

Air handling units with heat recovery

# iZZi V.302/402 ERV STANDARD

version Left and Right



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### 01 General information

Congratulations on your purchase of the iZZi V.302/402 ERV STANDARD compact recuperator. Please read the manual before installation. Compliance with the following instructions guarantees optimum operation and a long service life. Each shipment is carefully inspected before leaving the factory.

### 01.01 Safety

This appliance should not be used by persons (especially children) with reduced mobility or mental capacity or by persons without appropriate experience or knowledge, unless, to ensure safety, they use this appliance under the supervision of appropriate persons or are instructed by them on how to use this appliance.

Children should use the appliance under adult supervision to ensure that they do not play with this product.

### 01.02 Warranty and liability

The manufacturer is not responsible for damage caused by improper use, incorrect transport or handling. Attention: Please check that the delivered goods have not been damaged during transportation. Later complaints will not be recognised! Prior to installation, please check the shipment for completeness. The list of components is presented in point 04.01. The choice of dowels and mounting screws depends on the material of the wall! The manufacturer reserves the right to make technical and colour changes! All dimensions are given in mm! Warranty conditions are presented in point 09.

The manufacturer shall not be liable for damage which may result from:

- failure to observe the operating, safety and maintenance instructions listed in this manual,
- installation not carried out in compliance with the building regulations and the instructions for use of the appliance
- use of spare parts not supplied or recommended by the manufacturer,
- fouling of the ventilation system,
- normal wear and tear.

### 01.03 Disposal

End-of-life products should not be disposed of with normal household waste. They should be handed over to a special waste disposal facility or to a dealer who provides this type of service. Incorrect disposal of the product by the user risks administrative penalties in accordance with current legislation.



# 02 Product description

The iZZi V.302/402 ERV STANDARD is a heat recovery ventilation unit designed to provide healthy, energy-efficient and comfortable ventilation in residential buildings. Mechanical ventilation with heat recovery allows a balanced exchange of air in the building by removing used air from the so-called dirty rooms, i.e. kitchen, bathroom, WC, and supplying fresh, filtered air from the outside to, among others, the living room or bedroom, while recovering heat and, in the case of iZZi 402 ERV, also moisture from the removed air.

The iZZi V.302/402 ERV STANDARD is a compact unit with an innovative modular design, which consists of two independent

and interconnected parts - a lower and an upper part. The lower, suspended section houses the durable ERV enthalpy exchanger, which is very easy to access. The upper module, on the other hand, contains: automation, filters (with external inspection openings) and two fans.

The ERV enthalpic heat exchanger with polymer membrane used in the unit allows not only heat energy but also moisture to be recovered, thus maintaining the right climate in the home all year round. The absence of condensation on the enthalpy heat exchanger means that the iZZi V.302/402 ERV STANDARD recuperator has no condensate drain The absence of condensate on the exchanger also means greater resistance to negative outdoor temperatures, which is why the unit has no built-in pre-heater. The iZZi V.302/402 ERV STANDARD recuperator has two maintenance-free energy-efficient direct current(EC) fans for high available compression. The standard equipment also includes a built-in 100 % automatic bypass of the exchanger. The air handling unit is factory-fitted with two pleated filters of ePM10 class  $\geq$  50% (M5). The compact stainless steel casing has a universal wall or floor mounting system.

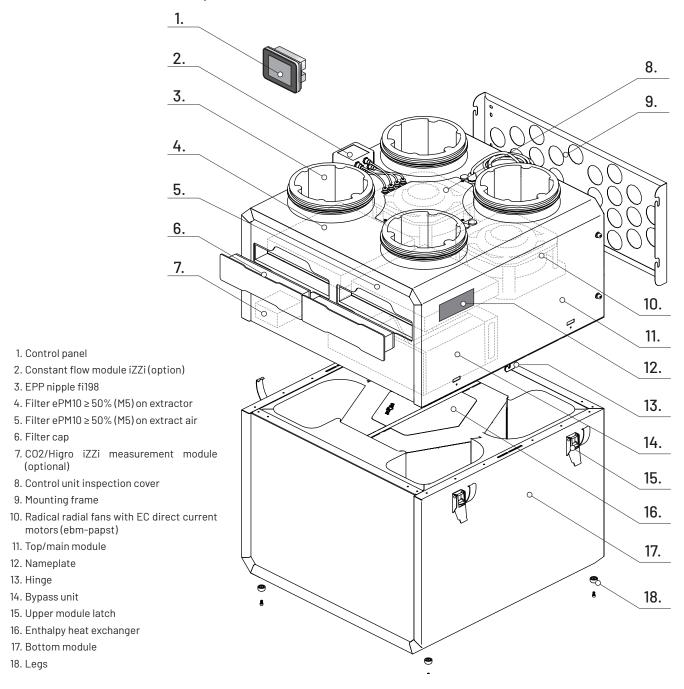
The iZZi V.302/402 ERV STANDARD recuperator is ideal for installation not only in newly built houses, but also in flats and houses already finished and inhabited. Its compact dimensions of 600x635x610 mm / 750x635x610 mm allow the air handling unit to be installed in places where this was previously not possible. The unit's quiet operation, thanks to, among other things, an internal filling made of special polyethylene foam and modern DC motors, also allows it to be placed in living spaces. The modular design, aesthetically pleasing casing and convenient touch panel control, allow for simple and fast installation of the recuperator anywhere: on the wall, in a cupboard, above a washing machine or refrigerator. Only one person is required to install the iZZi V.302/402 ERV STANDARD air handling unit.

