PE-FLEX® reQnet

# **PRODUCT CATALOG**

Plan fresh and clean air in your home!

# PE-FLEX®

# **COMPANY HISTORY**

**PE-FLEX** • is a Polish manufacturer of a complete mechanical ventilation system with heat recovery, designed for single-family houses. Our product range includes both **pipes**, **plenum and manifold boxes**, **anemostats**, **air intakes and outlets**, **but also many other accessories**.

As the first in Poland in 2009 we introduced to the market **double-**-walled, corrugated PE-HD flex pipes in the characteristic green color, which have become **the most popular pipes used in mechanical ventilation**, and the name "peflex" has become a common name for pipes of this type in ventilation. Since then, a lot has changed. Our range has grown significantly, giving customers a number of options, while providing the highest level of hygienic installation and comfort of use, and most importantly **fresh and clean** air in their homes. It should also be noted that **PE-FLEX** <sup>•</sup> operates in the Group together with the **manufacturer of intelligent recuperators - reQnet company** and the **manufacturer of hydraulic cabinets and heat pumps - iZZiFAST company.** As a group we provide comprehensive solutions for energy-efficient homes, in the field of recuperation and heat pump heating.

Recuperators reQnet brand are well thought devices for mechanical ventilation systems in single family houses. Creating them we put a special emphasis on **comfort and simplicity of use** and ensuring the best ventilation parameters for the **health of household members**.





# **Mechanical ventilation PE-FLEX®**

Modern mechanical ventilation through regular air exchange in the building, provides **high comfort** of living in rooms. An intelligent and efficient ventilation system guarantees fresh, clean and healthy air in detached houses.

Mechanical ventilation, or recuperation also has a huge impact on the energy efficiency of buildings. In modern, energy-efficient construction, an important issue is to **reduce energy losses**, and the recuperation system allows you to reduce the need for heat by up to **30%** in the entire heat balance. The **heat ex-changer** used in the air handling unit ensures energy recovery and moisture recovery, which is important especially in winter.

Efficient recuperation **ensures an optimum level of carbon dioxide** in rooms by **providing fresh, filtered air, removing pollution, viruses, and dust from the premises.** 

# Advantages of mechanical ventilation

- · Fresh and clean air all year round
- $\cdot$  Optimal levels of carbon dioxide and humidity in the home
- $\cdot$  Meeting the technical conditions of the building in accordance with WT 2021
- $\cdot$  Filtration of intake air from allergens and smog
- Removal of used air from the house together with contaminants such as dust, viruses
- $\cdot$  Energy recovery supply air is heated by warm exhaust air
- $\cdot$  Lower heating costs savings of up to 50%.
- $\cdot$  No need to open windows and associated heat losses
- $\cdot$  Full control over the amount of exchanged air
- $\cdot$  No need to build expensive and unsightly ventilation chimneys

# Plan fresh and clean air in your home!

# The most popular ventilation system on the market

# PE-FLEX®



# PE-FLEX®

# Key features of the PE-FLEX® system



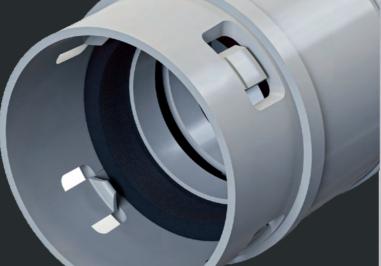
# Flexibility and ease of configuration

The components of the system allow for any configuration of the system to best suit the building. **The components are compatible with each other** and designed to form a single, sealed ventilation system. **Different duct diameters** and different types and variants of **expansion and manifold boxes** can be used in a single system for the most efficient distribution of the installation.



# Easy and quick installation

The CLICK coupler connection system enables the ducts to be quickly assembled to system components such as manifold boxes, plenum boxes and couplers. The CLICK coupler enables easy assembly and disassembly of the ducts, and thanks to a built-in gasket there is no need for additional sealing of the connection. A dedicated wire cutter speeds up the assembly process.



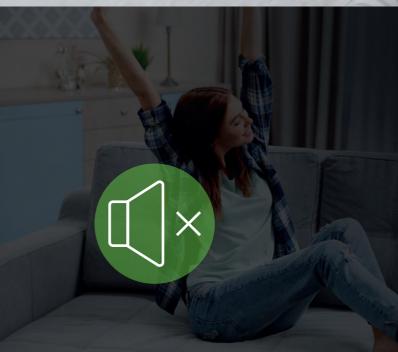
# Durability

Ventilation system components are made of **durable materials** such as PE-HD plastic, polypropylene and stainless steel.

Ventilation ducts have a **resistance** to external pressure of min **500N**, which allows for safe installation in the **insulation layer of the floor**. The whole system can function smoothly for years of use.

# **Tightness**

The **coupler on CLICK** is a system solution used in all elements requiring connection with **PE-FLEX®** pipe. The coupler has a **built-in inner gasket** that guarantees a tight connection and a dedicated knife for cutting the ducts, ensures the correct edge of the duct adhering to the gasket. PE-FLEX®-air ducts combined with our plenum boxes and distribution boxes provide a high degree of **airtightness** for the entire system (class "C" according to EN 12237). PE-FLEX® air ducts have an airtightness class o

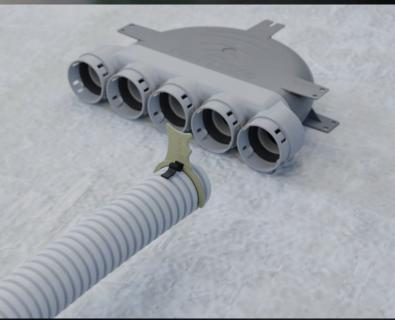




# **Biological protection**

Used materials and additives provide **biological protection** of the ventilation system for the safety and health of users. The Spectra 1000 ventilation duct provides the **highest biological protection** of almost 100%. The inner layer of the duct has **antibacterial**, **antifungal and antistatic properties**, which additionally reduce the settlement of dirt - dust.

