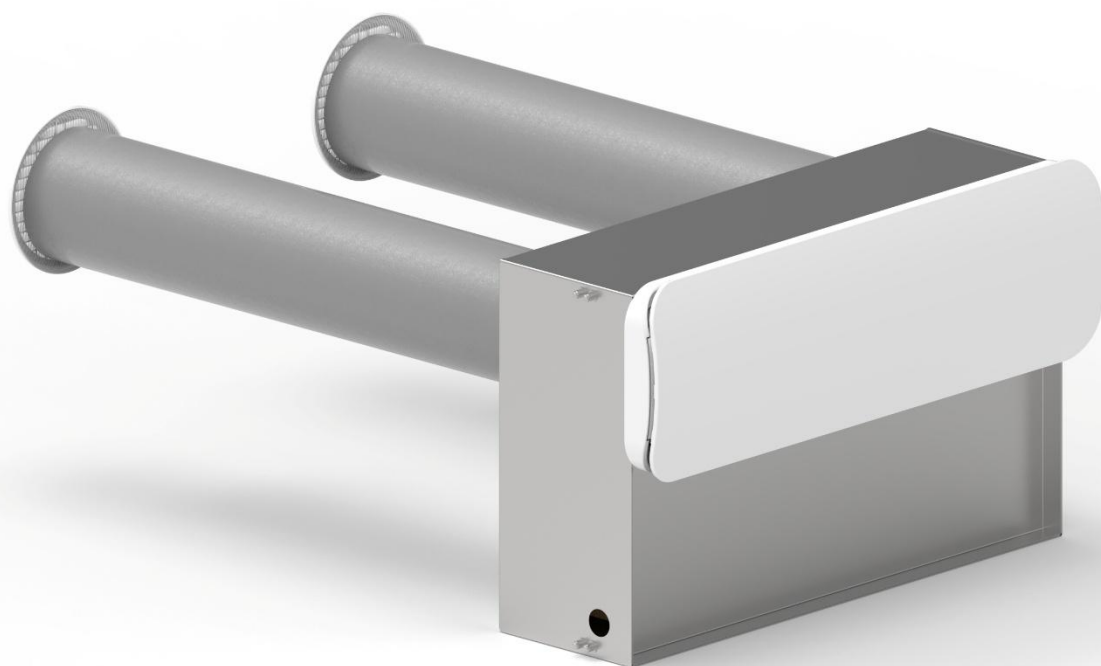




HIGH EFFICIENCY PUNTUAL HEAT RECUPERATOR
WITH DUO EDGE REMOTE CONTROL



USER AND INSTALLER MANUAL

**PLEASE READ THIS MANUAL CAREFULLY BEFORE USING THE UNIT.**

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1. FOREWORD

This manual indicates the intended use of the unit and provides instructions for transporting, installing, mounting, adjusting, and operating the unit. It provides information for maintenance work and residual hazards and instruction for personnel.

The user and maintenance manual must be read and used as follows:

- Every operator, engaged in the use or maintenance of the unit, must read this manual in its entirety and with the utmost attention and comply with what is stated;
- The employer must ensure that the operator has the necessary aptitude to operate the unit and has carefully read the manual; the employer must also carefully inform the operator about the risks of accidents and in particular about the risks deriving from noise, about the personal protective equipment provided and about the general accident prevention rules provided for by international laws or standards and those of the country where the unit is to be used;
- The manual must always be available to the user, the managers, the persons in charge of the transport, installation, use, maintenance, repair and final dismantling;
- Keep the manual in areas protected from humidity and heat and consider it an integral part of the unit for its entire duration, handing it over to any other user or subsequent owner of the unit;
- Make sure that any updates received are incorporated into the text;
- Do not damage, remove, tear or rewrite the manual or parts of it for any reason, in case it is lost or partially damaged and therefore it is no longer possible to read its contents completely, it is recommended to request a new manual to the manufacturer by communicating the machine serial number on the data plate.

Pay close attention to the following symbols. Their function is to emphasize particular information such as:



Note "notes" add additions or suggestions for the proper use of the unit.



"Caution!" notes indicate dangerous situations that may occur with the use of the unit to prevent damage to property and the unit itself.



"Danger!!!" notes indicate serious dangerous situations that may occur with the use of the unit to ensure the safety of people.

The manufacturer has the right to update production and manuals, with no obligation to update earlier versions except in special cases.

This manual reflects the state of the art at the time the unit was placed on the market and cannot be considered inadequate simply because it was subsequently updated to reflect new technology.

To request any updates or additions to the user manual, which shall be considered an integral part of the manual, please forward your request to the contact details given in this manual.

Contact the manufacturer for further information and any suggestions for improvement of the manual.

The manufacturer invites, in case of sale of the unit, to indicate the address of the new owner to facilitate the transmission of any additions to the manual to the new sender.

1.1 RESPONSIBILITY

The unit is guaranteed in accordance with the contractual agreements made at the time of sale.

The manufacturer considers himself exempt from any liability and obligation, and the form of guarantee provided for in the sales contract for any accident to persons or things that may occur due to:



- **failure to observe the instructions contained in this manual with regards to operation, use, maintenance and events which are in any case unrelated to the normal and correct use of the unit;**
- **modifications made to the unit and safety devices without the prior written authorization of the manufacturer;**
- **attempts at repairs carried out on their own account or by unauthorized technicians;**
- **Failure to perform regular and consistent maintenance or use of non-original spare parts.**

In any case, if the user attributed the accident to a defect of the unit, he must prove that the damage occurred was a main and direct consequence of such "defect".

1.2 OPERATING DIRECTIVES

The service regulations described in this manual are an integral part of the delivery of the unit.

These standards, moreover, are intended operator already expressly instructed to conduct this type of unit and contain all the information necessary and indispensable for the operating safety and the optimum use of the unit.

Rushed and deficient preparations force improvisation.

This is the cause of many accidents that can be avoided by following these technical instructions compiled with reference to Machinery Directive 2006/42/EC, as amended.

In any case always observe national safety standards;

Carefully read and strictly observe the following prescriptions:

- Initial start-up should only be carried out by qualified personnel;
- During installation or when you need to work on the unit, you must strictly follow the rules reported on this manual, follow the instructions on the unit and take any necessary precautions;
- Possible accidents to people and things can be avoided by following these technical instructions compiled with reference to the Machinery Directive 2006/42 / EC and subsequent amendments. In any case always observe national safety standards;
- Do not remove or damage the protections, labels and writings, especially those required by law and, if no longer legible, you must replace them.

The Machinery Directive 2006/42/EC gives the following definitions:

DANGEROUS AREA: any zone within and / or near a machine in which the presence of an exposed person constitutes a risk to the health and safety of the same.

EXPOSED PERSON: Any person who is wholly or partially in a hazardous area

OPERATOR: The person(s) in charge of installing, operating, adjusting, maintaining, cleaning, repairing, and transporting the machine.



All operators must comply with the international safety regulations and the country of destination of the unit in order to avoid possible accidents.

As a reminder, the European community has issued a number of directives concerning the safety and health of workers, including Directives 89/391/EEC, 89/686/EEC, 89/654/EEC, 89/655/EEC, 89/656/EEC, 86/188/EEC, 92/58/EEC and 92/57/EEC, which each employer is obliged to comply with and enforce on his or her staff.

The units were designed and built according to the current state of the art and current rules of technology.

Compliance was made with the laws, regulations, prescriptions, ordinances, and directives in force for such machines.

The materials used and the equipment parts, as well as the production processes, quality assurance and control meet the highest safety and reliability requirements.

By using them for the purposes specified in this user manual, handling them with due diligence and carrying out accurate maintenance and overhauls to perfection, you can maintain continuous and lasting performance and functionality of the units.

1.3 INTERVENTIONS AND MAINTENANCE

It should be remembered that the manual is never a substitute for adequate user experience; for some particularly demanding maintenance operations, this manual is a reminder of the main tasks to be performed by operators with specific training acquired, for example, by attending training courses at the manufacturer.

Please read the following suggestions carefully:

- Constant and careful preventive maintenance always guarantees the high operational safety of the unit. Never postpone necessary repairs and have them carried out only and exclusively by specialized personnel, using only original spare parts;
- Operators' workplaces should be kept clean, tidy, and clear of objects that may restrict free movement.
- Operators should avoid clumsy operations, in awkward positions that may affect their balance.
- The workplace must be adequately lit for the intended operations. Insufficient or excessive lighting can pose risks.
- Any intervention on the unit must be carried out by qualified personnel;
- Before carrying out any intervention or maintenance on the unit, make sure that the power supply has been disconnected;
- Make sure that the safety devices work correctly and that there is no doubt about their operation; otherwise do not start the unit under any circumstances;
- Use only tools prescribed by the unit manufacturer. To avoid personal injury, do not use worn or damaged, low-quality, or improvised tools;
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lacking experience and knowledge, unless they have received supervision or instruction regarding the use of the appliance from a person responsible for their safety
- children must be supervised to ensure that they do not play with the appliance
- precautions must be taken to prevent backflow of gas into the room from the open gas flue or other fuel-burning appliances
- It is forbidden the use of flammable fluids during cleaning operations.

For cleaning the unit does not use diesel, petrol or solvents as the former leave an oily layer that promotes adhesion of dust, while solvents (although weak) damage the paint and thus favor the formation of rust. If a jet of water penetrates the electrical equipment, in addition to inducing oxidation of the contacts, it can cause the unit to malfunction. Therefore, do not use water or steam jets on sensors, connectors or any electrical parts.



Once the unit has been cleaned, the operator should check for any worn or damaged parts or parts that are not solidly attached; if not, ask the maintenance technician for assistance;

1.4 INTENDED USE

These units are point (room-by-room) heat recuperators, to be installed at the perimeter wall, which allow ventilating a room without ductwork and without losing heat by emitting exhaust air.

Their use is recommended within the operating limits given in this manual.