### 02.01 Product features

- Enthalpy counterflow heat exchanger with moisture recovery,
- No condensate drain,
- Operation at negative outside temperatures without additional pre-heater plus built-in anti-freeze system,
- Built-in automatic insulated bypass,
- Version with spigots upwards wall or floor mounting,
- Panel with touch and colour screen as standard,
- Energy-efficient DC fans (with reduced noise emissions and stabilised airflow),
- Compact housing made of stainless steel,
- Can be retrofitted with a dedicated constant flow module (recommended especially for self-assembly),
- Automatic operation based on the air quality in the house (with additional module with carbon dioxide and humidity sensor),
- Bridgeless PE foam insulation with excellent acoustic properties,
- Convenient installation console included.

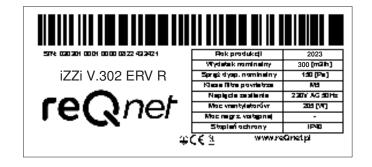
### 02.02 Design of the iZZi V.302/402 ERV STANDARD R air handling unit (right-hand version).

Note: Most of the drawings, descriptions and the assembly of the recuperator are presented in the right version (R). For the left-hand (L) version follow the same procedure - unless otherwise indicated.



### 02.02.1 Nameplate

The rating plate is located on the right side wall of the upper module (figure above). It serves to identify the product. The information on it is needed for the safe use of the product and for servicing issues. The rating plate should not be obscured or removed from the appliance.



### 02.03 The way the recuperator works.

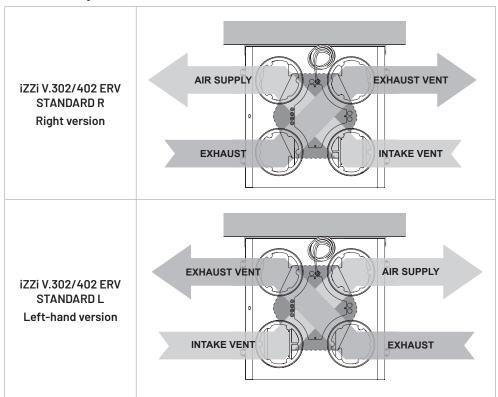
The unit is designed and manufactured as a ventilation unit for residential premises and allows a maximum air exchange of approximately 300 m3 (for iZZi V.302) i 400 m3 (for iZZi V.402) per hour. When selecting a recuperator, take into account not only the surface area of the premises, but also the air exchange demand

EXHAUST: used air is extracted from rooms such as kitchen, toilet and bathroom through the EXHAUST system.

OUTLET: the air cooled in the exchanger is discharged to the outside via the EXHAUST.

AIR SUPPLY: fresh air drawn from the outside is ducted to the heat exchanger via a duct marked "SUPPLY".

AIR INLET: fresh outside air heated in the heat exchanger is blown in through the AIR INLET.



# 02.04 Bypass

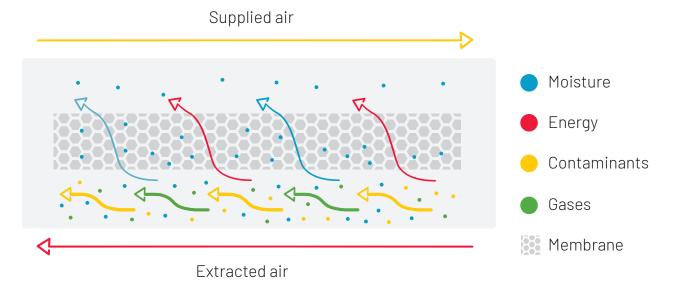
The built-in automatic bypass allows used air to be discharged to the outside, bypassing the heat exchanger so that no heat is transferred to the fresh supply air. This solution makes it possible to take advantage of the free-cooling phenomenon in summer. The bypass settings are described in the panel instructions.



Due to the protection of the system and recuperator, it is not possible to open the bypass when the outside temperature is below 10°C.

# 02.05 Enthalpy exchanger

The unit has a counter-current enthalpy exchanger with a polymeric membrane. The air extracted from the building hygienically gives up heat energy and moisture to the incoming air stream without mixing. The exchanger membrane separates the two air streams and has a thin dense polymer barrier layer that allows water vapour to be absorbed and pass through, while blocking gases, volatile organic compounds and other pollutant compounds. The material of the exchanger also ensures its high durability.



# 02.06 Anti-frost system

The anti-frost system is designed to protect the heat exchanger from frosting at low outdoor temperatures. Thanks to the use of the enthalpy exchanger with a special structure recovering moisture in the iZZi V.302/402 ERV STANDARD recuperator, the phenomenon may appear only in the case of very big frosts, when the temperature outside drops to approx. minus  $7^{\circ}$ C and below. In such a situation, the exchanger defrost mode is activated periodically, consisting of automatic reduction of the supply fan speed and activation of the optional duct pre-heater (if connected).

Caution: do not turn the recuperator off in winter - it may lead to exchanger freezing or flooding of the unit.