All elements of the system are certified hygienically by the National Institute of Public Health - National Institute of Hygiene.

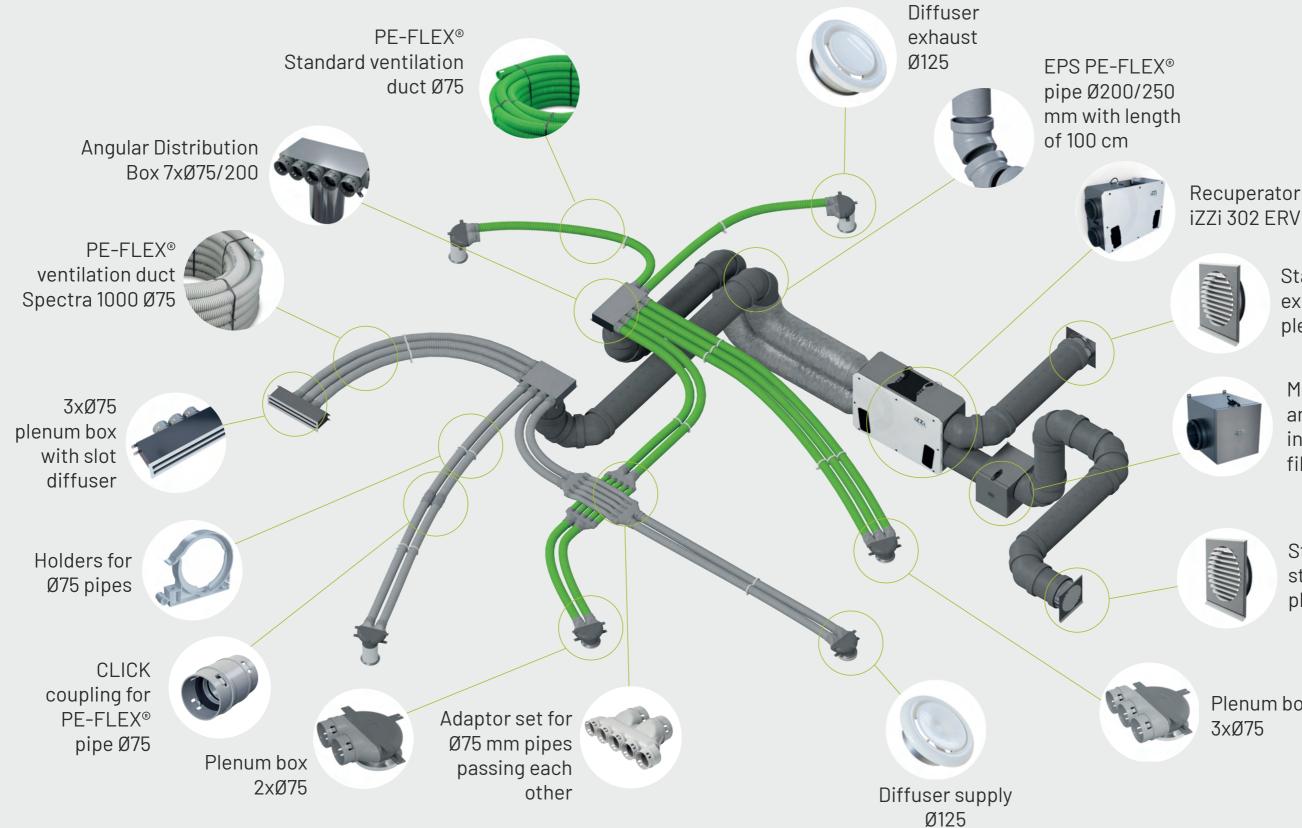


# Noise

A correctly designed system based on **PE-FLEX** <sup>(\*)</sup> mechanical ventilation, especially the double-walled design of the ventilation ducts with the correspondingly profiled inner wall and the closed air cavities, ensures low noise levels in the entire system during operation.



# **Plan fresh and clean air at home with our products!**







Stainless steel exhaust plenum

M5/F9 iZZi SF anti-smog insulated filter box

Stainless steel intake plenum

Plenum box



# **PE-FLEX®** Standard duct

Flexible corrugated ventilation duct, with antibacterial and antifungal smooth inner layer. Made of high-quality PE-HD plastic with external dimensions of Ø50, Ø75 lub Ø90.



Pipes are fully **odorless**, so they do not emit any odor.

The inner layer has antistatic properties, which re- Polish National Institute of Public of Health.

Type of pipe:	PE-FLEX <sup>®</sup> 50	PE-FLEX <sup>®</sup> 75	PE-FLEX <sup>®</sup> 90
Outer diameter [mm]	Ø50	Ø75	Ø90
Inner diameter [mm]	Ø40	Ø60	Ø75
Coil lengt [m]	100	50	40
Flow capacity [m3/h] at 3 m/s	12	30	45

# Antifungal Aq, Cu, + product

Antibacterial Antistatic

tubes, and additionally the smooth surface facilita-

The pipes have the **reaction to fire class D-s2,d2**.

The product has a hygienic certificate, issued by

# **PE-FLEX® SPECTRA 1000 duct**

Flexible ventilation duct with a corrugated structure and the best antibacterial and fungicidal properties, up to almost 100%. Made of the highest quality **PE-HD** plastic with external dimensions of Ø50, Ø75 or Ø90 mm.



