEFORE INSTALLING ADDITIONAL EXTERNAL DEVICES, READ THE RELEVANT USER MANUALS.



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, cafes 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.

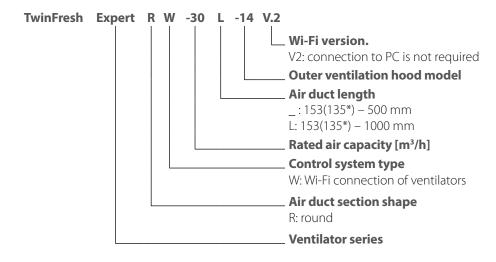
The ventilator is designed for installation on external walls.

The ventilator is rated for continuous operation.

## **DELIVERY SET**

Name	Quantity
Indoor unit of the ventilator	1 pc.
Mounting frame	1 pc.
Air duct	1 pc.
Sound-absorbing material	1 pc.
Assembled cartridge	1 pc.
Outer ventilation hood	1 pc.
Cardboard template	2 pcs.
Fastening set	2 packs
Foam wedges	1 set
User's manual	1 pc.
Mounting hood installation instruction	1 pc.
Packing box	1 pc.

## **DESIGNATION KEY**



<sup>\*</sup> Minimum wall thickness for the unit with a mounting frame



### **TECHNICAL DATA**

The temperature in the room where the indoor unit of the ventilator is installed must be in the range from +1 °C to +40 °C with relative humidity up to 65 % (no condensation).

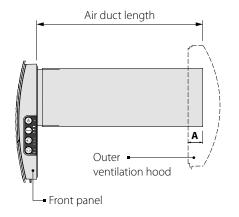
The unit is rated as a class II electric appliance.

Hazardous parts access and water ingress protection rating is IP24.

The unit design is constantly being improved, so some models may be slightly different from those ones described in this manual.

### **TECHNICAL DATA**

Speed	I	II	III
Network parameters	100-240 V ~ 50/60 Hz		
Power consumption [W]	1.8	3.0	4.40
Current consumption [A]	0.027	0.037	0.051
Max. air flow [m³/h] (CFM)	10 (6)	20 (12)	30 (18)
Transported air temperature [°C]	-15+40		
Filters	G3 (MERV 7);		
Sound pressure level @ 1 m [dBA(Sones)]	30 (1.1)	37 (2.0)	40 (2.5)
Sound pressure level @ 3 m [dBA(Sones)]	21 (0.4)	28 (0.9)	31 (1.1)
Outdoor noise level attenuation [dBA (Sones)]	42 (2.5)		
IP rating	IP24		
	WI-FI TECHNICAL DATA		
Standard	IEEE 802.11 b/g/n		
Frequency band [GHz]	2.4		
Transmission power [mW (dBm)]	100 (+20)		
Power mains	DHCP		
WLAN safety	WPA. WPA2		



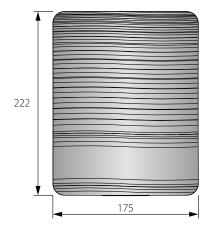
The air duct length depends on the unit model, refer to the Designation Key.

The supplied ventilation hood model depends on the ventilator model.

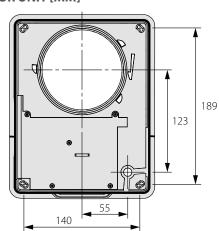
The distance A and the overall dimensions of the outer ventilation hood are stated in the installation instruction.

The overall dimensions of the front panel are stated below.