# 03 Technical data

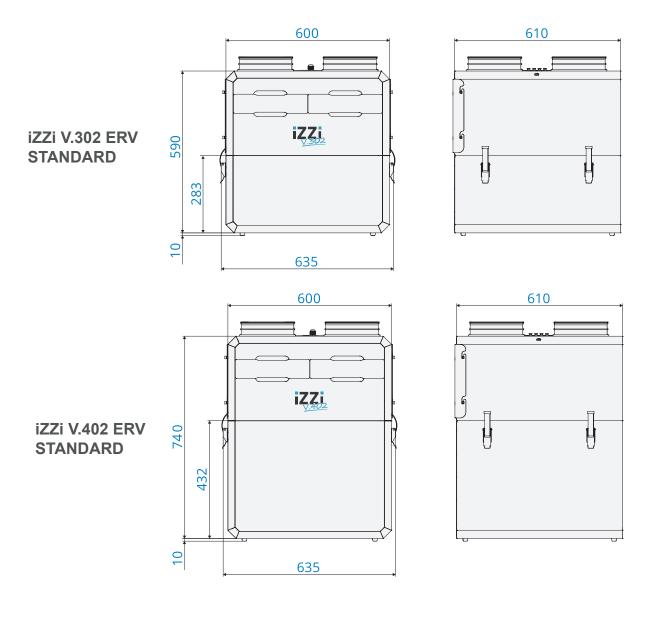
Model	iZZi V.302 ERV	iZZi V.302 ERV STANDARD			iZZi V.402 ERV STANDARD			
Maximum air discharge	300 m <sup>3</sup> /h at 150 Pa 400			400 m <sup>3</sup> /h at 150	400 m³/h at 150 Pa			
Heat recovery efficiency	up to 85%							
Exchanger type	cross-flow counterflow							
Type of exchanger	enthalpy (with moisture recovery)							
Exchanger material	plastic + polymer diaphragm							
Moisture recovery efficiency	up to 65%							
Maximum fan power	165 W							
Gear	1st gear - 30% (90 m³/h at 50 Pa)	2nd gear - 60% (180 m³/h at 100 Pa)	3rd gear - 100% (300 m³/h at 150 Pa)	1st gear - 30% (100 m³/h at 50 Pa)	2nd gear - 60% (250 m³/h at 100 Pa)	3rd gear - 100% (400 m³/h at 150 Pa)		
Energy consumption	20 W	59 W	164 W	20 W	73 W	205 W		
Sound power level emitted by the casing at a distance of 1 metre	26 dB(A)	35 dB(A)	43 dB(A)	28 dB(A)	38 dB(A)	48 dB(A)		
Sound power level - nominal value	38 dB(A) 41 dB(A)							
Fans	radial Redical with EC direct current motors							
Energy efficiency class	A*							
Bypass	automatic, insulated, 100% supply air bypass							
Anti-freeze system	vacuum, only works below -7°C							
Controller	LCD 3.2" with colour touch panel							
Connection of the controller with the unit	Shielded cable 4x0.5**(3 metres included)							
Filters	pleated ePM10 class ≥ 50%*** / M5**** V.302/402							
Connection spigots diameter	4 x Ø200 mm			38 dB dB dD	41 400 m³/h			
Condensate drain	no	no				41 dB 400 m³/h		
Degree of protection	IP 40	IP 40				DERICA- DEPTIM-DEPTIM-DERICH-DERICH-DERICE DYTEC 2016 1254/2014		
Insulation class of appliance	1	State and the st						
Supply voltage	230V (AC), 50H	Z						
Weight (with dedicated rack)	26 kg	26 kg		36 kg				
Dimensions (H x W x L)	600 x 635 x 610 mm			750 x 635 x 610 mm				
Accessories	touch panel with 3.2" colour display connection ferrules Ø200 mm power cable 2.8 m long 3 m control cable stainless steel mounting bracket for wall mounting							
Optional peripherals  * for moderate climates in accordance	GHE damper ad duct cooler	dule ton re-heater econdary heater ctuator		N. 187 (1994)				

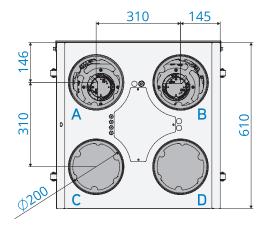
<sup>\*</sup> for moderate climates in accordance with Directive 2009/125/EC and European Commission Regulation No. 1254/2014

<sup>\*\*</sup> above 10 m length recommended 4x0.75 (shielded)

<sup>\*\*\*</sup> according to ISO 16890

<sup>\*\*\*\*</sup> according to EN779





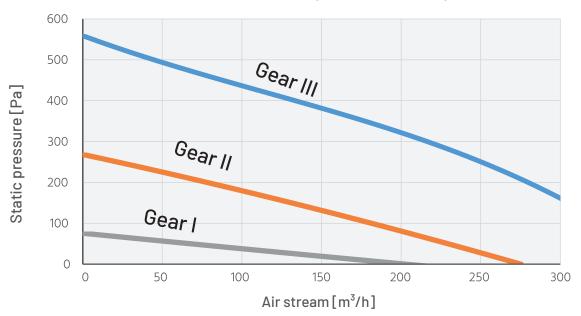
Right version (R)

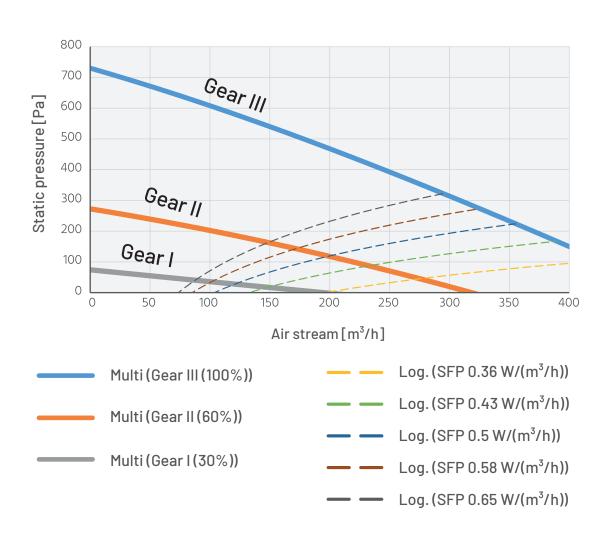
- A AIR INLET
- **B** AIR EXHAUST
- **C** EXHAUST
- D AIR INTAKE

Left-hand version (L)

- A AIR EXHAUST
- **B** AIR INLET
- C AIR INTAKE
- D EXHAUST

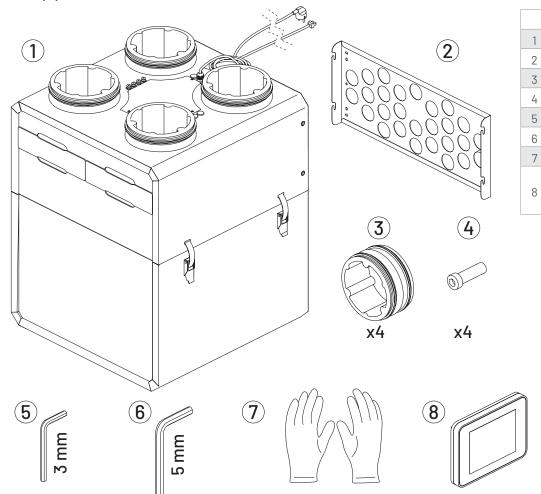
# iZZi V.302 ERV (300 m³/h; 150 Pa)