Place the unit in environments where there is no danger of explosion, corrosion, fire and where there are vibrations and electromagnetic fields. It is also forbidden to operate in a different way from what is indicated or to neglect operations necessary for safety.

1.5 GENERAL SAFETY RULES

WEAR PROTECTIVE CLOTHING

Each operator must use personal protective equipment such as safety shoes, gloves, safety goggles, noise protection earphones and helmet for head protection.



FIRE EXTINGUISHER AND FIRST AID

Place a first aid kit and fire extinguisher near the unit. Periodically make sure that the fire extinguishers are charged and that the way to use is clear. In case of fire, use it according to current regulations and contact the fire brigade. Check periodically that the first aid *kit* is complete. Make sure to have first aid phone numbers nearby.



The provision of a fire extinguisher and first aid kit is the responsibility of the owner of the property where the unit is installed.



WARNINGS FOR INSPECTIONS AND MAINTENANCE

Apply a sign with the words: "UNDER MAINTENANCE" on all sides of the unit. Check the unit carefully by following the list of operations in this manual.

SAFETY PLATES



Generic hazard



Burn Hazard



Danger of moving
organs



Presence of hazardous
electrical voltage



Danger of stab
wounds

2. PRODUCT DESCRIPTION

DUO EDGE recuperators are designed for controlled ventilation of apartments, hotels, bars and any other civil, residential and commercial environments.

The unit is equipped with a polystyrene air-to-air exchanger, with an efficiency of more than 90 percent, which allows fresh air to enter the room and heat to be recovered from the exhausted air expelled.

DUO EDGE recuperators combine state-of-the-art technical solutions with attractive aesthetics, thanks to elegant external covers. DUO WALL is designed to be mounted in exterior walls from 50 mm to 500 mm thick. Special extensions make it possible to overcome greater thicknesses (see section: CONDUCT FOR THICK WALLS).

The low air speed avoids the annoying draughts of traditional air conditioning systems and ensures maximum environmental comfort.

The exclusive use of absolute quality parts in the aeraulic and electrical parts puts the DUO EDGE units at the highest level of the state of the art in terms of efficiency, reliability and sound power output.

2.1 STRUCTURE AND OPERATION

The unit consists of: an indoor unit, two outdoor grilles and two ducts. The central indoor unit contains the heat exchanger, two fans and three filters and presides over operation; the outdoor grilles protect against rain and insects.

One of the filters is placed on the air inlet from the outside and prevents the entry, from the outside of objects that could damage exchanger or fan, while two other filters are placed on the air inlet to the room and air extraction from the room.

The unit is equipped with a nonvolatile memory clock, which signals every 2000 hours of operation the opportunity to check the filters, with the lighting of an LED, located on the left side of the unit. Once the filters have been replaced and the programmer reset, the LED remains off until another 2000 hours of operation have elapsed.

The heat exchanger recovers heat from the exhausted air, to heat the air fed into the room.

The ventilation unit must be installed in a location where water or other substances cannot enter and damage its components. DUO EDGE can operate in different modes:

EXTRACTION: the unit operates permanently in extraction.

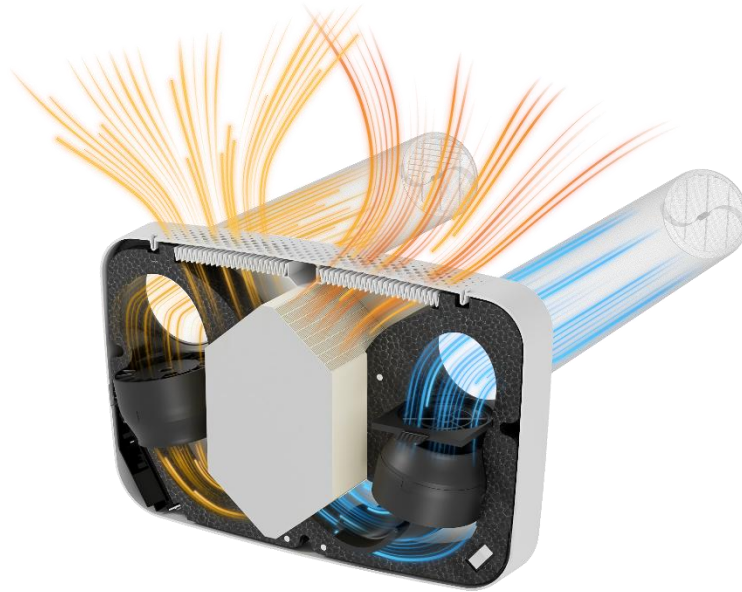
IMMISSION: the unit operates permanently in immission.

HEAT RECOVERY: the unit operates constantly as heat recovery.

NIGHT FUNCTION: if activated, the speed is reduced to the "Superminimum" level so that air exchange continues, without producing noise. In automatic, the preset ventilation is reactivated as the brightness increases.

HUMIDITY FUNCTION: if activated, the ventilation rises to the maximum level, as long as the room humidity remains above the preset level.

IONIZER function: when activated, the air is ionized to precipitate dust.



2.2 OPERATING LIMITS

The recuperator should be used in temperatures between -20° and $+40^{\circ}$, with relative humidity below 97%. If installed in dimly lit locations, the "night" function may not be usable.

3. OPERATION OF SEVERAL INTERCONNECTED DEVICES

When you want to manage ventilation from a single room, several units can be connected in cascade.

With cascading, one remote control, operating on the first appliance, called the "Master," is sufficient to operate all the other "Slaves."

Appliances operating in different rooms can also be cascaded, provided that they have similar needs to each other and it is useful to manage them with one control.

The maximum number of recuperators that can be connected in cascade is ten pieces.

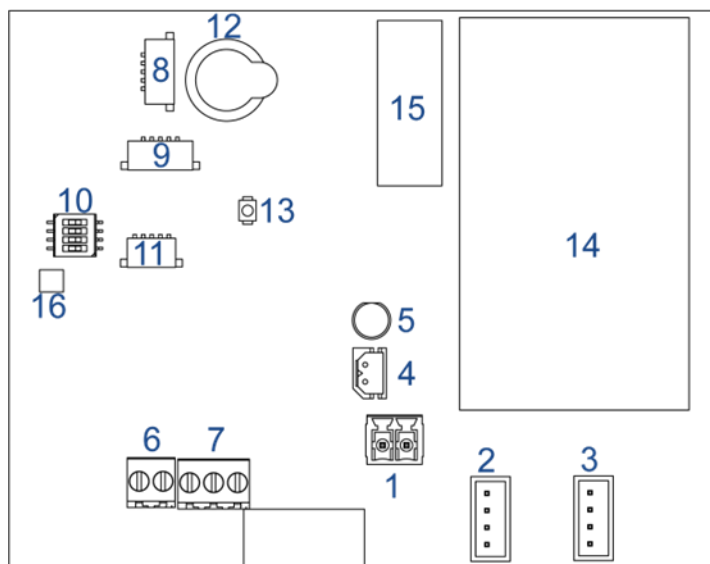
4. ELECTRICAL CIRCUITS

4.1 ELECTRICAL EQUIPMENT

All electrical and electronic equipment is made and wired in compliance with low voltage and electromagnetic compatibility standards for household applications.

The fans, equipped with low-consumption reversible EC motors with adjustable flow rate, are extremely quiet. Having installed the fan in the properly prepared hole (see Section 9.4), connect an electrical power outlet (110-240 Vac ~ 50-60 Hz).

Pos	Description
1	Power supply terminal Power supply input 110V-240Vac - 50-60Hz
2	Fan connector output
3	Fan connector input
4	Ionizer connector
5	Ionizer activation status LED
6	Output signal terminal Output control signal to next device
7	Input signal terminal Input signals from previous device or remote control
8	Sensor Card Connector
9	Connector for Wi-Fi+ card (TQCT07 accessory)
10	Dip-Switches
11	Connector for Touch Display
12	Buzzer
13	Reset button
14	24Vdc power supply
15	Fuse

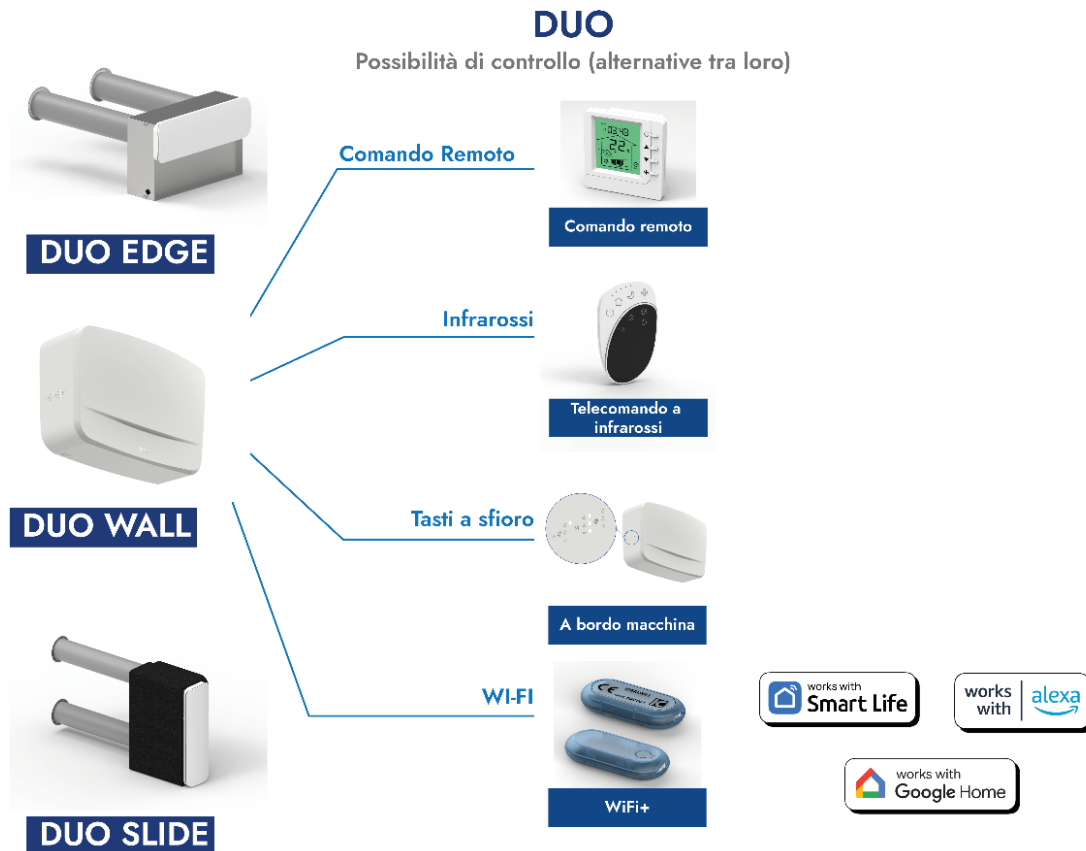


5. COMMANDS AND OPERATION

5.1 MODE OF CONTROL

The unit can be controlled alternately by means of:

- Remote control
- Remote control as standard
- On-board touch buttons
- Control via App by pairing with WIFI+ accessory (cod. TQCT07 - optional)













5.2 ON-BOARD BUTTONS

The on-board buttons are located on the left side of the device and are touch buttons: just place your finger on them to control them.