# **Key features**

Antibacterial and antifungal internal layer confirmed by certificates, with almost 100% biocidal efficiency, protects ducts against colonization of unwanted and dangerous for humans microorganisms.

The two-layer construction of the ducts, ensures **high** compression strength and allows for pouring the pipes into structural concrete or placing them in the insulation layer of the ceiling.

The high flexibility of the ducts significantly facilitates the installation by free shaping, bending and routing of the ducts without the need for additional fittings.

The inner layer has antistatic properties, which reduces the settling and accumulation of dust in the tu-

Type of pipe:	PE-FLEX <sup>®</sup> 50	PE-FLEX <sup>®</sup> 75	PE-FLEX <sup>®</sup> 90
Outer diameter [mm]	Ø50	Ø75	Ø90
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Coil length [ m ]	100	50	40
Flow capacity [m3/h] at 3 m/s	12	30	45





bes, and additionally the smooth surface facilitates cleaning.

Pipes are fully **odorless**, so they do not emit any odor.

The pipes have the reaction to fire class D-s2,d2.

The product has a hygienic certificate, issued by Polish National Institute of Public of Health.

# **BOXMAKER-manifold boxes**

PE-FLEX® manifold boxes are customized and manufactured to individual order - they can have any dimensions and spigot arrangement. With **BOXMAKER**, you can design an individual box with a fast lead time. Optimally matched distributors, make it possible to build ventilation systems and connect recuperators faster, easier and better.



# **Key features**

Boxes are made entirely of stainless steel, which ensures their long durability.

Individual box dimensions, spacing and spigot sizes can be designed individually in the intuitive BOXMAKER software, which also stores your design so you can easily return to it in the future. Adapt the box to your own installation, not the installation to the box.

In the boxes, we use system ventilation pipe sockets made of polycarbonate with a built-in gasket and a **CLICK mounting system**, which makes it easy to install the manifold.

The PE-FLEX® ventilation pipes connected to the plenum and manifold boxes provide a high degree of airtightness for the entire system.

The BOXMAKER program also makes it possible, to plan mounting brackets on any plane of the box.

The refined production process for the boxes, enables projects to be completed in just a few days.

### Hygienically certified by PZH.

Box dimension	Number and size of spigots	Main spigots	Type of box (angle, pass-through)	Mounting ears
Individually specified	to your choice	of type and size	to your choice	to your choice

# **Plastic plenum boxes**

**PE-FLEX®PLENUM boxes** are used to connect flexible ducts to anemostats. They are made of polypropylene, have sockets with gaskets and are assembled using the **CLICK system**, and are available in various connection versions.



# **Key features**

The boxes are made of **durable plastic**, which allows them to be placed in the insulation layer of the ceiling.

A wide range of box versions, makes it possible to mount the mechanical ventilation system both under the ceiling and directly on the ceiling.

The sockets in the boxes are made of polypropylene and have **pre-installed gaskets** and a CLICK assembly system, which greatly speeds up installation and guarantees a tight installation.

PE-FLEX<sup>®</sup> ventilation ducts connected to plenum boxes and manifold boxes, provide a high degree of system tightness.

Anemostats with a diameter of Ø125 mm can be directly connected by means of an anemostat frame inserted into the plenum box in the socket version, or by means of a plenum box extension in the nipple version.

Free holes in the box, **can be closed with dedicated plugs** to ensure a tight installation.

The boxes have convenient **mounting brackets**.

The product has a hygienic certificate, issued by Polish National Institute of Public of Health.

Number of sockets in plenum boxes

2xØ75





3xØ75

2xØ90

5xØ50

# All plastic boxes are offered in two versions:



• with Ø125 mm socket spigot , for direct connection of Ø125 mm diffuser frame



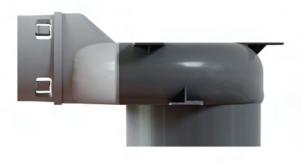
• with nipple spigot Ø123 mm enabling extension of the box stub with our extensions, flexible pipe or any pipe with diameter Ø125

# **Plenum box extension**

Plastic pipe for extending the connection of the PE-FLEX<sup>®</sup> plenum box to the diffuser frame. It is designed for boxes made of polypropylene (model 5xØ50, 2xØ75 and 3xØ75, 2xØ90).



# Plastic plenum boxes 2x075, 3x075, 2x090 and 5x050 are additionally available in two variants:



• floor mounting - on-floor mounting



• ceiling mounting - under-ceiling mounting

Number of spigots in plenum boxes	2xØ75	3xØ75	2xØ90	5xØ50

# **Plastic plug**

A plug made of PP plastic used to plug unused spigots in plenum boxes of various diameters. The plugs are matched to the diameter of the sockets and the diameter of the stubs for diffusers.





# Key features

The extension is designed for nipple boxes with Ø123 mm spigot. It is suitable for direct mounting of the diffuser frame. **Available in different lengths:** from 10 to 150 cm. The product has a **hygienic certificate**, issued by Polish National Institute of Public of Health.

# Key features

Plugs with diameters **Ø 50mm, Ø 75mm and Ø 90mm** are used to plug unused "CLICK" plastic sockets in plenum and distribution boxes.

Plugs of diameters **Ø 100mm, Ø 125mm, Ø 160mm, Ø 200mm and Ø 250mm** are used in plenum boxes to secure spigots for diffusers or in manifold boxes to secure spigots for ventilation ducts.

Simple push-fit assembly.