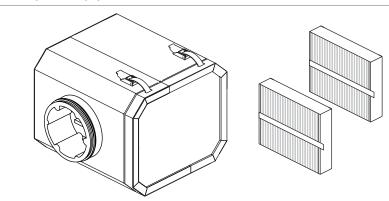


# 04 Scope of delivery

# 04.01 Equipment



# 04.02 Optional equipment



Anti-smog filter box iZZi 200 SF (optional with pre-heater) with a set of two filters of filtration class  $ePM10 \ge 50\%$  (M5) and  $ePM1 \ge 80\%$  (F9)

Description Recuperator

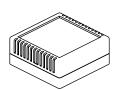
Mounting frame
EPP nipple Ø198 (x4)

Screw M6 (x4)

Allen 3mm Allen 5mm

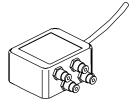
Gloves (x2)

Control panel - for scope of supply see panel instructions



# CO2/hygro measuring module

for automatic control of recuperator performance based on the air quality in the house - see instructions for CO2/ hygro module



# Constant flow module

for automatic balancing of the supply and extract air flow in the ventilation system - see instructions for constant flow module



# Signal cable (15 m)

for IZZi 302/402 ERV control panel

# 05 Planning

### 05.01 Requirements for the place of installation

The iZZi V.302/402 ERV STANDARD recuperator is suitable for installation in rooms where the temperature does not fall below  $5^{\circ}\text{C}$  and the relative humidity does not exceed 70% in winter.

Prepare the ground so that it is even and stable in the recuperator's contact area. For proper operation, the manufacturer recommends installation on a solid wall or, if there is no solid wall, on a suitably reinforced surface that does not transmit vibrations.

### 05.02 Electrical connection

A 230 V electrical connection with earthing ( $\leq 30\Omega$ ) in the form of a plug socket should be prepared at a maximum distance of 2,5 metres from the cable outlet of the recuperator.

### 05.03 Safe area

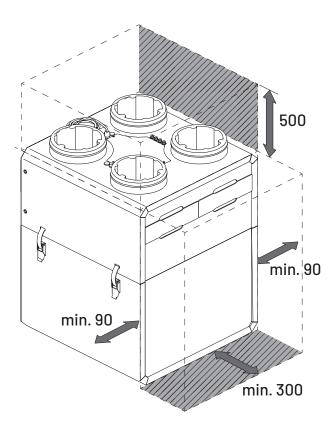
When planning the place for the installation of the recuperator, adequate free and easily accessible space should be kept in front, to the side and above the recuperator (as shown in the figure below) for service and operation purposes.



Ductwork (rigid or flexible) should be connected to the recuperator using dedicated nipples. It is recommended that the correct length of straight lengths is maintained when connecting the ducts to the air handling unit (especially the exhaust and supply ducts). An excessive bend or sharp elbow installed right next to the unit can lead to high installation resistance and a decrease in the maximum efficiency of the recuperator.

### Note:

All recuperator ducts should be properly insulated.

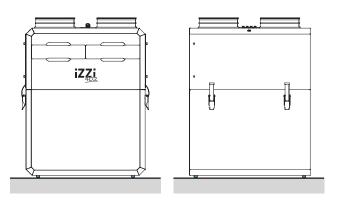


### 05.04 Installation methods

Thanks to the enthalpic exchanger, which does not require condensate drainage, we can distinguish two ways of installing the recuperator:

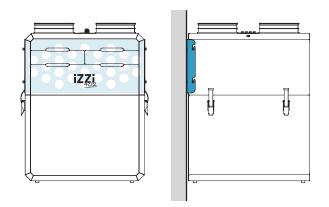
# 05.04.1 On the floor vertically

In the case of installation directly on the floor, the installation is carried out on flexible ducts to allow for a few centimetres of lifting up of the upper recuperator module during maintenance.

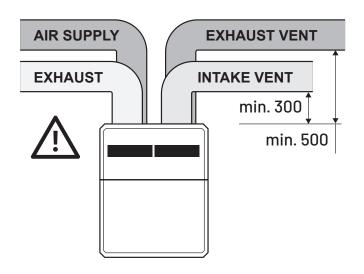


Note: additional elevation on your own.

05.04.2 On the wall



Mounting on the wall is carried out using the special frame included in the scope of delivery.



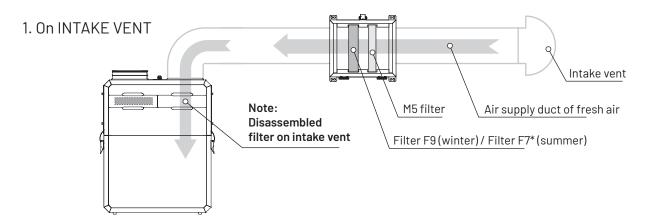
# 05.05 Control panel

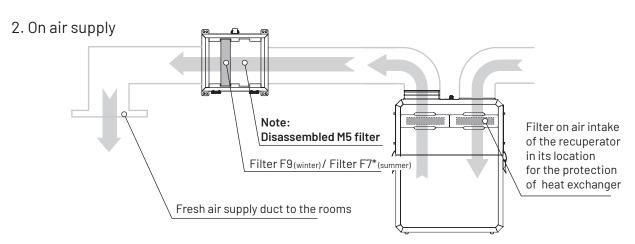
A control panel with a dedicated mounting system is included. Please refer to the installation and operating instructions of the panel to plan its installation correctly.