## **OVERALL DIMENSIONS OF THE INDOOR UNIT [MM]**









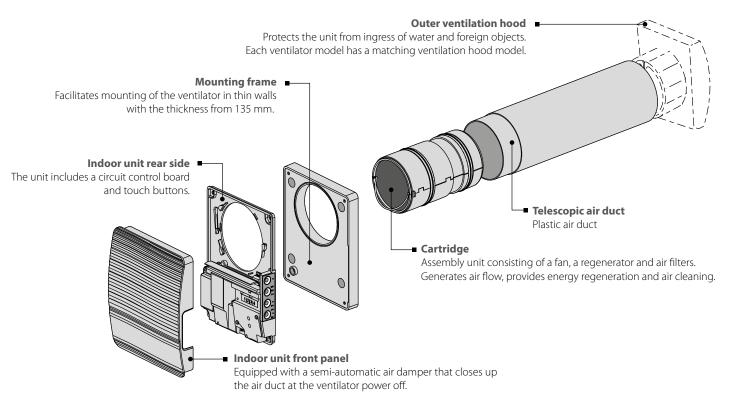
## **DESIGN AND OPERATING PRINCIPLE**

The ventilator consists of an indoor unit with a decorative front panel, a cartridge, an air duct with a sound absorbing mat and an outer ventilation hood.

Cartridge is the basic functioning part of the ventilator. The cartridge consists of a fan, a regenerator and two filters that ensure rough air filtration and prevent ingress of dust and foreign objects into the regenerator and the fan.

The indoor unit is equipped with a semi-automatic air damper that closes during shutdown of the ventilator and prevents air backdraft.

#### **VENTILATOR DESIGN**



#### **VENTILATOR OPERATION MODES**

The ventilator has three operation modes:

**Ventilation:** the ventilator runs either in the air exhaust or air supply mode at a set speed.

**Air supply** (available from a mobile device only): all the connected ventilation units in the network are in the air supply mode.

**Regeneration:** the ventilator operates in reversed mode with heat and moisture regeneration, simultaneously cycling the direction of air flow.

**Cycle I.** Warm stale air is extracted from the room and flows through the ceramic regenerator, which gradually absorbs heat and humidity. **Cycle II.** Fresh intake air from outside flows through the ceramic regenerator, absorbs accumulated moisture and is heated by the heat stored in the regenerator.

The ventilator is equipped with an air humidity sensor and a terminal for connecting an external normally open contact (**relay sensor**). When either of these devices is triggered, the ventilator switches to maximum speed (**Boost mode**). When the humidity sensor or relay sensor returns to its original position, the Boost mode deactivation delay timer is started.

In the relevant sections of the Vents Home mobile app, the following ventilation parameters can be set:

- activate or deactivate the humidity sensor and relay sensor;
- set the humidity sensor activation threshold;
- set the **Boost mode** turn-off delay time (default setting is 30 minutes);
- set the duration of the first speed timer («Night mode») (8 hours by default);
- set the duration of operation by timer of the third speed («Party mode») (by default 4 hours).



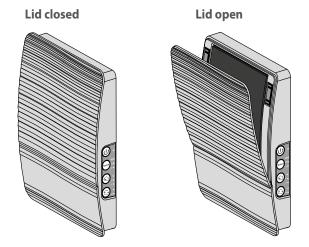
If required, in the **Schedule** section of the Vents Home mobile app, different ventilation speeds can be set at different intervals by day of the week. For the weekly schedule to work correctly, the current date and time must be set correctly in the «**Date and time**» section When simultaneously activating several operation modes that exclude each other, the ventilator selects the mode according to the following priority:

- 1. Night mode timer or Party mode timer.
- 2. Standby.
- 3. Boost.
- 4. Weekly schedule.
- 5. Standard mode.

### SEMI-AUTOMATIC AIR DAMPER OPERATING PRINCIPLE

The indoor unit of the ventilator is equipped with a front panel with a semi-automatic air damper. During the ventilator operation the air damper opens and lets the air flow freely through the ventilator.

After switching off the ventilator, close the damper by hand to prevent drafts.





### MOUNTING AND SET-UP



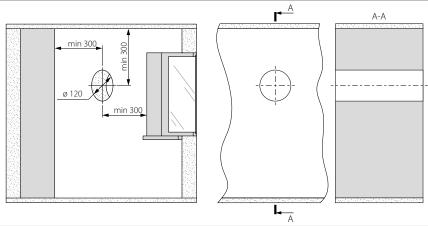
## READ THE USER'S MANUAL BEFORE INSTALLING THE UNIT.