# **Stainless steel plenum boxes**

Plenum boxes made of stainless steel have system sockets with a built-in gasket and **CLICK** assembly as well as spigots adapted for direct mounting of the diffuser frame. Available in different configurations connectors.



certificate, issued by National Institute of Public Health

# **Key features**

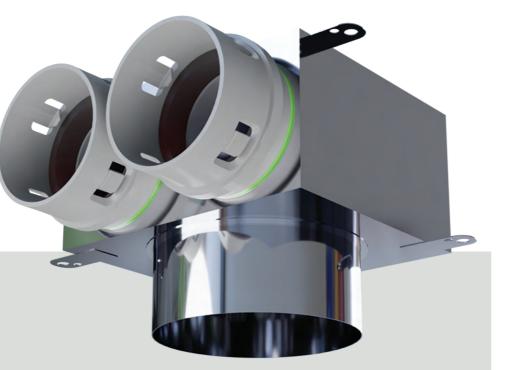
The plenum boxes are available with two ty**pes of spigots** for the diffuser:

- with adaptation for independent extension of the stub pipe to the diffuser frame: flexible pipe, spiro pipe or plastic pipe

- adapted for direct connection to the diffuser frame

Boxes sockets are made of polypropylene and have a factory-installed seals and the assembly system CLICK , which significantly speeds up installation and guarantees a tight installation.

Spigots for anemostats are available in two variants: socket and nipple, and in three dia-



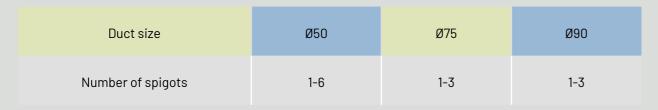
meters. Additionally, it is possible to extend them.

Depending on the location of the diffuser, the boxes are available in three variants: angular, pass-through.and directional.

The PE-FLEX<sup>®</sup> ducts connected to the plenum and distribution boxes provide a high level of airtightness throughout the system.

The boxes have a convenient mounting bracket.

The product has a hygienic certificate, issued by Polish National Institute of Public of Health.



# **Plenum box for slot diffusers**

The stainless steel plenum box has a system socket with a built-in seal and **CLICK** assembly and is dedicated for slot diffusers. They are available in two versions: angled and pass-through.





# **Key features**

The box is made entirely **of stainless steel**, which ensures its long-term durability.

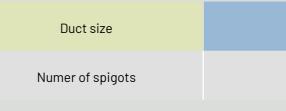
Sockets in the box are made of polypropylene and have a factory-installed seals and the assembly system CLICK, which greatly speeds up installation and guarantees a tight installation.

Depending on the location of the slot diffuser, boxes are available in two variants: angular and pass-through.

Matching **PE-FLEX**<sup>®</sup> slot diffuser.

The boxes have convenient mounting brackets.

### The product has a hygienic certificate, issued by Polish National Institute of Public of Health.





Ø50	Ø75
7	3 or 4



# **Slot diffuser**

The linear slot diffuser is designed for air supply in ventilation systems and is particularly suitable for mounting on walls or vertical structures. Each slot is equipped with independent blades allowing for easy change of direction of the supplied air.



# **Key features**

Allows you to conveniently direct and adjust the airflow in different directions.

Original and minimalist design makes it suitable for **modern interiors.** 

Fitted with a PE-FLEX<sup>®</sup> plenum box, which ensures the tightness of the entire installation.

**High airflow** capacity up to 120m3/h.

Overall length	Internal length	Material	Color
530 mm	495 mm	aluminum + plastic	RAL 9016 white glossy

# **Adaptor set**

A set of adapters (connectors) for non-collision crossing of ventilation ducts or crossing of ducts with other installations, which facilitates installation of ventilation system.



# **Key features**

**Complete set** for making a duct crossing or crossing over installations, including: adapters, plugs, vent pipe.

The set makes it possible to cross over PE-FLEX® flexible ventilation ducts, without having to go over the polystyrene foam in the floor insulation.

It allows PE-FLEX® ventilation pipes to cross over with other installations without the need for rework.

The sockets in the adapters are made of polypropylene and have a **factory-installed seal** and the **assembly system CLICK**, which significantly speeds up installation and guarantees a tight installation.

It is possible to use plugs and create other configurations of adapters.

### The product has a hygienic certificate, issued by Polish National Institute of Public of Health.

Set 1	Set 2	Set 3
<ul> <li>2 adapters 5x50/2x75</li> <li>5 metres of Ø50 mm pipe</li> <li>plug</li> </ul>	<ul> <li>1 pc adapters 5x50/2x75</li> <li>plugs</li> </ul>	<ul> <li>2 adapters 5x50/2x75</li> <li>5 meters of SPECTRA pipe Ø50 mm</li> <li>plugs</li> </ul>



# **CLICK connector for ventilation ducts**

System fitting for connecting flexible PE-FLEX® ventilation ducts with integrated gasket and CLICK assembly system, which ensures high tightness and durability of the connection of two pipe sections. Does not require the use of additional gaskets and sealing tape.



# **Key features**

The connector is available in three sizes according to the diameter of the PE-FLEX® ventilation ducts: Ø 50mm, Ø 75mm and Ø 90mm.

The connector is made of durable plastic, which allows it to be placed in the insulation layer of the ceiling.

It has a built-in factory seals and the assembly system CLICK, which significantly speeds up installation and guarantees a tight installation.

The special design of the latches prevents the ventilation ducts from dislodging.

Allows the use of ventilation ducts' ends.

The product has a hygienic certificate, issued by Polish National Institute of Public of Health.

Outer diameter table:

Ø50

Ø75

Ø90

# **PE-FLEX®** duct cutter

The PE-FLEX® duct cutter makes it possible to cut ventilation ducts quickly and evenly. It considerably improves the assembly of the ventilation system and enables the pipe to be **tightly connected** to the plenum and distribution boxes.



# **Key features**

Available in three sizes to suit the diameter of the ventilation ducts.