If several devices are installed in cascade, only the first one (master) accepts commands, whether they come from the on-board buttons or the remote control.

All other devices (slaves) are controlled by the master.

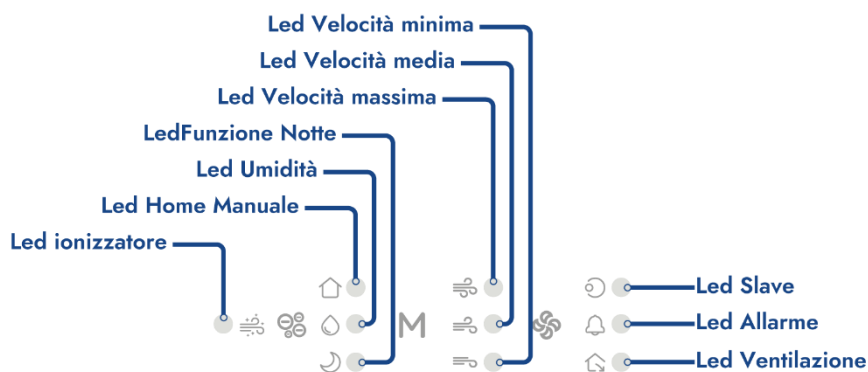









Key	Description	Function
	Mode	<p>The button M allows you to choose the mode of operation:</p> <ul style="list-style-type: none"> Manual home - Heat recovery active (Led "" on) Night function active (Led "" lit) Device shutdown <p>Pressing this key returns to the manual Home function</p>
	Speed	<p>This key allows you to choose the operating speed of the fan in the Home manual and ventilation modes:</p> <ul style="list-style-type: none"> Super-minimum speed (Orange Led "" lit steadily) Minimum speed (White led "" lit steadily) Medium speed (White led "" lit steadily) Maximum speed (White led "" lit steadily)
	Ionizer	<p>This key enables the air ionizer function:</p> <ul style="list-style-type: none"> When the ionizer is active the led "" will be on steady.




5.3 ON-BOARD LEDs

On-board LEDs are located on the left side of the device.

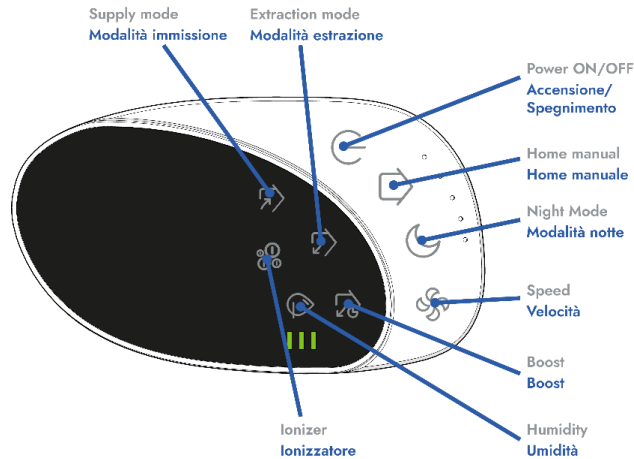
The LEDs indicate in which mode DUO EDGE is operating at that moment.



Led	Description	Function
	Manual Home	<ul style="list-style-type: none"> Led on: Standard operating mode, any fan speed can be selected manually. In this mode, the fan alternates between air intake and exhaust, and heat recovery is active (unless the ventilation led is on)
	Humidity	<ul style="list-style-type: none"> Led on: humidity control is on, room humidity is not over the set threshold, you can choose the fan operation speed. LED flashing: The preset humidity threshold has been exceeded, DUO activates the maximum speed until the humidity falls below the preset threshold. <p>Humidity control and its threshold can only be set by remote control. Humidity control is incompatible with the night function.</p>
	Night function	<ul style="list-style-type: none"> Led on: the night function has been activated. In this mode, the twilight sensor reduces the speed to "super minimum" level so as not to disturb sleep. When this mode is on, at night, all the LEDs on the machine are turned off and the fan remains running. Led off: the night function is not active
	Minimum speed	<ul style="list-style-type: none"> Orange led: super-minimum speed active White led: minimum speed active
	Medium speed	<ul style="list-style-type: none"> White led: medium speed active
	Maximum Speed	<ul style="list-style-type: none"> White led: maximum speed active
	Ventilation	<ul style="list-style-type: none"> Led on: the fan is running in the extract-only direction Led flashing: the fan is running in the inlet-only direction. The choice between input or extraction in this function is made through the remote control with the appropriate buttons Led off: the fan operates in the alternating direction by recovering heat.















	Alarm	<ul style="list-style-type: none"> • Led on: Generic device error • Led flashing: Filters dirty signal
	Slave	<ul style="list-style-type: none"> • Led off: Device operates independently or is a MASTER, can be controlled by remote control or from device board. • Led on: this recuperator is a SLAVE, so it does not accept direct commands, but commands must be applied to the relevant Master • Led flashing: following receipt of a command, the device signals its rejection, either because it is commanded by a Master device or because an external controller is commanding it.
	Ionizer	<ul style="list-style-type: none"> • Led off: Ionization function is not active • Led on: The air ionization function has been activated

5.4 REMOTE CONTROL



The operating distance of the remote control can be affected by the environment in which it operates.

Possible operations:

Key	Description	Function
	ON/OFF	<ul style="list-style-type: none"> • The button  turns the unit on and off
	Manual Home	<ul style="list-style-type: none"> • Activates the heat recovery mode with alternating 60-second cycles of extraction and input • Returns the unit to manual home mode • Any input-only, extraction-only or extraction boost functions are deactivated
	Night Mode	<ul style="list-style-type: none"> • Activates Night Mode: in darkness, the device goes into super-minimum speed with heat recovery active. When the room is lit it resets to manual Home Mode
	Speed	<ul style="list-style-type: none"> • Changes the speed among several available by switching between: • Super-minimum speed (Orange Led " lit steadily) • Minimum speed (White led " lit steadily) • Medium speed (White led " lit steadily) • Maximum speed (White led " lit steadily)
	Air Supply Mode	<ul style="list-style-type: none"> • Activates the new air only mode.
	Exhaust mode	<ul style="list-style-type: none"> • Activates the Exhaust air only mode.
	Extraction Boost	<ul style="list-style-type: none"> • Activates Extraction Boost Mode: the device runs at maximum speed in expulsion for 1/2 hour. The speed LEDs flash and the ventilation LED is on steady
	Humidity	<ul style="list-style-type: none"> • Activates or deactivates humidity control, three bars light up on the remote control to indicate the humidity threshold (1 bar: desired humidity low, device will activate maximum speed frequently - 3 bars: desired humidity high - device will activate maximum speed rarely)
	Ionizer	<ul style="list-style-type: none"> • Activates the Ionization Mode of the air fed into the room.

Connecting the device with the Smart life App also makes connection with Google Home and Alexa available if desired. Through this association, it is then also possible to manage the device through voice commands. We recommend assigning a unique name to each device connected to the SmartLife application to simplify its remote management.

ALEXA VOICE COMMANDS

Through the virtual assistant Alexa, it is possible to manage some of the device's functions with Voice Commands (see table below for available commands):

Hey Alexa, turn on "device name"



Okay

Hey Alexa, increase "device name"



Okay

Command type	Available commands ALEXA
Turning ON	Hey Alexa turn on "device name"
Shutdown	Hey Alexa turn off "device name"
Speed	Hey Alexa increase "device name"
	Hey Alexa decrease "device name"

GOOGLE HOME VOICE COMMANDS

Through the Google Assistant, it is possible to manage much of the device's functions directly with Voice Commands (see table below for available commands):

Ok Google, turn on "device name"



All right, I turn on "device name"