### 05.06 Anti-smog filter box - optional

In case of additional filter box it is necessary to plan additional place near recuperator (from air intake or room supply side).

Note: The layout of the boxes is shown for the right-hand (R) version, for the left-hand (L) version the reversed direction of the airflow in the recuperator has to be taken into account – see point 02.02 "Recuperator mode of operation".

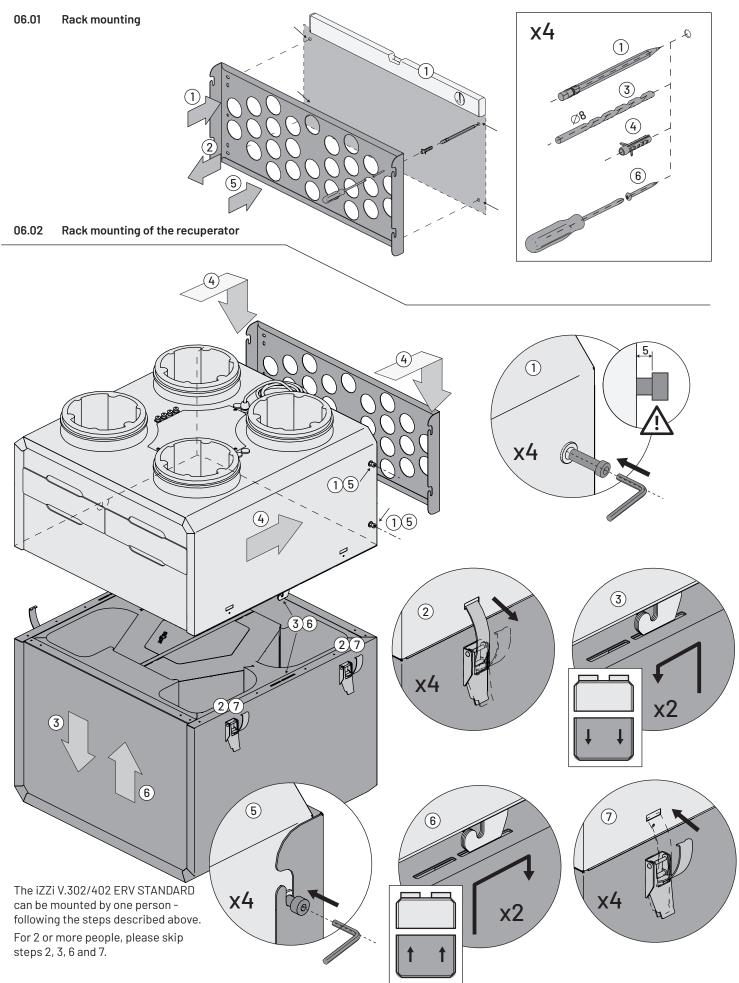




\*-opcja

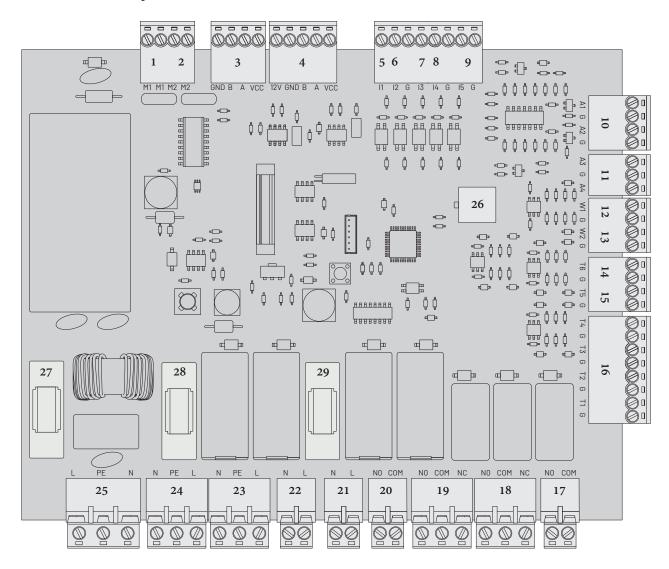
Szczegółowe informację znajdują się w instrukcji skrzynki filtracyjnej.

# 06 Assembly



# 07 Automation

### 07.01 iZZi automation diagrams (model KR-04)

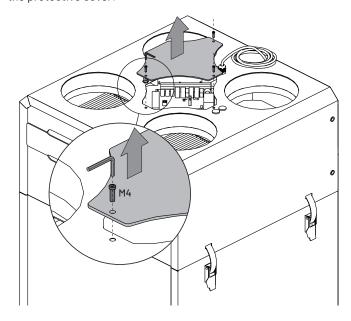


- 1. Bypass actuator
- 2. GHE iZZi damper
- 3. Control panel socket
- 4. Socket for CO2/hygro measurement module iZZi
- 5. Digital input bell button for ventilation (100% efficiency)
- 6. Digital input bell button for fireplace function (supply 90%, exhaust 60% efficiency)
- 7. Digital input switch at the hood (supply 100%, extract 30% capacity)
- 8. Digital input signal from fire panel. (0% efficiency)
- 9. Digital input signal from fire panel (20% of capacity)
- 10. Supply air fan control (A1) Exhaust fan control (A2)
- 11. Analogue 0-10V control of the two-way valve of the heater and the cooler
- 12. Analogue input 0-10V external capacity control
- 13. Outlet inactive
- 14. Duct external temperature sensor (for GWC system)
- 15. Duct sensor after heater/cooler