Guarantees **fast and precise cutting** of the PE-FLEX<sup>®</sup> ventilation duct, which consequently ensures tightness of the entire installation.

Facilitates the assembly and significantly reduces the assembly time of the entire installation.

Table with available sizes:



Ø50

Ø75

Ø90



# **Ducting Clamps**

Specially developed holders for PE-FLEX® flexible ducts, enable quick installation on ceilings and walls. The clamps can be connected in series with a tongue-and-groove connection, making it possible to install several ventilation ducts inparallel.

# **Key features**

Dedicated pipe clamps **make it easy for one person** to install the PE-FLEX<sup>®</sup> ventilation system!

**Time-saving** when installing the entire system.

The mounting holes allow the clamps to be fixed to the ground with dowels or screws.

Suitable for flexible ducts with an external diameter of Ø 75 mm.

Closing from the top, facilitates the installation of ducts under the ceiling, and tongue and groove allows for quick connection of brackets

# **Acoustic foam damper PE-FLEX®**

PE-FLEX<sup>®</sup> damper mounted directly before the diffuser, is used to **smoothly** regulate the air flow and suppress noise in ventilation systems. It is used both on supply and exhaust ducts.



Allows convenient and smooth airflow adjustment without removing the damper from the duct. It is enough to turn the lower ring to expose the oval pass-through openings.

It is especially useful when the air flow in a given point is too high and the regulation with a diffuser is impossible or generates a lot of noise.

It is equipped with **additional pass-through** holes intended for removal by the user in the case of a desire to obtain maximum air flow.

It is made of a special plastic acoustic foam with very high damping properties.

Very easy to install directly in front of the diffuser.

diameter	thickness
Ø128 mm	40 mm



# Air diffusers with mounting frame

Air diffuser, as the end of air distribution system in mechanical ventilation enables proper air distribution in rooms. They are available in two versions: supply and exhaust.

# **Conical filters for diffusers**

A conical FSA filter for anemostats is **mounted directly on the anemostat**, **protecting** ventilation ducts against pollution. The shape of the cone, reduces pressure loss of the flowing air, while maintaining a large filtration surface area.



# **Key features**

Modern design to suit contemporary home interiors.

The rotary disc, enables proper air distribution in rooms and smooth adjustment of the supply and exhaust air stream.

Low noise level due to additional dampening foam on the rotary disc in the supply valve.

**Simple installation** with metal clips in the mounting frame or press-fit directly into a circular duct. In addition, it has a **built-in gasket** and holes for screwing it to the ceiling, which protects the diffuser from slipping out.

Easy to measure airflow,

Table with available sizes:

Ø 100 mm

Ø 125 mm



# **Key features**

Provides protection against contamination of the exhaust ductwork and the entire recuperation system made of cone-shaped filter fabric that traps dirt such as dust, insects and grease.

The conical filters significantly **extend the working time** of the filters used in the recuperator.

Mounting directly above the anemostat allows easy access and filter replacement.

Table with available sizes:

Ø 80 mm





Ø 100 mm

Ø 125 mm

Ø 160 mm

# Stainless steel air intake/outlet

Flat, square external grille for the end of air intake and exhaust ducts of recuperation systems, mounted on the external wall of the building or in the roof soffit.





# **Key features**

The fins in the grille are made to **minimize air resistance**.

Made of high quality stainless steel for outdoor use without the risk of corrosion.

Additional drip cap protects the facade against stains.

A rubber gasket makes the air intake/exhaust easy to install and protects against water leaking from the ventilation duct under the grill.

The air intake is available in three sizes: Ø200, Ø250 and Ø315 mm.

Table with available sizes:

Ø200

Ø250

Ø315

# **Filters for recuperators**

### High quality replacement filters with improved parameters for e.g. Zehnder and KOMFOVENT recuperators. PE-FLEX® filters have a number of improve**ments** to extend the operating time and improve tightness.



# **Key features**

Larger number of pleats and increased filtration surface in comparison to the original filters, provides greater dust capacity of the filter and extends its operation time without causing large air resistance.

**Rigid and durable cardboard filter frame** and **foam gasket** ensuring high tightness of the filter installed in the recuperator.

**Increased filtration class** in comparison with the original ones. Filters are available in 3 classes of filtration: **G4 - standard coarse filter, M5 - with increased filtration parameters** and F7 - anti-dust filter.

Easy to use and replace thanks to comfortable and durable handles allowing to remove the filter and a clear arrow showing the direction of airflow.

Filters fitted for the most popular models of Zehnder and KOMFOVENT recuperators.

Filters are available in 3 classes of filtration:



G4

M5

# **MEET OUR NEW INSULATED EPS SYSTEM FROM PE-FLEX®**

The **PE-FLEX**<sup>®</sup> EPS air distribution system is an **innovative** way to combine **high instal**lation aesthetics with fast installation speed and excellent duct insulation.

EPS system was created as a complement to the PE-FLEX® system for air distribution in the building. It is therefore a modern alternative to the rigid spiro ducts and flexible flex ducts used so far, which are used to connect the recuperator with distribution boxes and air intake and outlet.



# **Key features**

### **INSTALLATION OF THE SYSTEM**

The PE-FLEX<sup>®</sup> EPS air distribution system was designed to minimise heat loss in the building and to enable bridgeless routing of ventilation ducts between the air handling unit and the air intake and outlet grilles from the external insulation of the building to the insulation of the unit.

The PE-FLEX<sup>®</sup> EPS ventilation system also makes it possible to connect the recuperator to the ventilation system quickly, simply and professionally. EPS ducts connecting the recuperator with manifold boxes ensure high parameters of the whole recuperation system in the house

To ensure optimal operation of the mechanical ventilation system in the house and low noise level we recommend connecting the recuperator with PE-FLEX® EPS system by using **AKUDEC** flexible silencer or a minimum of one meter section of flexible duct **SONODEC** on the supply air duct or all connections of the recuperator.