Ok Google, set "device name" to low

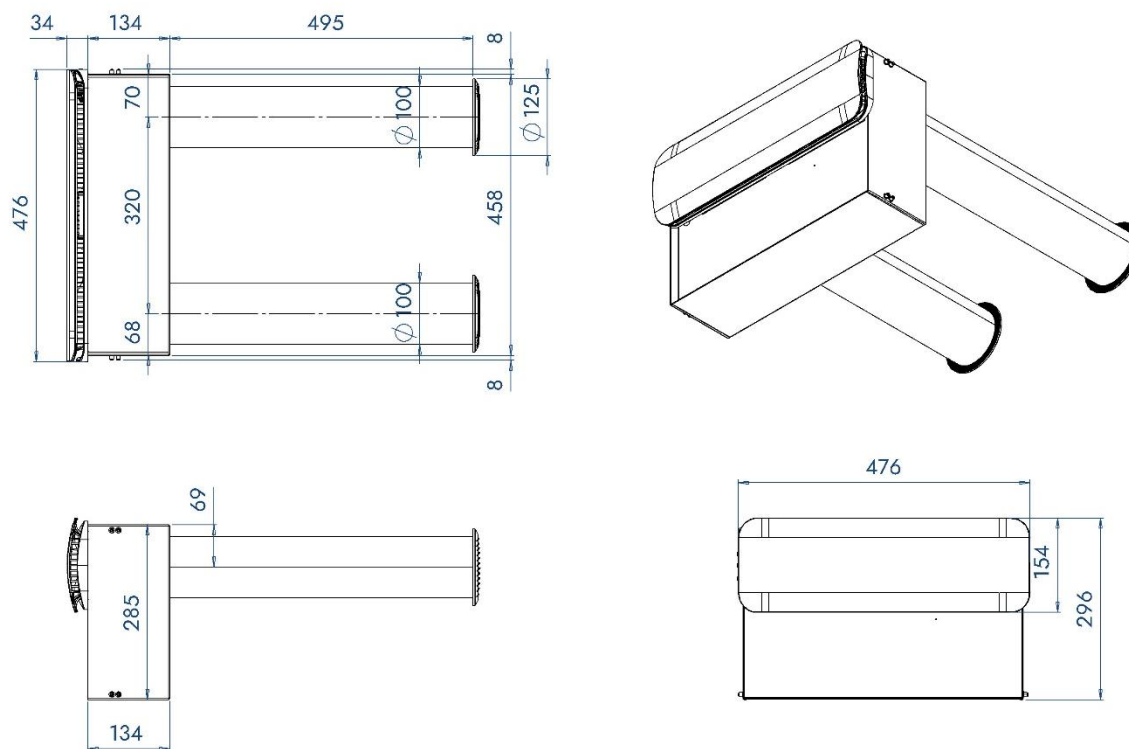


Okay, set "device name" to low

Command type	Available commands GOOGLE HOME
Turning ON	Ok Google turn on "device name"
Shutdown	Ok Google turn off "device name"
Speed	Ok Google set "device name" to very low
	Ok Google set "device name" to low
	Ok Google set "device name" to medium
	Ok Google set "device name" to high

6. TECHNICAL DATA.

6.1 DIMENSIONAL DRAWING



All measurements are in mm

7. AFTER SALE

7.1 FAULT SEARCH

Listed below are the most common causes that can cause the unit to freeze, or at least malfunction. The breakdown is made on the basis of easily identifiable symptoms.

NR	ANOMALY	POSSIBLE CAUSES	CORRECTIVE ACTIONS
1	The unit does not start up	No power supply to the unit	Check the power supply terminals for its presence
		One or more speed LEDs are flashing	Wait until the damper is fully open
		Motor blocked, impeller clogged	Turn unit off Resolve motor jam, clean propellers Restart the unit
2	Low air flow rate	Too low a speed has been set	Choose a higher speed
		The fan or heat exchanger filter is dirty	Clean or replace the filters, clean the fan and the recuperator (see the maintenance chapter).
3	The circuit breaker trips	A short circuit produced an overcurrent.	Turn off the unit and contact a service center.
4	The device does not apply the commands sent by remote control	The remote control battery may be low. The remote control does not flash when it sends the pulse to the device.	Replace the batteries of the remote control
		The device is a slave, it beeps three times to reject the command, and the Slave LED flashes three times	None - expected behavior for a slave device. Command the master
		The device is commanded by an external contact, the medium speed led is on white and the super minimum speed led is on orange	None - expected behavior for a device commanded by external control. Disable external control in order to command the device with the remote control

		Device is in stand-by mode commands other than power on are rejected with two beeps.	Turn the device on via the power button on the remote control or via the buttons on board the machine
		The fan is dirty	Clean the fan
5	Vibration and noise	The screws of the housing or the outer cap are loose.	Tighten the screws of the unit and the outer cap.
		Deformation of the motor unit: the fan blades touch the pipe.	Loosen the fixing screws and shim
6	Alarm led on	If led is intermittent, filters are dirty	Clean or replace the filters, clean the fan and the recuperator (see the maintenance chapter).
		If led is on steady: general alarm	Call for service

7.2 ROUTINE MAINTENANCE



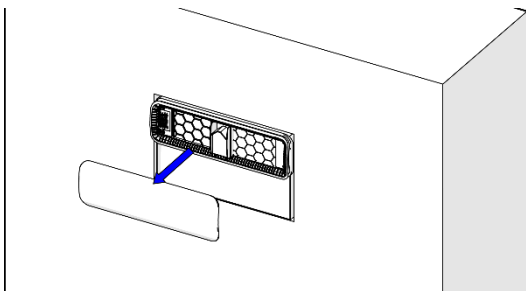
Disconnect the unit from the power supply before performing any maintenance.

Proper operation of the unit requires regular cleaning of the filters or their replacement when necessary. Clean exchanger of any dust that may settle over time.

FILTER CLEANING

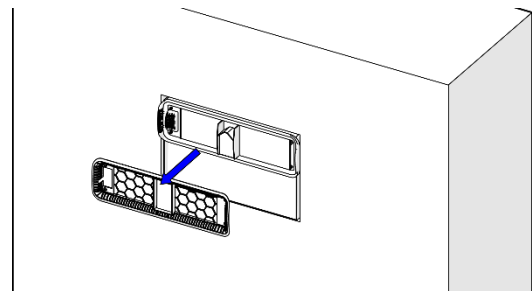
Perform the following steps:

Cleaning Filters - 1



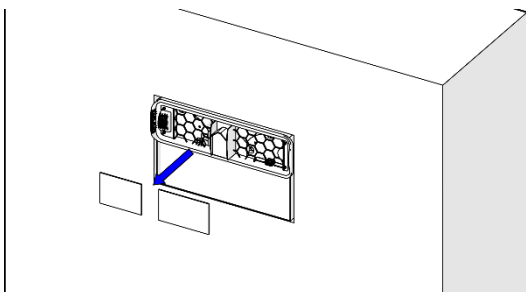
Remove the front cover

Filter Cleaning - 2



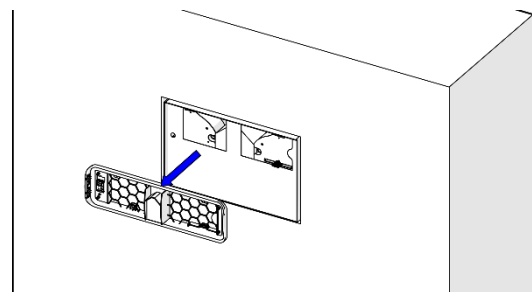
Remove the internal filter retainer grille

Cleaning Filters - 3



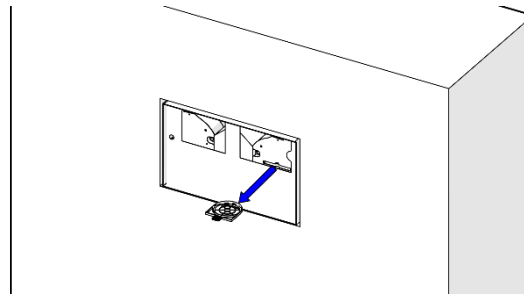
Remove the internal filters

Cleaning Filters - 4



Remove the 4 screws securing the front cover then remove it being careful not to tear the wiring of the sensor and display boards

Cleaning Filters - 5



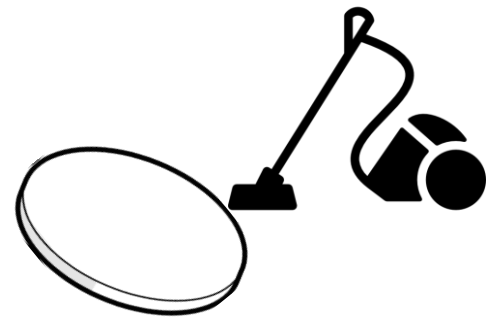
Slide out the filter on the new air intake side

Cleaning filters - 6



Clean the filters with water and let them dry.
Filters should only be reinserted when completely dry.

Cleaning filters - 7




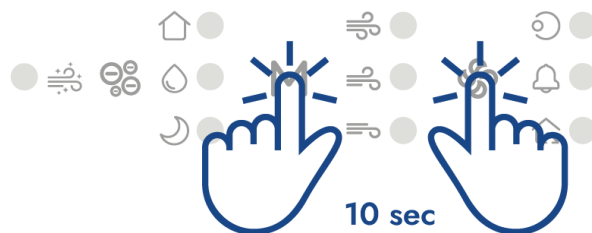
Alternatively, the filters can also be cleaned with a vacuum cleaner

ALARM RESET

The service life of the filter, thus maintained, is about three years.

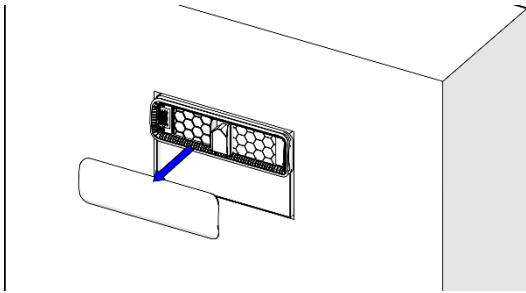
To remind you to clean them, a red LED on board the unit is activated by a timer after about 3 months of operation.

To reset the filter cleaning timer, hold down the on-board buttons **M** and  simultaneously for at least 10 seconds. The "humidity" LED flashes 5 times, the device restarts, and the filter cleaning timer is reset.