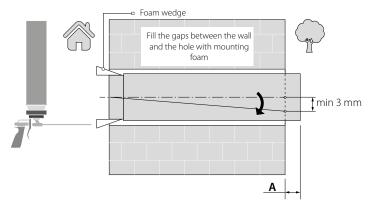
DO NOT BLOCK THE AIR DUCT OF THE INSTALLED VENTILATOR WITH DUST ACCUMULATING MATERIALS, SUCH AS CURTAINS, CLOTH SHUTTERS, ETC.

AS IT PREVENTS AIR CIRCULATION IN THE ROOM.

1. Prepare a round core hole in the outer wall. The hole size is shown in the figure below.



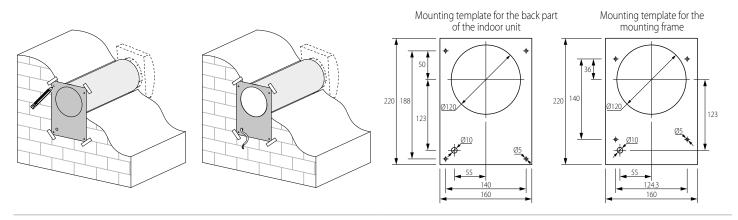
2. Insert the air duct in the wall hole. For ease of installation use the polystyrene wedges included in the delivery set. The air duct end must protrude for the distance A that enables installation of the outer ventilation hood. The distance A is stated in the installation instruction for the ventilation hood.



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

To cut the air duct, either make preliminary calculations of the required duct length or make sure to have access to the outer wall after fixation of the air duct.

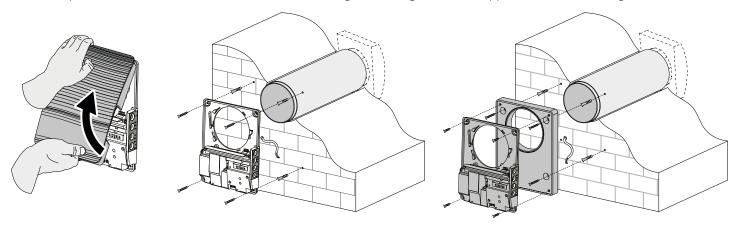
3. Take the required mounting template and then fasten it to the indoor wall using the adhesive tape. The large opening in the template must be coaxial with the air duct. For aligning the template with respect to the horizon line it is recommended to use a builder's level. Then mark the fastening holes for installation of the supplied dowels and drill the holes to a required depth. Route the power cable of the ventilator from the wall through the marked opening on the template.





4. Pull the lug on the bottom to disconnect the front panel of the indoor unit from the rear part. Attach the mounting frame on the wall if you use it.

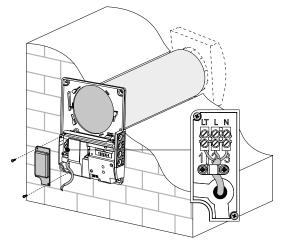
Fix the rear part of the indoor unit on the wall or on the mounting frame using the screws supplied with the mounting kit of the ventilator.



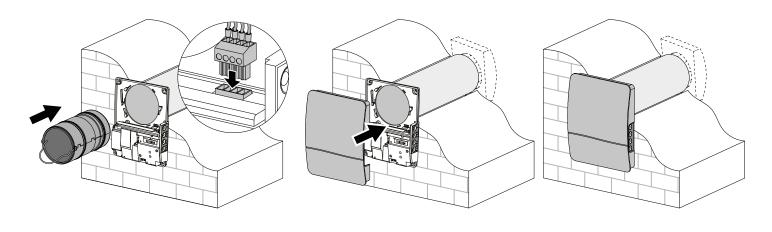
5. Remove the two screws that retain the terminal cover to enable access to the connection terminals.

Route the power cable as figured below and connect the ventilator to power mains in compliance with the external wiring diagram, see page 10.

Fix the power cable and the control cables with a cable clamp. After completion of the electrical connection re-install the transparent terminal cover in site.



6. Insert the cartridge into the air duct and insert the plug cartridge to the controller. Re-install the front panel of the indoor unit rear part.





## **CONNECTION TO POWER MAINS**



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.