### Up to 25% greater insulation

(thermal resistance) compared to flexible and rigid ducts insulated with wool of the same thickness ensures excellent performance of the installation.

### Integrated mounting grommets

with a snap-in system improve assembly and reduce the number of parts needed to assemble the entire system

### Up to 25% cheaper installation cost

compared to competitive systems due to the No thermal bridges use of integrated sockets and no need for additional fittings.

### **Compatible with other systems**

steel and flex channels with a diameter of Ø200 mm using the system EPP nipple.

### 2x faster installation

thanks to the use of insulating material and no need for additional insulation of ventilation system components.

### 8 x lower weight

than the installation of traditional steel ducts insulated with wool is much easier to install and transport.

# Easy and tight press-fit connection



### High resistance to moisture and water

The foamed polystyrene from which the system elements are made guarantees high durability and constant insulation parameters, as well as the absence of problems with wetting the insulation.

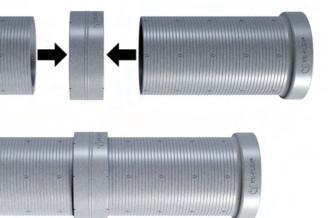
### Lower air flow resistance

compared to flex insulated ducts, thus increasing air handling unit efficiency and reducing energy consumption.

and continuity and tightness of insulation along the entire length of the installation, thanks to built-in sockets and system couplings connecting all the elements of the system.

### Simplicity of assembly

based on the principle of joining the elements by pressing and cutting them without the need to use professional equipment.



# OF WHICH COMPONENTS DOES THE PE-FLEX® EPS SYSTEM CONSIST?



PE-FLEX<sup>®</sup> EPS pipe Ø200/250 mm with a length of 100 cm with integrated mounting cup and 25 mm thick walls

Rigid ventilation duct designed for air distribution in mechanical ventilation systems with recuperation. Made entirely of EPS polystyrene with a high density of 40 kg/m<sup>3</sup> guarantees very good insulating properties of the pipe along its entire length. Pipe inner diameter is Ø200 mm, outer diameter is Ø250 mm, length 1000 mm.



# Elbow EPS PE-FLEX<sup>®</sup> 45° Ø200/250 mm replacing a socket and allowing to use any piece of EPS pipe

Light and resistant elbow EPS 45° allows to make bends in ventilation installations, and thanks to its compact design and the possibility of joining two elbows together also short right angle bends with the radius of 90°. Smooth inner surface and special profiling minimize resistance of the flowing air on the bend of the installation.



### Socket EPS PE-FLEX<sup>®</sup> Ø250 mm

to connect the PE-FLEX<sup>®</sup> EPS system with standard metal and flexible ducts

The EPS socket is used to join two sections of EPS PE-FLEX<sup>®</sup> pipe when you want to use a previously cut off section of the pipe without a socket. This minimizes the waste and costs of the whole installation. In the same way we can connect the cut piece of pipe with an elbow.



### PE-FLEX<sup>®</sup> EPP nipple Ø198 mm for connecting SONODEC and steel ducts with a diameter of Ø200 mm

The EPP nipple is made of deformation- and damage-resistant foamed polypropylene, which has very good insulation properties and is water-resistant. This allows for a safe connection without a thermal bridge between the PE-FLEX<sup>®</sup> ventilation system and standard flexible flex ducts and steel spiro ducts with a diameter of Ø200 mm.



### Stainless steel coupler Ø250 mm for connection of Ø250 mm air intake/exhaust grilles

The Ø250 mm coupler is made of weatherproof stainless steel and allows for connection to the bare end of the EPS PE-FLEX<sup>®</sup> pipe for air intakes and outlets with a diameter of Ø250 mm.



# New generation of inteligent recuperators

# **ReQ series recuperators**

The reQnet recuperators are designed to provide maximum indoor air comfort with minimal primary energy consumption, while maintaining the highest levels of comfort. For this reason, all models feature intelligent control with built-in CO2 and humidity sensors to automatically adjust the ventilation level in the building, while the internet connectivity allows the recuperator to be controlled also outside the home via a mobile app. To maintain the highest air quality, the units can be equipped with an anti-smog or anti-dust filter and an enthalpy heat exchanger (ERV) to minimise the drying out of the air in the building in winter.

The recuperator's insulation made of polyethylene foam provides excellent acoustic and thermal insulation with no thermal bridges, as well as low weight.

The use of EBM-Papst's state-of-the-art DC radial fans combined with a constant flow system, guarantees low electricity consumption and quiet operation of the recuperator.

# requer

# **New level of standard features in recuperators**

We want you to enjoy all the benefits we offer. That's why when you opt for our product you get a fully equipped unit - at no extra charge. Enjoy 100%, not half.





# **Features**

The use of an enthalpy exchanger (ERV models) with an innovative polymer membrane that recovers moisture from the exhaust air will maintain maximum air quality comfort at your home.

Smart control based on built-in CO2 and humidity sensors, will automatically adjust the ventilation level taking care of your comfort and optimise electricity consumption.

The built-in Wi-Fi module, by connecting to your home internet network, will allow you to control the recuperator via internet using your mobile device from anywhere in the world.

# **Control the recuperator via your phone**

We have included a Wi-Fi module in each control unit, which connects to your home internet and allows the unit to be conveniently controlled from your phone by anyone in the house - even on the sofa, even on the other side of the world!

The reQnet app provides complete management of your recuperator, without the need to install additional wall controls. It allows you to control multiple operating modes of the unit and allows you to view the current operating parameters remotely.