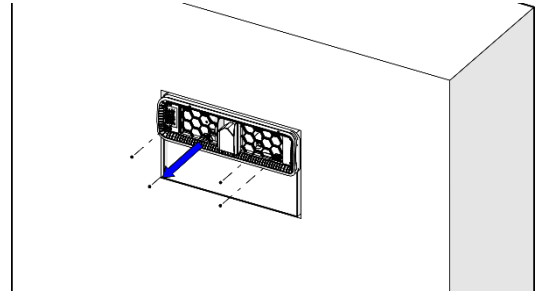
CLEANING THE EXCHANGER

1



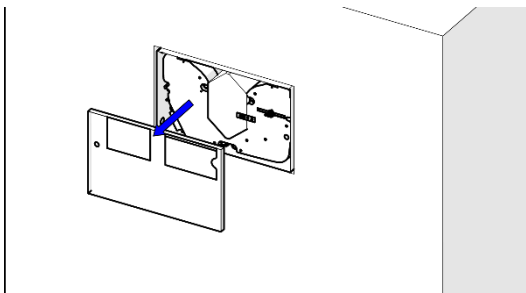
Remove the front cover by pulling toward you

2



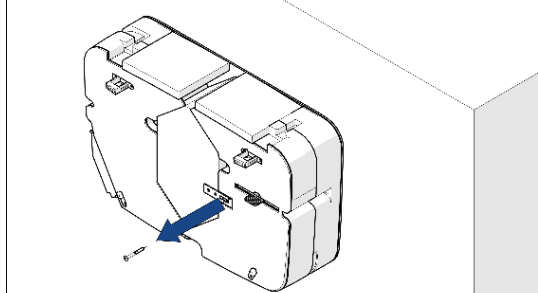
Remove the front cover locking screws and slide it out of place

3



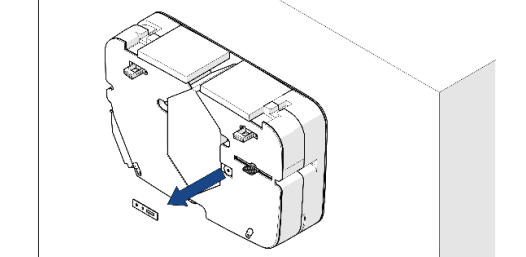
Remove the sheet metal front cover by pulling toward yourself

4



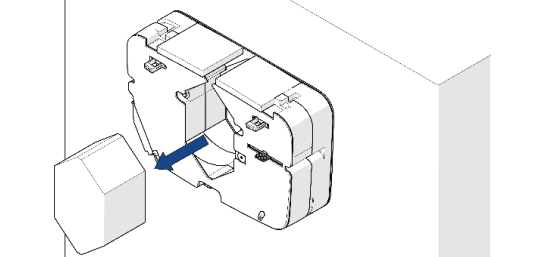
Remove the locking screw of the exchanger safety bracket

5



The exchanger safety bracket can now be removed

6

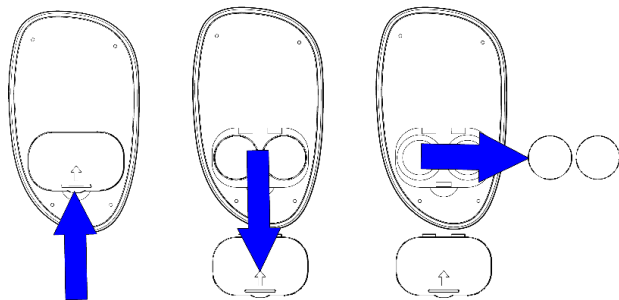


Slide off the exchanger and vacuum or blow it to remove any dirt deposited over time

REPLACING THE REMOTE CONTROL BATTERY (IF NECESSARY)

If the device no longer responds to the remote control, the battery may be low: gently slide the battery case on the back of the remote control, even with a screwdriver. The battery is of the **CR2032** type.

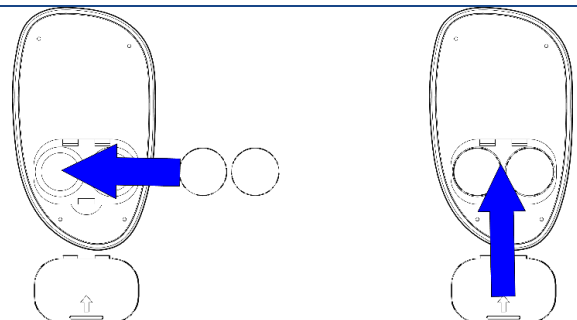
Battery removal



Remove the battery compartment cover located on the back side of the remote control as shown in the figure.

Remove spent batteries and dispose of them properly.

Inserting new batteries



Insert the new CR2032 batteries into the slot with the positive "+" side showing.

Insert the guide teeth correctly and close the cover

CHECKING AND CLEANING THE EXTERNAL GRILL

The external grilles may over time become clogged with leaves or other objects that would reduce the air flow rate and thus the performance of the device. Check that the external grilles are free of clogging at least twice a year and clean them as needed. The flexible grille, if inaccessible from the outside, should be disassembled from the inside to be cleaned from the inside using vacuum cleaners.

8. PUTTING THE UNIT OUT OF SERVICE

When DUO is removed, the structure and various components, if unusable, should be demolished and broken down according to their commodity kind.



9. INSTALLATION

9.1 PREMISES

INSPECTION

Upon receipt of the unit, check its integrity: the machine left the factory in perfect condition; any damage must be immediately reported to the carrier and noted on the Delivery Note before countersigning it.

LIFTING AND TRANSPORTING

When unloading and positioning the unit, extreme care must be taken to avoid sudden or violent maneuvers. Internal transportation should be done carefully and gently, without using machine components as strong points.



In all lifting operations, make sure you have firmly anchored the unit, in order to avoid accidental overturning or falls.

UNPACKING

The packaging of the unit should be removed carefully without causing damage to the machine; the materials that make up the packaging are of a different nature, wood. It is good practice to store them separately and hand them over for disposal or eventual recycling, to the companies designated for this purpose.

POSITIONING



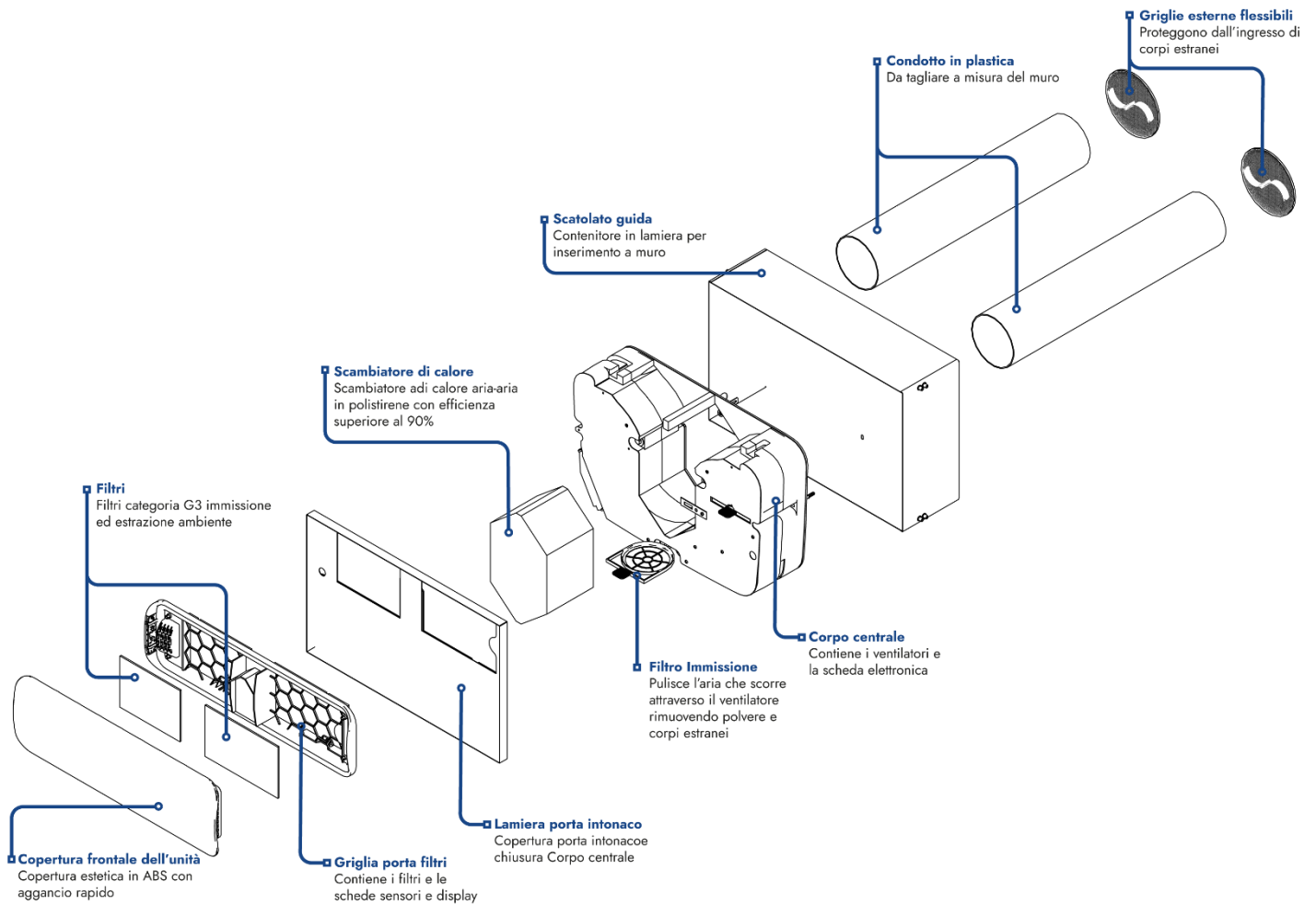
All models are designed and built for installation in perimeter walls at a minimum distance of 16 cm from the ceiling.

It should not be exposed to aggressive weather conditions and excessive temperatures (-20°C to +50°C).