ANY TAMPERING WITH THE INTERNAL CONNECTIONS IS PROHIBITED AND WILL VOID THE WARRANTY.

The ventilator is rated for connection to single-phase AC 100-240 V/50 (60)) Hz power mains. The routing of the Cable is shown in the "Mounting and set-up" section.

For electric installations use insulated, durable and heat-resistant electric leads (cables, conductors) with the minimum cross section 0.5 up to 0.75 mm<sup>2</sup> for the power cable and 0.25 mm<sup>2</sup> for the control cables. The actual conductor cross-section selection must be based on its type, maximum permissible heating, insulation, length and installation method.

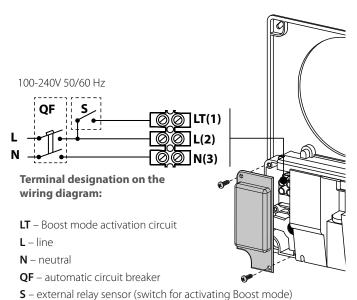
Use copper wires for all the electric connections!

10

Connect the unit to power mains via the terminal block in compliance with the wiring diagram and terminal designation. Connect the ventilator to power mains through an automatic circuit breaker with magnetic trip integrated into the home wiring system. The trip current of the automatic circuit breaker or fuses must exceed the maximum current consumption of the ventilator, refer to the Technical data section.

It is recommended to select the rated current of the circuit breaker/ fuses from the standard series, following the maximum current of the connected unit.

### **WIRING DIAGRAM**



www.ventilation-system.com

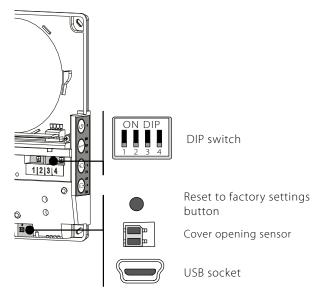


## **VENTILATOR PRE-SETTING**

Prior to operating the ventilator set it up using the DIP switch. It is located on the controller circuit board.

Remove the front panel of the indoor unit to access the DIP switch.

To reset to factory settings, hold the reset button under the front panel for 5 seconds until an acoustic signal sounds. It is also possible to reset using a mobile app.



## **DIP SWITCH POSITION**

Defining the role of the ventilator during group work			
<b>—</b>	OFF – master unit (hereinafter referred to as <b>«Control unit»</b> ).		
<b>—</b>	ON – slave unit (hereinafter referred to as <b>«Slave unit»</b> ).		
	Standby mode setup		
	OFF – the ventilator is switched off in the <b>Standby</b> mode.		
<b>1</b> ~	ON – the ventilator operates at Speed I in the <b>Standby</b> mode.		
	Ventilation mode setup		
<b>T</b> ~	OFF – operation in the exhaust mode.		
<b>T</b> ~	ON – operation in the supply mode.		
	Programming mode		
4	OFF – standard operation of the unit.		
4	ON – Programming mode.		
Caution! The programming mode is only switched by the service department.			



#### **VENTILATOR CONTROL WITH THE BUTTONS ON THE INDOOR UNIT**

The table below shows the buttons and indicators on the ventilator indoor unit with a description of their purpose and functionality.



ON/OFF

## Speed

The speed selection sequence is follows: I-II-III. 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. Simultaneous flashing of indicators I, II and III indicates operation of the **Party mode** timer or **Boost-mode** switch-off delay timer when the built-in humidity sensor or an external relay sensor is triggered. 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.



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## Regeneration mode

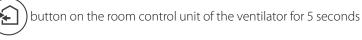
The ventilator works in reverse mode. Heat recovery is performed in this mode. To enable reverse phase operation of the ventilators, change the position of the DIP switch No. 3.

**Contamination indicator of filters.** The indicator light will start flashing after the preset number of days of continuous ventilation operation (90 days by default) has elapsed.

In this case, clean or replace the filters (see section Technical maintenance).

In the relevant section of the app on the mobile device, you can restart the filter timer and set the required length of time before the filter clogging indicator comes on.

The filter timer can be restarted by holding down the (until an acoustic signal sounds.