The innovative dual supply air filtration system with an F9 class fine filter to protect against so-called smog, is the only one in this class of appliance that will truly protect your family's health.

Extensive automation will enable you to integrate the heat recovery unit into your smart home system and connect a range of optional peripherals.







flow









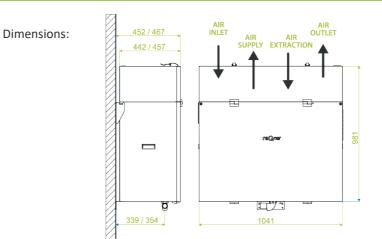






# Vertical air handling unit reQ V.400/550

The recuperators of the reQ V. series are the units with upper spigot exits with the possibility of hanging on the wall. The robust stainless steel casing and excellent acoustic and thermal insulation through the use of polyethylene foam make them ideal for installation in domestic utility rooms. The use of one of the largest counter-flow heat exchangers in this class of recuperators with a surface area of  $35 \text{ m}^2$ ensures high heat recovery. The reQ V. recuperators are available in two versions with capacities of 400 and 550 m $^{3}$ /h and can have an optional moisture recovery exchanger (ERV).



### Available versions:

reQ V.400 HRV

### reQ V.550 HRV counterflow with heat recovery

reQ V.400 ERV

### reQ V.550 ERV enthalpic counterflow with heat and moisture recovery

# **Easy and quick installation**

Thanks to its unique flat construction with a laterally placed heat exchanger, the reQ V. recuperator protrudes from the wall by only 47 cm! This allows the recuperator to be conveniently mounted in narrow rooms or garages.

The reQ V. series air handling unit is mainly designed for wall mounting in technical rooms. The original stainless steel mounting bracket included as standard allows the unit to be hung on the wall in a fast and stable manner.

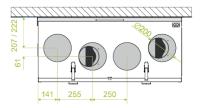




Model	reQ V.40	0 HRV / ERV	reQ V.550	) HRV / ERV
	(00 3/1 *	by150 Pa(HRV)	FF0 3/4 *	by 150 Pa (HRV)
Maximum air flow	400 m <sup>3</sup> /h*	by 180 Pa (ERV)	550 m <sup>3</sup> /h*	by 200 Pa (ERV)
Heat recovery efficiency		up tp 95% (HRV)	/ do 85% (ERV)**	
Type of exchanger		count	erflow	
		HRV: with het recovery		
Type of exchanger	ERV: with heat and moisture recovery (enthalpic)			
		HRV:	plastic	
Exchanger material		ERV: plastic + po	lymer membrane	
Moisture recovery efficiency		no(HRV)/up	to 65% (ERV)	
	100	25 W (HRV)	000 m <sup>3</sup> /h (E0 Da)	43 W (HRV)
	100 m³/h (50 Pa)	24 W (ERV)	200 m³/h (50 Pa)	42 W (ERV)
Energy consumption	250 m <sup>3</sup> /h (100 Pa)	74 W (HRV)	$400 \text{ m}^3/\text{h}(100 \text{ Pa})$	157 W (HRV)
	250 III / II (100 F d)	72 W(ERV)	400 111 / 11 (100 Pa)	154 W (ERV)
	400 m <sup>3</sup> /h (150 Pa)	187 W (HRV)	550 m <sup>3</sup> /h (150 Pa)	272 W (HRV)
	. ,	184 W (ERV)	. ,	267 W (ERV)
Sound power level emitted by the housing at a distance	100 m <sup>3</sup> /h (50 Pa)	24 db(A)	200 m <sup>3</sup> /h (50 Pa)	30 db(A)
of 1 metre	250 m <sup>3</sup> /h (100 Pa)	33 db(A)	400 m <sup>3</sup> /h (100 Pa)	42 db(A)
	400 m <sup>3</sup> /h (150 Pa)	43 db(A)	550m³/h (150 Pa)	48 db(A)
Sound power level - nominal value	41 db(A) 45 db(A)			
Fans	radial with EC direct current motors (ebm-papst)			
Energy efficiency class		Α	***	
Bypass		automatic, 100%	supply air bypass	
Communication	control via	built-in w mobile app (iOS 12.0 and A	i-fi module Indroid 6.0 or newer) an	d web browser
Interaction with the smart home system		YES (RI	EST API)	
Diameter of spigots		4 x Ø2	00 mm	
Filters	(ot	pleated class M5**** / ePM10 75% **** (optional air supply: anti-smog F9**** / ePM1 80% *****)		
Pre-heater		built-in, continue	ously variable PTC	
Constant flow system		Y	ES	
Humidity sensor		YES,	built in	
CO <sub>2</sub> sensor		YES,	built in	
Housing material		stainle	ss steel	
Dimensions (H x W x D)		784 x 1202	2 x 432 mm	
<ul> <li>with filter class M5</li> <li>The re0net F.350 ERV recuperator, due to its enthalpy exchanger, does</li> </ul>		climates in accordance with Dire nmission Regulation 1254/2014	ctive 2009/125/EC and the	

not meet the requirements of the "Clean Air 2019" programme for applications submitted before 15.05.2020. The statement for the "Clean Air 2020" programme for applications submitted after 15.05.2020 can be found cennik24.pl in the product tab \*\*\* according to EN779

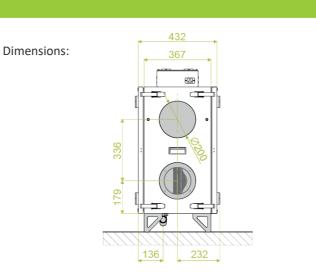




according to ISO 16890

# Horizontal air handling unit reQ H.400/500

The recuperators of the reQH. series are floor-standing units with lateral spigot exits with the additional option of hanging on the wall. The slim and robust stainless steel casing and excellent acoustic and thermal insulation, thanks to the use of polyethylene foam make them ideal for installation, for example in domestic attics. The use of one of the largest counter-flow heat exchangers in this class of recuperators with a surface area of  $35 \text{ m}^2$  ensures high heat recovery. The reQ H. recuperators are available in two versions with capacities of 400 and 500 m3/h and can have an optional moisture recovery exchanger (ERV).