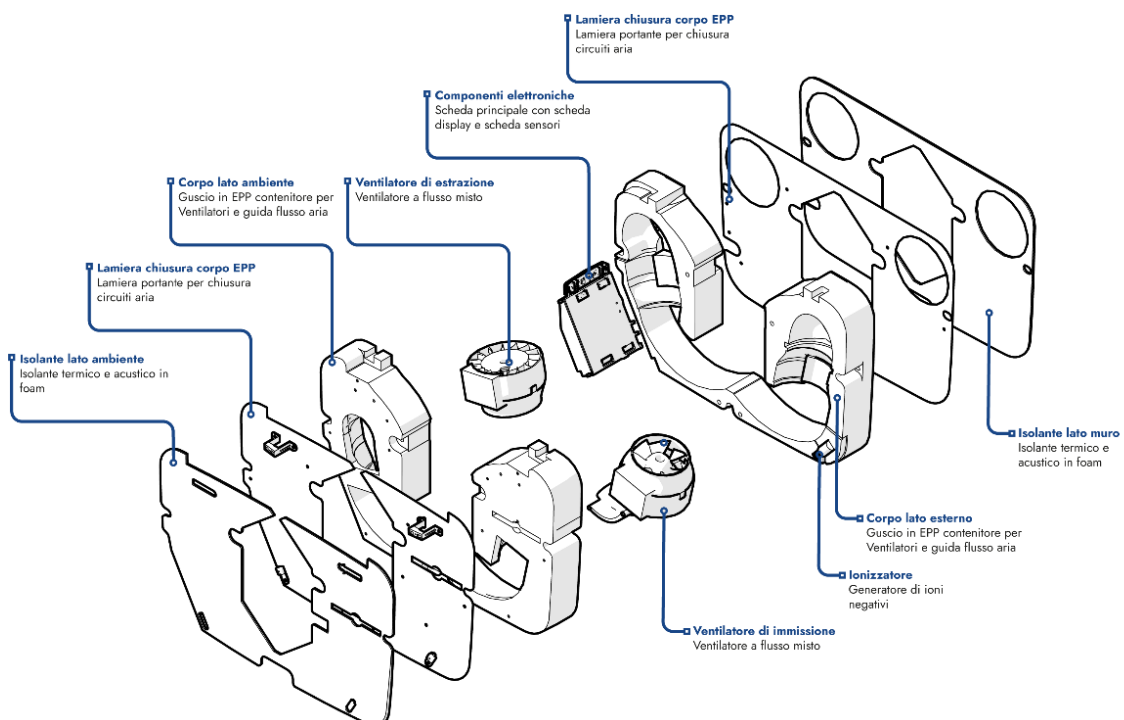
If installed in shade, the night function may not be operable.

9.2 EXPLODED DIAGRAMS

OVERALL



CENTRAL BODY



9.3 WALL MOUNTING

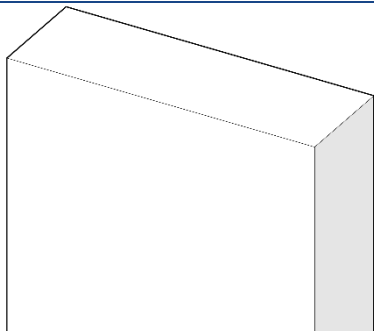
MOUNTING TEMPLATE POSITIONING

It is recommended to use the "Guide Box" as an assembly template.

The depth of the recess should be at least 134 mm

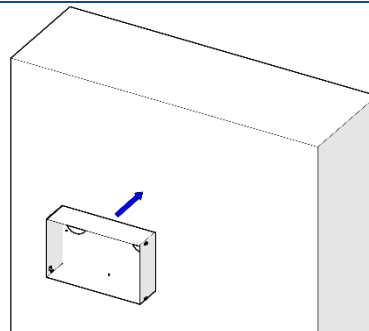
INDOOR UNIT INSTALLATION

Indoor unit installation - 1



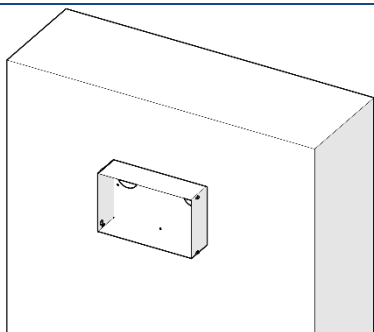
Choose the wall and installation location of Duo Edge

Indoor unit installation - 2



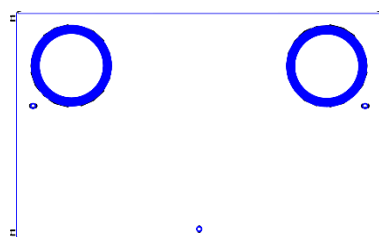
Use the sheet metal guide box as a drilling template

Indoor unit installation - 3



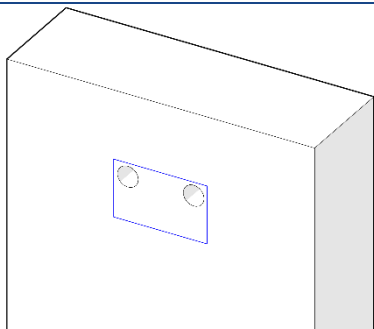
Lay the guide box in the installation position

Indoor unit installation - 4



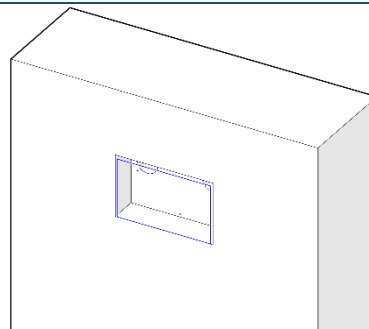
Trace with a pencil the outer profile, the 2 holes diameter 100 mm

Indoor unit installation - 5



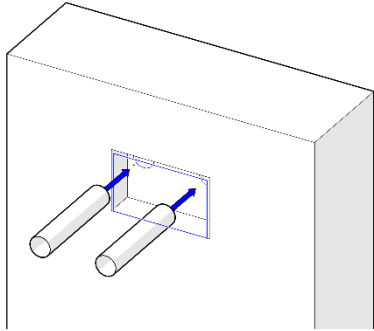
Drill the 102 mm diameter holes

Indoor unit installation - 6



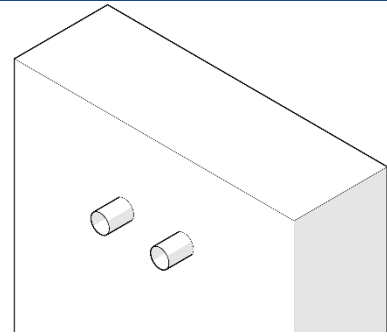
Make a split at least 134 mm deep following the outline of the outer profile and widen 1 cm on the 4 sides.

Indoor unit installation - 7



Insert the 2 DN100 ducts into the wall

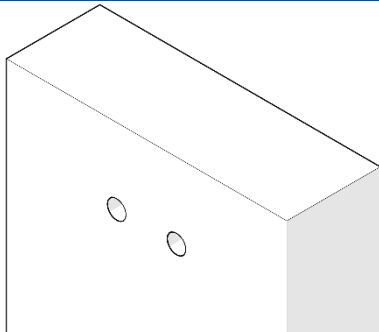
Indoor unit installation - 8



External side view

Check the overhang (if possible check from the outside side, alternatively take the depth measurement of the wall)

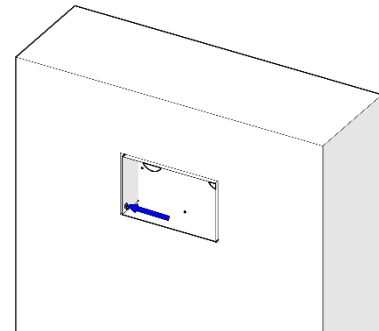
Indoor unit installation - 9



Exterior side view

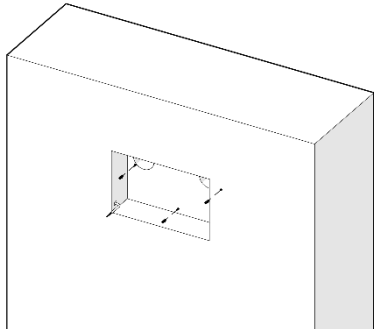
Cut the ducts to length and seal

Indoor unit installation - 10



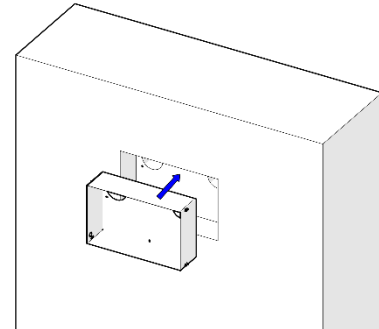
Insert the guide box in place centering on the 2 walled ducts and mark with a pencil the entry position of the electrical wiring and the 3 holes Diameter 6mm for the plugs

Indoor unit installation - 11



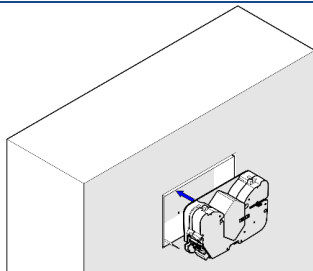
Prepare the 3x1.5 power cable (L-N-PE)
And insert the 3 wall plugs

Indoor unit installation - 12



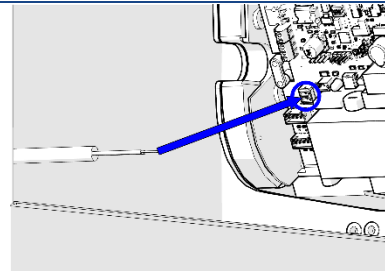
Insert the guide box into position

Indoor unit installation - 13



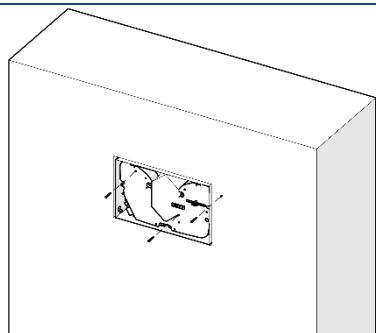
Bring the main body closer to the recess after removing the board cover

Indoor unit installation - 14



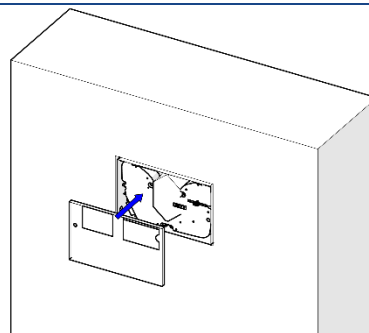
Proceed to wire the power supply to the dedicated terminal.
Grounding can be attached anywhere on the guide box.
Prepare connected cables for sensor board and display and let them protrude after closing the electrical box.