**Alarm indicator.** In case of failure, the **Alarm** indicator on the indoor unit glows or blinks.

<u>Causes of constant illumination of the</u> indicator light:

• Alarm shutdown of the ventilator. Stopped due to a faulty ventilator in the group.

## Reasons of Alarm blinking:

Α

- Battery charge is below the low level.
- No connection between the **Master** unit and the router.
- Alarm shutdown of the ventilator. This ventilator causes all ventilators in the group to stop.

In case of communication loss of the **Master** unit with the router for longer than 20 seconds, the Master unit switches to **Standby** mode and the **Slave** units will signal that there is no communication with the **Master** unit.

After resuming communication, the **Slave** units are automatically synchronised with the **Master** unit.



## Ventilation mode.

The ventilator operates in the supply or extraction mode at a set speed. The fan rotation direction depends on the position of the Speed controller switch DIP No. 3.

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 device.

М

Permanent glowing of the indicator shows the leading unit (Master) in the group.

Indicator blinking indicates the driven **Slave** unit) and no connection to the **Master** unit.

No glowing of the lamp indicator means that this ventilation unit is a **Slave** ventilation unit and it is connected to a **Master** unit

Synchronous blinking of all the indicators on the casing of the ventilator indicates that the **Setup mode** is enabled.



## **VENTILATOR CONTROL USING THE VENTS HOME APP**

Download th Vents Home application and install it on the mobile device.

<u>Vents Home</u> – App Store	<u>Vents Home</u> – Play Market

The ventilator with factory settings works as a Wi-Fi access point with the name FAN: + 16 characters of the ID number shown on the casing under the front panel.

## Wi-Fi access point password: 111111111.

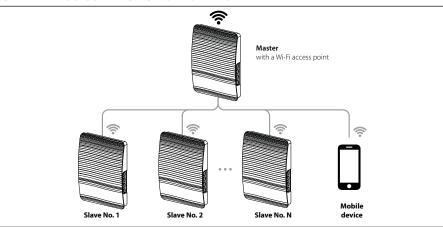
Follow the instructions in the mobile app to connect. In the app, the ventilator can be set up to connect via a home Wi-Fi network and a cloud server.



## **VENTILATOR WIRELESS CONNECTION DIAGRAMS**

## Wiring diagram 1

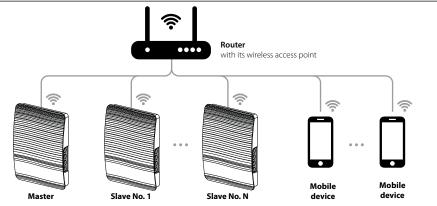
Connection to eight devices (**Slave** ventilators or mobile devices) to the control **Master** ventilator, which has its own access point.



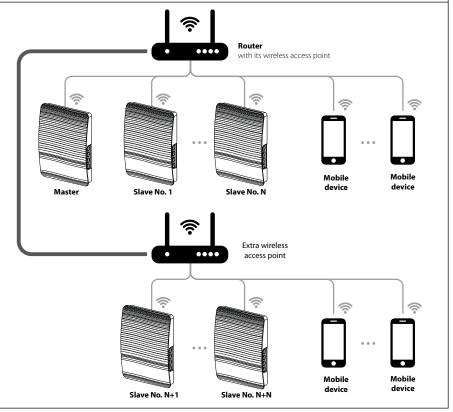
## Wiring diagram 2

The **Master** units, the **Slave** units and the mobile devices are connected to a wireless access point of the Wi-Fi router.

In this case, the **Master** control unit can operate with the number N of **Slave** units, limited by the technical characteristics of the router.



If the Wi-Fi router capacity is not enough to connect a required number of the units, you may use an extra wireless access point to connect the other the unit. Several **Master** units can optionally be connected to the network for arranging a zone control.





#### **VENTILATOR CONTROL VIA THE SMART HOME SYSTEM**

Connect the ventilators to the Smart Home system in accordance with the Smart Home system user manual.