- 16. Temperature sensors:
  - T1 on the INTAKE VENT
  - T2 on the launcher
  - T3 on the air supply
  - T4 on the exhaust
- 17. Control of the radiator (potential-free contact)
- 18. Control of the radiator solenoid valve (potential-free contact)
- Control of the solenoid valve of the heater (potential-free contact)
- 20. Control of secondary electric heater (potential-free contact)
- 21. Actuator 230V GWC
- 22. Supply to pre-heater
- 23. Supply to exhaust fan
- 24. Supply to supply fan
- 25. Unit supply
- 26. Socket for constant flow module iZZi
- 27. Main Fuse 6.3A 250V 5x20mm
- 28. Fan Fuse 3.15A 250V 5x20mm
- 29. Heater Fuse 3.15A 250V 5x20mm

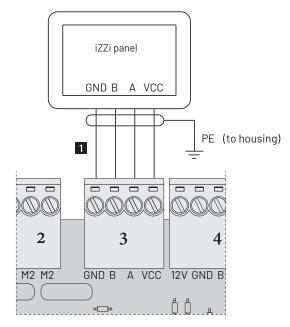
### 07.02 Automatics revision

The automatics in the recuperator is located in the upper part of the recuperator. To access it, unscrew the 3 screws and remove the protective cover:



### 07.03 Touch panel

The iZZi recuperator is equipped with a dedicated touch panel. The installation of the touch panel and the description and capabilities of the controller can be found in the manual supplied with the panel.



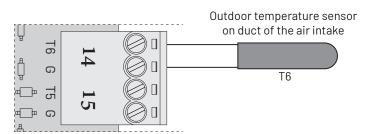
control cable LiYCY 4x0.5mm2 in screen (for connections longer than 10m LIYCY 4x0.75mm2 in screen)

Fig. Connection diagram of the iZZi STANDARD touch panel to the automation board.

### 07.04 Ground heat exchanger\*

The iZZi controller has the possibility to cooperate with the ground heat exchanger (GHE) by controlling the control damper actuator (switching between the ground and wall air intakes) or by switching on the circulation pump in the glycol heat exchanger (GGWC). An additional duct sensor mounted on the air intake duct (see figure below) is required for operation. For activation and setting of the GGHE operation, see the panel instructions.

\*option not available with LITE control panel connected.



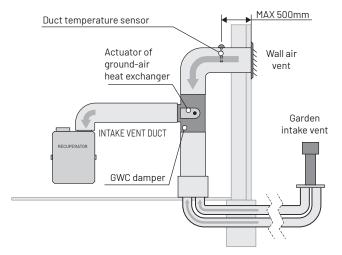
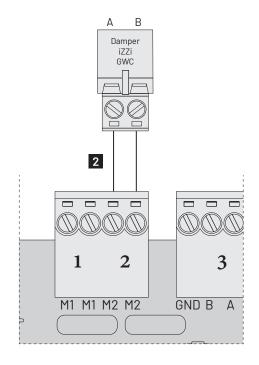
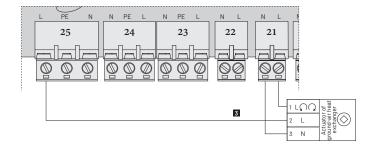


Fig. Connection diagram for the outdoor temperature sensor on the louvre channel



2 control cable 2x0,5mm2

Fig. iZZi GHE damper connection diagram

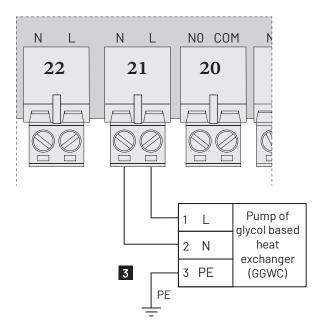


# 3 current cable 3x2,5mm<sup>2</sup>

Specification of the damper actuator:

- AC 230V
- close/open

Fig. Connection diagram for 230V actuator for GHE control damper



3 current cable 3x2,5mm<sup>2</sup>

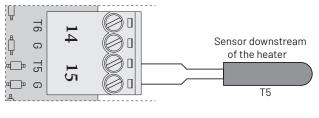
Fig. Wiring diagram for GWWC circulation pump

# 07.05 Ducted secondary heater

# 07.05.1 Electric secondary heater

The iZZi controller is capable of operating a duct electric secondary heater for heating the supply air to the building. The controller allows the electric heater to be controlled on/off or by a continuously controlled 0-10V signal. An additional duct sensor mounted behind the heater is required for operation (see drawing).

For activation and setting of the heater operation, see the panel instructions.



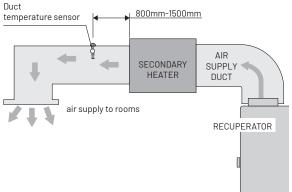
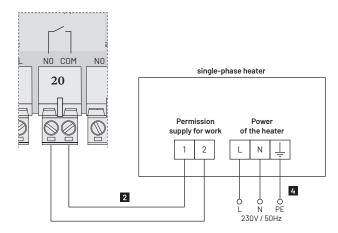
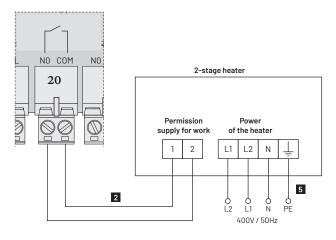


Fig. Drawing of the connection diagram for the temperature sensor behind the electric secondary heater.



- 2 control cable 2x0,5mm<sup>2</sup>
- 4 current cable 3x2,5mm²

Fig. Wiring diagram for a secondary 1-phase on/off electric heater from 1.0 kW to 3.0 kW.



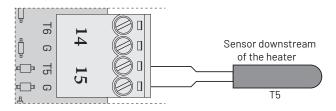
- 2 control cable 2x0,5mm<sup>2</sup>
- 5 current wire 4x2,5mm<sup>2</sup>

Drawing of the connection diagram of the secondary electric heater 2-phase on/off with power from 3,0 kW to 6,0 kW.

### 07.05.2 Water secondary heater

The iZZi controller has the ability to operate a water secondary heater used to heat the supply air to the building. The automation allows 0-10V control of a two-way valve or an electro-thermal in-line valve. An additional duct sensor mounted downstream of the heater is required for operation (see drawing).