Indoor unit installation - 15



Then bring the center cover into place and secure with the 3 screws, locking it to the 3 wall plugs previously inserted

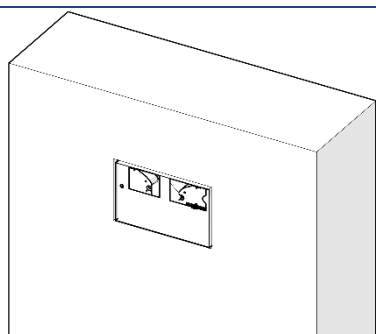
Indoor unit installation - 16



Place the Plaster Holder Sheet and check the flatness with the wall, if necessary you can adjust the position by acting on the magnets located in the guide box.

Take care to run the sensor board and display cables through the specially provided hole.

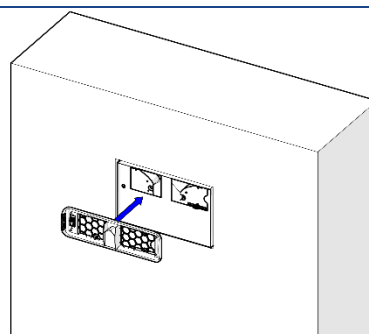
Indoor unit installation - 17



Now you can pull up the plaster at the bottom.

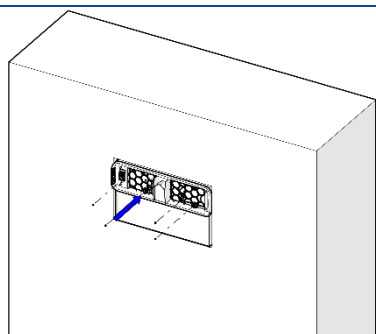
It is important to leave the front divided from the wall finish to allow for extraordinary maintenance maneuvers

Indoor unit installation - 18



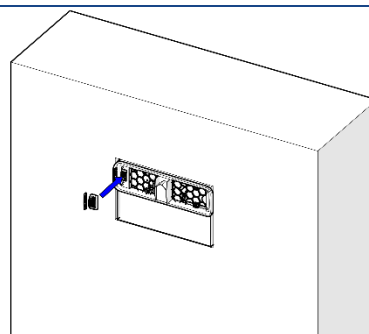
Place the back of the front cover to which the sensor board as well as the display board are attached and connect them with the dedicated cables.

Indoor unit installation - 19



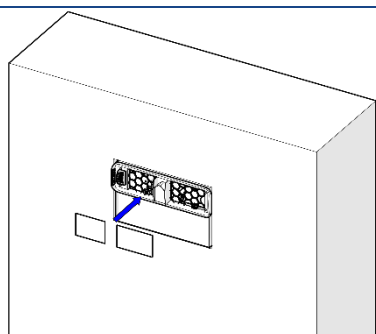
Then fasten with screws.

Indoor unit installation - 20



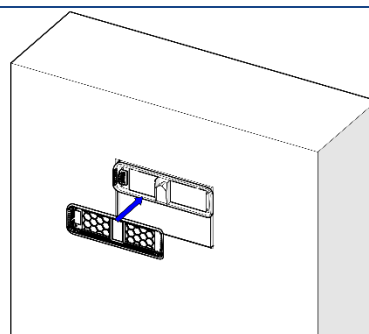
Cover the sensor and display boards with the appropriate Covers

Indoor unit installation - 21



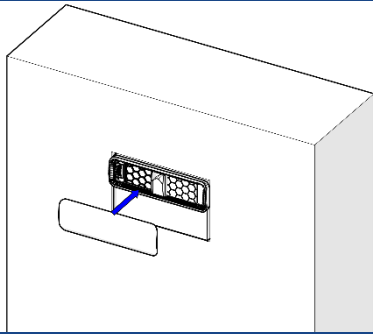
Place filters

Indoor unit installation - 22



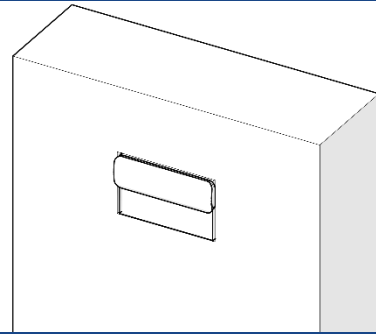
Place the filter retainer grid

Indoor unit installation - 23



Now place the aesthetic cover

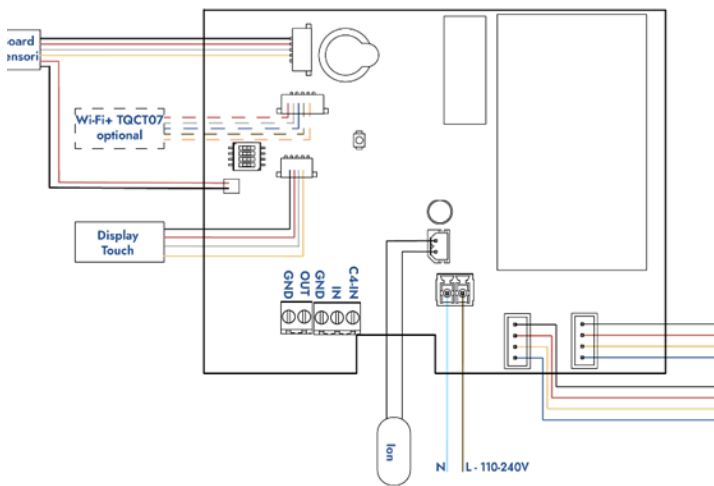
Indoor unit installation - 24



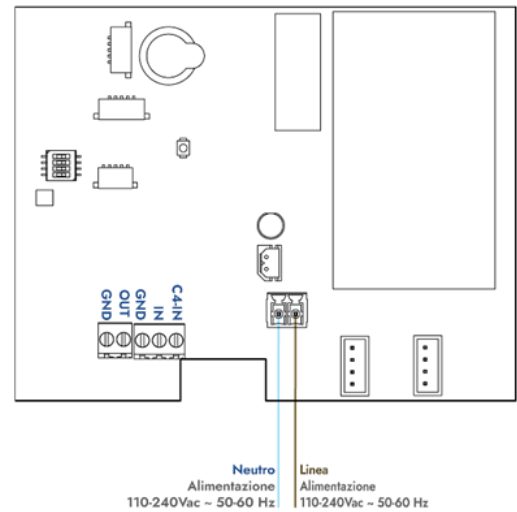
Installation is complete

SINGLE UNIT CONNECTION WIRING DIAGRAM

Connection legend



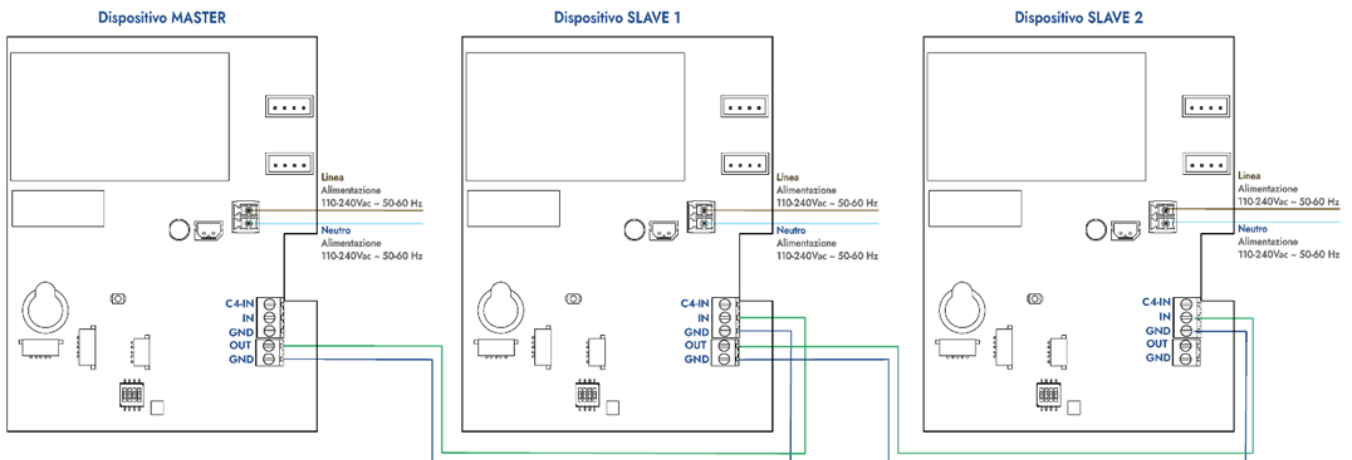
Single unit connection



Connect the 110-240Vac power supply respecting the Line-Neutral polarity as indicated.
Use cables 2x1.5 mm²

ELECTRICAL DIAGRAM OF CONNECTION IN SERIES (CASCADE) OF MULTIPLE RECEIVERS (MAX.NO.10)