## AFTER CHANGING THE WI-FI PARAMETERS OF THE MASTER VENTILATOR REPEAT THE CONNECTION STEPS!

### **SPECIAL SETUP MODE**

In the event of losing the Wi-Fi password or the master ventilator password or in other cases use the recovery Setup mode to restore access to the ventilator functions. To enter the special Setup mode, press and hold the **Ventilation** button on the ventilator casing for 5 seconds until the beep and blinking of all the LED lights.

The ventilator will continue in this mode for 3 minutes and then automatically revert to the previous settings. To exit the Setup mode immediately, press and hold the **Ventilation** button on the ventilator casing once again for 5 seconds until the beep and shutdown of all the LED lights.

In this mode the following settings are available:

- **Wi-Fi** network name: Setup mode.
- Wi-Fi password: 11111111.
- · The unit password is ignored.



## WHILE COMPLETING THE CONNECTION MAKE SURE THAT THE SLAVE UNITS ARE WITHIN COVERAGE OF THE BUILT-IN WI-FI IN THE MASTER UNIT

## **CONNECTING MASTER AND SLAVE VENTILATORS**

To create a group of ventilators linked together as Master and Slave, proceed as follows:

- Set the DIP switches on each ventilator to the position corresponding to its role in the group (see section "DIP switch position").
- Then configure the Wi-Fi settings of the Master ventilator by following the instructions in the Vents Home mobile app.
- Switch the ventilator to the special mode as indicated above and all the LEDs on the ventilator casing will start flashing. Repeat the steps with all the slave ventilators and wait for the beep when all the LEDs stop blinking on each Slave unit. Set the Master unit to the normal operation mode. Press and hold the **Ventilation** button. Wait for the beep when all the LEDs stop blinking.

**Note:** if the home router works in conjunction with several Wi-Fi access points requiring connection of ventilators to different access points:

- Connect the Master unit to the first Wi-Fi access point.
- Complete the connection with the first group of Slave units.
- Connect the Master unit to the second Wi-Fi access point.
- Complete the connection with the second group of Slave units.

## **BATTERY REPLACEMENT**

The **Alarm** indicator on the unit casing will blink when the battery is approaching the end of its life.

The mobile app will also display the warning  $\triangle$  and show the following message on pressing the indicator icon. PLow battery power may cause disruptions in the weekly schedule operation. Power off the unit before replacing the battery Ventilator. After replacing the battery reset the time and date.

The battery is located on the control board. To replace the battery, power off the ventilator, remove the front panel and the cover protecting the control circuit board. Then remove the battery and install a new one.

The battery type is: **CR1220**.



## **TECHNICAL MAINTENANCE**



# DISCONNECT THE UNIT FROM POWER SUPPLY BEFORE ANY MAINTENANCE OPERATIONS!

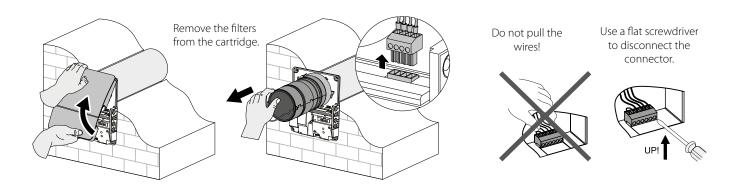
# MAKE SURE THE UNIT IS DISCONNECTED FROM POWER MAINS BEFORE REMOVING THE PROTECTION

Maintenance of the ventilator means regular cleaning of the ventilator surfaces of dust or replacement of the filters. Clean the filters as often as required, but at least 3 times a year.

After 90 days of continuous operation (default duration), the filter change indicator (Filter) lights up on the ventilator.

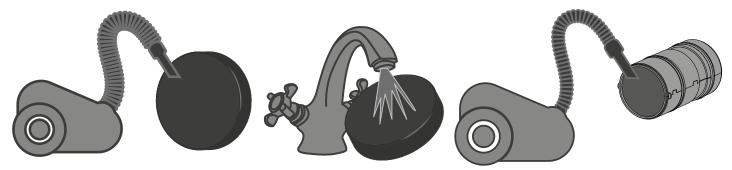
To access the main serviced units, disconnect the ventilator from power mains using a circuit breaker or a power switch and follow the steps below.