See the panel instructions for activation and setting of the heater operation.



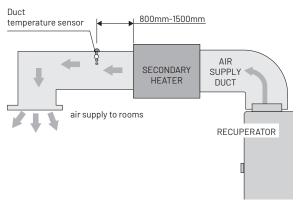
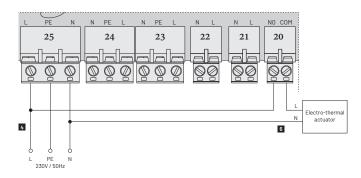
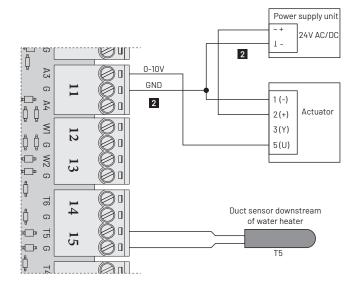


Fig. Connection diagram for the temperature sensor behind the water secondary heater.



- 4 current wire 3x2,5mm<sup>2</sup>
- 6 current wire 2x2,5mm<sup>2</sup>
- Fig. Connection diagram of the water heater controlled by an electro-thermal linear actuator.



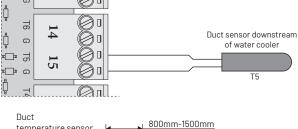
- 2 control cable 2x0,5mm<sup>2</sup>
- Fig. Connection diagram for water heater controlled by 0-10V valve.

### 07.06 Duct cooler

### 07.06.1 Water duct cooler

The iZZi controller is capable of operating a water cooler used to cool down the supply air to the building. The automation allows 0–10V control of a two-way valve. For operation it is required to connect an additional duct sensor mounted behind the cooler (see figure).

See the panel instructions for activation and setting of the cooler operation.



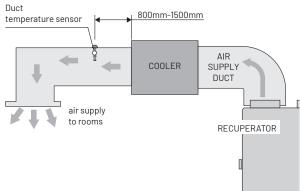
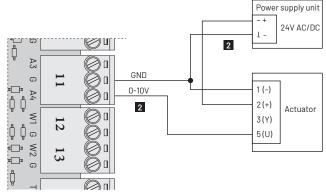


Fig. Connection diagram for the temperature sensor behind the water cooler.



2 control cable 2x0,5mm<sup>2</sup>

Fig. Connection diagram for a water cooler controlled by a 0-10V valve.

# 07.07 Simultaneous connection of the cooler and the after heater.

The iZZi controller allows simultaneous connection of a heater and an aftercooler. The connection is made according to the diagrams described in sections 07.05.1 and 07.05.2. In this case, only one additional temperature sensor needs to be mounted in the supply air duct after the heater and the duct cooler.

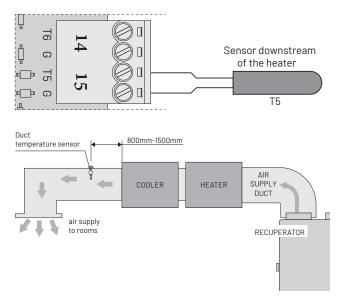
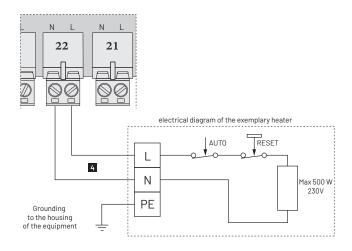


Fig. Drawing of Wiring diagram for the temperature sensor behind the cooler and the heater.

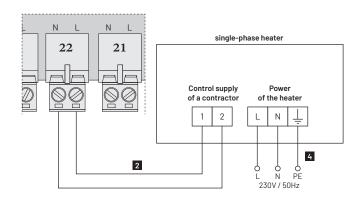
### 07.08 Pre-heater

The iZZi controller has the possibility to operate a duct electric pre-heater for defrosting the exchanger in winter when the outside temperature is low. The heater is automatically switched on with the operation of the anti-freeze system. The automatics allows to control and direct power supply of the heater up to 500W or to control the contactor of the heater above 500W.



4 current wire 3x2,5mm<sup>2</sup>

Fig. Drawing wiring diagram of an electric pre-heater up to 500W.



2 control cable 2x0,5mm<sup>2</sup>

4 current wire 3x2,5mm<sup>2</sup>

Fig. Connection diagram for an electric secondary heater of more than 500W.

### 07.09 iZZi constant flow module (recommended)

The iZZi recuperator has the possibility to connect the optional constant flow module, which is responsible for automatic balancing of the ventilation system during recuperator operation by adjusting the operation of the fans to the actual resistance of the system on the supply and exhaust side. Once connected and activated in the settings, it also allows the current operating status of the recuperator to be displayed in the unit "m³/h".

See the panel instructions for module activation and settings. Installation instructions included with the module.



QR CODE taking you to the video with installation instructions for the module.

Note: In the absence of the module, the ventilation system must be manually balanced by measuring and correcting the capacity of the supply and exhaust fans (see the panel instructions).

### 07.10 CO2/hygro iZZi module

The iZZi recuperator has the possibility to connect the optional CO2/hygro module, which enables the measurement of the concentration of carbon dioxide and humidity in the air removed from the house and the operation of the unit in automatic mode (see the manual of the panel).

See panel instructions for module activation and settings. Installation instructions included with the module.

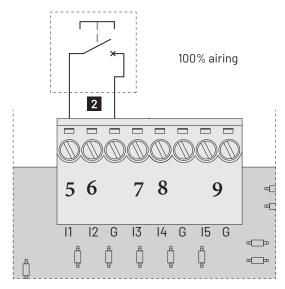


QR code taking you to a video with installation instructions for the module

### 07.11 Bell ventilation button

The iZZi controller has the ability to connect an external bell ventilation button to the digital short-circuit input in the recuperator automation. The cooperation with the bell button consists in giving an impulse (short-circuiting the input to the ground) to the measuring module located inside the air handling unit.