Series connection of multiple units

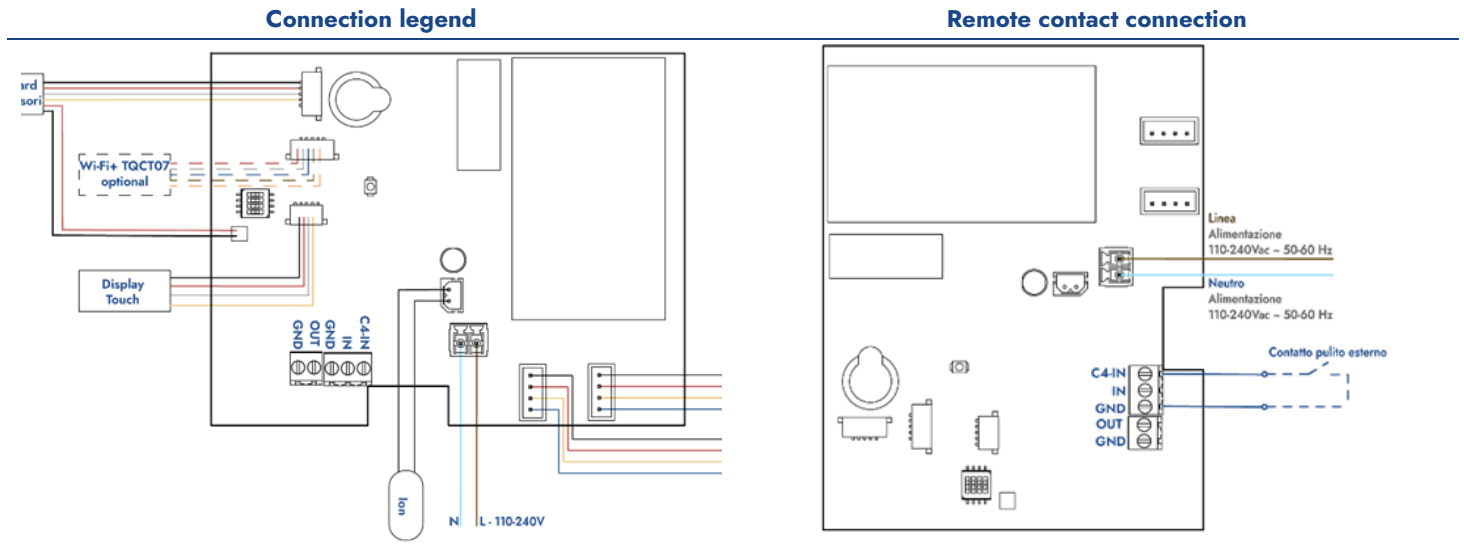


Multiple units can be connected in series.

Series connection of multiple units must be made as shown above respecting the connection GND (Master)/GND (Slave) and Out (Master)/IN (Slave). Use cables 2x1.5 mm²

When several DUOs are cascaded together, all of them are managed by the first one (master) and its user control.

WIRING DIAGRAM OF CONNECTION VIA EXTERNAL CONTACT

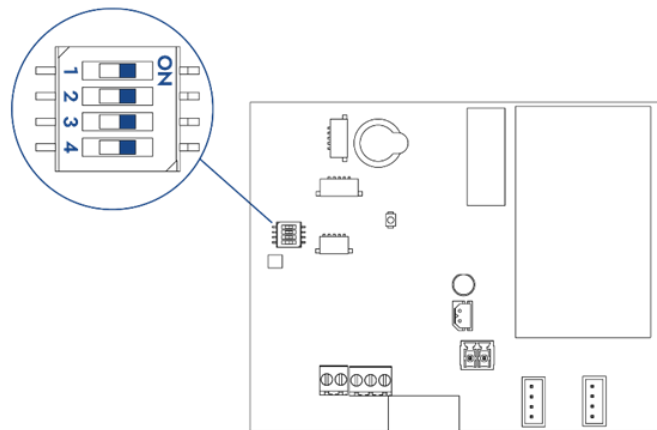


When this contact is used, the other functions are turned off.

When the contact is closed, the heat recuperator is activated at the average speed and both on-board and remote controls are inhibited.

When the contact is open, the recuperator is in stand-by mode and controls from the machine or remote control are reactivated.

Setting the Dip-Switches



Identifying the Dip Switch

The meaning of each dip-switch is as follows:



Selector switch 1: fixed for each model (do not change).

Selector switch 2: fixed for each model (do not change).

Switch 3: no functions

Switch 4: Master/Slave selection

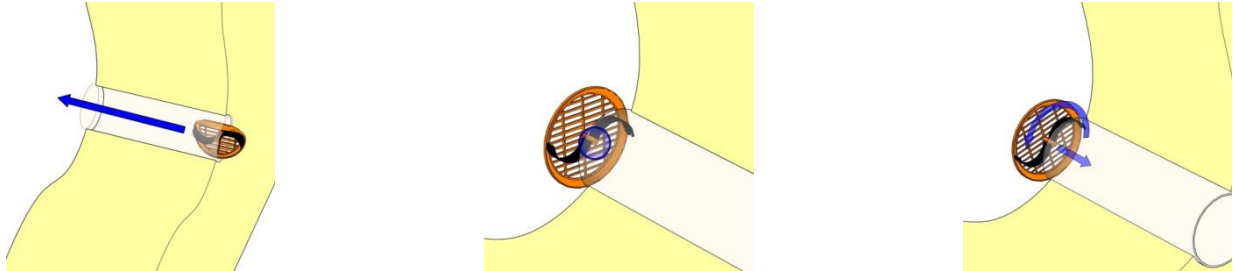
Selector switch 4: Master/Slave selection

Position	Meaning
	MASTER Device
4	In cascade installations, only the first "MASTER" shall have Dip 4 in the OFF position. This device will be the only one in the cascade capable of receiving commands.
	SLAVE Device
4	In Cascade Installations, devices excluding the first one must have Dip 4 in the ON position. Such devices will not be able to receive commands as they are dependent on the MASTER.

10. INSTALLATION OF THE FLEXIBLE OUTDOOR GRILLE

INSTALLATION OF FLEXIBLE OUTDOOR GRILL

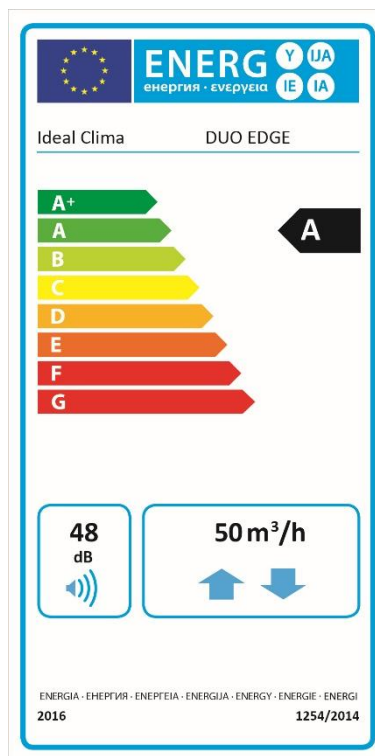
Slightly flex the grille and slide it into the duct. Holding it firmly by the center peg, pull it completely out of the duct so that it can expand and return to its original shape. Pull towards you and at the same time rotate the grill counterclockwise. The springs retract into the duct and adhere to the wall, and lock the grill in place.



11. DUCT FOR THICK WALLS

If the wall thickness is greater than the length of the normal duct supplied with the device (50 cm), a 70 cm duct is available.

12. ENERGY LABEL



13. WARRANTY CONDITIONS

The guarantee of this product is governed by the Ideal Clima general conditions of sale (version 3.0) of which we report the part relating to the guarantee:

Ideal Clima guarantees its products against manufacturing faults or defects, with the express exclusion of any defect or fact inherent in the installation, operation and maintenance of the product. - 15.2 Recipients - Ideal Clima provides products only to professional companies. By giving the order, the client declares that the products are intended for use in the context of his professional, commercial or entrepreneurial activity. It is therefore excluded the application of Norm 1999/44 / EC and D. Leg nr. 24 of 2 February 2002. The warranty is limited to the products provided by Ideal Clima and only to the customer. Ideal Clima reserves the right to apply their own conditions to guarantee, directly or indirectly through the subjects to be identified, the end user only upon specific request and authorization of the Client, who remains entitled to the fulfillment of any obligations with the end user in accordance with the regulations in force. - 15.3 performance under warranty-the intervention under warranty implies, in Ideal Clima's opinion, the repair or replacement of the defective product. In the event of repairs, the Customer undertakes to have those repairs carried out by its end customer that Ideal Clima deems indispensable, allowing access to the system. In the event of replacement, Ideal Clima undertakes to replace its defective products with its own products with equal or superior characteristics, excluding any cost to restore the asset (labor, travel, transport, works, etc.). In any case, production defects must be recognized by Ideal Clima technicians. The components replaced under warranty remain the property of Ideal Clima, to which they must be returned ex works. - 15.4 Effective date and duration - The warranty starts from the date of purchase of the product and has a duration of two years. The purchase date is proven by the invoice and by the delivery note. In the event of a dispute regarding the date of supply, the lot / date of production / serial number indicated on the product will prevail. The customer shall forfeit the warranty if he does not report the defect within 8 days of the discovery and before the expiry of the maximum term of the warranty. The duration of the warranty is not changed by warranty interventions - 15.5 limitations and exclusions - the warranty does not cover defects attributable to transport, handling of the product, poor storage (eg. non-dry environments, direct sun exposure etc.), installation and/or maintenance not carried out by qualified personnel and enabled, according to the manufacturer's instructions and the regulations in force, usage not in accordance with product characteristics, use of water, gas and electricity which is not suitable to the product, use or maintenance, improper product, normal wear and tear -15.6 Right call: Ideal Clima reserves the right to ask for a contribution for the intervention of the technical assistance centre authorized, starting from the seventh month of the warranty period. This contribution will be quantified in advance and will have to be paid directly to the CAT. This contribution will also be due if the product is defective.



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Version 1.0 March 2026

ORIGINAL INSTRUCTIONS

In a process of constant improvement, the company reserves the right to make changes to the product at any time, even without prior notice.