- 1. Press the lower latch of the indoor control unit to take off its front panel. Please make sure the thermal actuator rod is in lower position during reinstallation of the front panel. If the rod is up, please wait for about 2 minutes until it goes down.
- 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.
- 3. Remove the cartridge from the ventilation duct.
- 4. Remove the filters from the cartridge for cleaning. Wash the filters and let those dry out completely. Install the dry filters in the air duct. Vacuum cleaning is allowed. The filter rated service life is 3 years.
- 5. Perform all the above operations in the reverse order after cleaning.



Restart the filter timer countdown in the Vents Home app on a mobile device or by holding down the for 5 seconds before the beep.





Some dust may accumulate on the heat exchanger block even in case of regular maintenance of the filters.

- To maintain high heat recovery efficiency, the regenerator should be cleaned regularly with a vacuum cleaner at least once a year.
- Vacuum clean the regenerator not less than once a year.



### **FAILURES AND TROUBLESHOOTING**

Failure	Possible reasons	Troubleshooting	
	No power supply.	Make sure the power supply line is connected correct, otherwise eliminate the connection error.	
The fan does not get started during turning on.	The motor is jammed, the impeller blades are contaminated.	Turn the ventilator off. Troubleshoot the motor jam and the impeller clogging. Clean the blades. Turn the ventilator on.	
Circuit breaker tripping during turning of the ventilator on.	Overcurrent as a result of a short circuit in the electric circuit.	Turn the ventilator off. Contact the Seller for further information.	
	Low set fan speed.	Set the higher speed.	
Low air flow.	The filters, the fan or the regenerator are contaminated.	Clean or replace the filter. Clean the fan and the regenerator.	
Noise, vibration.	The impeller is contaminated.	Clean the impeller.	
	Loose screw connection in the ventilator casing or in the outer ventilation hood.	Tighten the screws of the ventilator or the outer ventilation hood.	

## 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:

- User's failure to submit the unit with the entire delivery package as stated in the user's manual including submission with missing component parts previously dismounted by the user.
- Mismatch of the unit model and the brand name with the information stated on the unit packaging and in the user's manual.
- User's failure to ensure timely technical maintenance of the unit.
- External damage to the unit casing (excluding external modifications as required for installation) and internal components caused by the user.
- Redesign or engineering changes to the unit.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- Unit misuse.
- Violation of the unit installation regulations by the user.
- Violation of the unit control regulations by the user.
- Unit connection to power mains with a voltage different from the one stated in the user's manual.
- Unit breakdown due to voltage surges in power mains.
- Discretionary repair of the unit by the user.
- Unit repair by any persons without the manufacturer's authorization.
- Expiration of the unit warranty period.
- Violation of the unit transportation regulations by the user.
- Violation of the unit storage regulations by the user.
- Wrongful actions against the unit committed by third parties.
- Unit breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, blockades).
- Missing seals if provided by the user's manual.
- Failure to submit the user's manual with the unit purchase date stamp.
- Missing payment paperwork certifying the unit purchase.



FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT.



USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP.



CERTIFICATE	<b>OF ACCEPTANCE</b>
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Unit Type	Single-room reversible energy recovery ventilator
Model	
Serial Number	
Manufacture Date	
Quality Inspector's Stamp	

## **SELLER INFORMATION**

Seller		
Address		
Phone Number		) 
E-mail		
Purchase Date		
This is to certify acceptance acknowledged and accepted.	of the complete unit delivery with the user's manual. The warranty terms are	
Customer's Signature		Seller's Stamp

## **INSTALLATION CERTIFICATE**

The		unit is installed pursuant to the requirements stated	
in the present user's manua	l.		
Company name			/
Address			] ;
Phone Number			
Installation			<u>``</u>
Technician's Full Name			
Installation Date:		Signature:	***************************************
		sions of all the applicable local and national construction, perates normally as intended by the manufacturer.	Installation Stamp
Signature:			

## **WARRANTY CARD**

Unit Type	Single-room reversible energy recovery ventilator
Model	
Serial Number	
Manufacture Date	
Purchase Date	
<b>Warranty Period</b>	
Seller	