The activation of the ventilating function is also possible from the control panel. For description of the function, see the control panel manual.

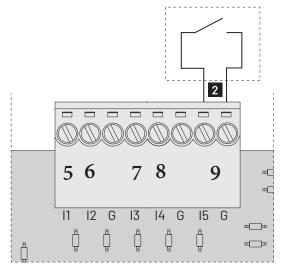


2 control cable 2x0,5mm<sup>2</sup>

Fig. Drawing of connection diagram for bell button (pulse).

### 07.12 Signal from control panel

The iZZi controller has the possibility of cooperation with the alarm panel through connection to the digital short-circuit input in the recuperator automatics. The cooperation with the control panel consists in giving an impulse (shorting the input to the ground) to the measuring module located inside the air handling unit. When the signal is given, the recuperator forces the fans to operate at a low level of 20% of their maximum capacity.

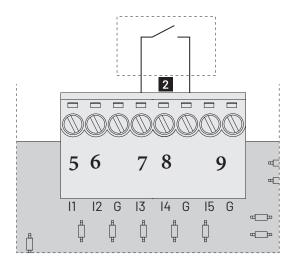


2 control cable 2x0,5mm<sup>2</sup>

Fig. Connection diagram to the control panel.

### 07.13 Switch at the hood

The iZZi controller has the possibility of cooperation with the kitchen hood by connecting the switch to the digital short-circuit input in the recuperator automatics. The cooperation with the switch at the hood consists in giving an impulse (shorting the input to the ground) to the measuring module located inside the air handling unit. When the signal is given, the recuperator starts operating in the following modes: supply 100%, exhaust 30% efficiency.

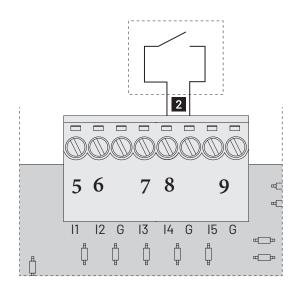


2 control cable 2x0,5mm<sup>2</sup>

Fig. Drawing of the hood switch connection diagram.

### 07.14 Signal from fire control panel

The iZZi controller has the possibility of cooperation with the fire panel through connection to the shorting digital input in the recuperator automatics. The cooperation with the fire panel consists in giving an impulse (shorting the input to the ground) to the measuring module located inside the air handling unit. When the signal is given, the recuperator stops the operation of the fans.



2 control cable 2x0,5mm<sup>2</sup>

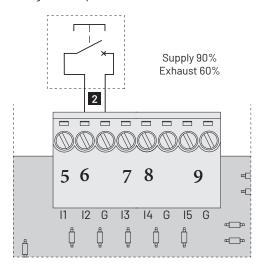
Fig. Drawing of the connection diagram of the fire panel.

### 07.15 Bell button of the fireplace function

The iZZi controller has the possibility to connect an external bell button of the fireplace function to the digital short-circuit input in the recuperator automatics. The cooperation with the bell button consists in giving an impulse (short-circuiting the input to ground) to the measuring module located inside the air handling unit.

The fireplace function increases the speed of the supply fan for a period of 15 minutes to create an overpressure in the house to make it easier to light the fireplace. Activation of the fireplace function is also possible from the control panel\* - see panel instructions.

### \* excluding the LITE panel



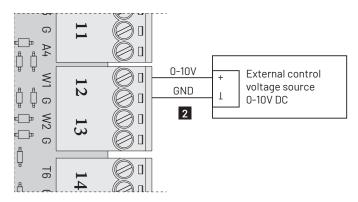
2 control cable 2x0,5mm<sup>2</sup>

Fig. Drawing of connection diagram for bell button (pulse).

# 07.16 External control with 0-10V signal

The iZZi controller has the ability to adjust the capacity by means of an external 0-10V DC voltage signal.

If the voltage given to input 12 (W1, G) is lower than 1V, the device operates according to the mode set on the operator panel. Increasing the voltage above 1V allows the airflow value to be set, where the control voltage is interpreted as a percentage of the recuperator's maximum capacity. 10V means 100% of the maximum capacity, 3V means 30%, and so on. This type of control has a higher priority than the IZZI402 panel functions, as long as the voltage value is between 1 and 10V DC. Below 1V, the function is inactive.



2 control cable 2x0,5mm<sup>2</sup> or other depending on cable length

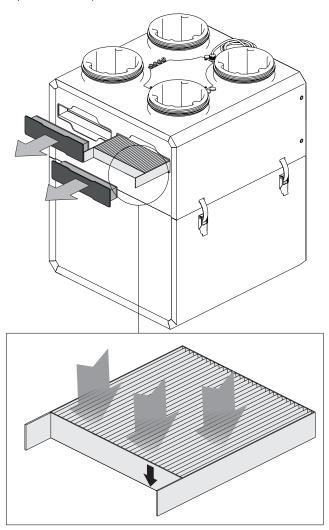
Fig. Drawing diagram of air handling unit capacity control by external 0-10V signal

# 08 Service and maintenance

# 08.01 Filter replacement

The manufacturer recommends replacing the filters once every 90 days. This will be reminded by an alert set in the panel (see the panel manual - Filter condition monitoring).

It is recommended to use original filters meeting the specified parameters. New filters can be purchased e.g. on the website: reqnet.cennik24.pl



When replacing or cleaning the filter, pay attention to the arrows on the filter label. They indicate the direction of air flow. Removing the filter is facilitated by the convenient ears on the sides.

# 08.02 Removing the recuperator cover

For service or maintenance/cleaning of the units it is possible to remove the recuperator cover - as shown in the installation drawing - section 06.02.

# 08.03 FAQ

If you have not found the solution to your problems in the above instructions, please visit the website: re $\mathbb{Q}$  net. pl in the FAQ section.