### Available versions:

reQ H.400 HRV

reQ H.500 HRV counterflow with heat recovery

reQ H.400 ERV

reQ H.500 ERV enthalpic counterflow with heat and moisture recovery

# **Easy and quick installation**

Thanks to the unique slim design with a transversely located heat exchanger, the width of the reQ H. is only 44 cm, and with the flaps removed only 37 cm, which makes it possible to pass the recuperator even through the smallest loft hatch.

The reQ H. series air handling unit is mainly designed for standing installation in attics and technical rooms. Dedicated feet allow the recuperator to be placed stably on the floor and the condensate drain can be easily connected.

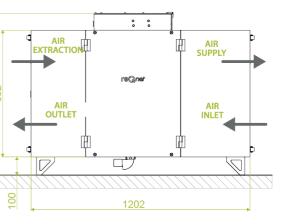
Wall mounting using the original stainless steel mounting bracket is also possible.



Model	reQ H.
Maximum air flow	400 m <sup>3</sup> /h*
Heat recovery efficiency	
Type of exchanger	
Type of exchanger	
Exchanger material	
Moisture recovery efficiency	
	100 m³/h (50 Pa
Energy consumption	250 m³/h (100 Pa
	400 m <sup>3</sup> /h (150 Pa
Sound power level emitted by the housing at a distance of 1 metre	100 m <sup>3</sup> /h (50 Pa) 250 m <sup>3</sup> /h (100 Pa 400 m <sup>3</sup> /h (150 Pa
Sound power level - nominal value	
Fans	
Energy efficiency class	
Bypass	
Communication	control v
Interaction with the smart home system	
Diameter of spigots	
Filters	
Pre-heater	
Constant flow system	
Humidity sensor	
CO <sub>2</sub> sensor	
Housing material	
Dimensions (H x W x D)	
* with filter class M5	*** for modera

\*\* The reQnet F.350 ERV recuperator, due to its enthalpy exchanger, does not meet the requirements of the Clean Air 2019' programme for applications submitted before 15.05.2020. The statement for the Clean Air 2020' programme for applications submitted after 15.05.2020 can be found cennik24.pl in the product tab.

# reQnet



H.40	0 HRV / ERV	reQ H.50	0 HRV / ERV
	by 150 Pa (HRV)	500 341*	by 150 Pa (HRV)
	by 200 Pa (ERV)	500 m <sup>3</sup> /h*	by 200 Pa(ERV)
	up to 95% (HRV) /	up to 85% (ERV)**	
	count	erflow	
	HRV: with h	et recovery	
	ERV: with heat and mois	ture recovery (enthal	pic)
	HRV: p	plastic	
	ERV: plastic + po	lymer membrane	
	no(HRV)/up	to 65% (ERV)	
Pa)	23 W (HRV)	200 m <sup>3</sup> /h (50 Pa)	42 W (HRV)
a)	21 W (ERV)	200111711(50 Fa)	39 W (ERV)
Pa)	68 W (HRV)	400 m <sup>3</sup> /h (100 Pa)	143 W (HRV)
1 a)	65 W (ERV)		140 W (ERV)
Pa)	170 W (HRV)	500 m <sup>3</sup> /h (150 Pa)	267 W (HRV)
ru)	167 W (ERV)		261 W (ERV)
Pa)	30 db(A)	200 m³/h (50 Pa)	38 db(A)
Pa)	41 db(A)	400 m <sup>3</sup> /h (100 Pa)	47 db(A)
Pa)	48 db(A)	500 m³/h (150 Pa)	51 db(A)
41	db(A)	45	5 db(A)
	radial with EC direct cur		pst)
	A*		
	automatic, 100%		
ol via I	built-in wi mobile app (iOS 12.0 and A		nd web browser
	YES (RE	EST API)	
	4 x Ø20	00 mm	
(op	pleated class M5** ptional air supply: anti-sr		%****)
	built-in, continuo	usly variable PTC	
	YE	ES	
	YES, b	ouilt in	
	YES, b	ouilt in	
	stainles	ss steel	
	784 x 1202	x 432 mm	
erate	climates in accordance with Direc	tive 2009/125/FC and the	

for moderate climates in accordance with Directive 2009/125/EC and the European Commission Regulation 1254/2014

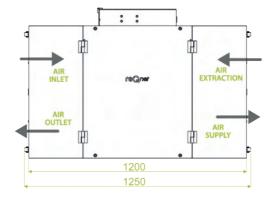
\*\*\*\* according to EN779

\*\*\*\*\*\* according to ISO 16890

# **Universal air handling unit reQ F.350 ERV**

The reQ F.350 ERV air handling unit is a recuperator with an ultra-slim casing and universal ceiling, floor or wall mounting without the need to connect a condensate drain. The unit features an enthalpy heat exchanger with moisture recovery (ERV) as standard to ensure an optimum building climate all year round and minimise the drying out of building air in winter. The robust stainless steel construction and excellent acoustic and thermal insulation thanks to the PE foam filling ensure that the recuperator can even be installed in suspended ceilings. The reQ F. unit is available with a capacity of 350 m3/h.

Dimensions:



### Available versions:

reQ F.350 ERV

# **Easy and quick installation**

Thanks to its unique low design with a special flat heat exchanger, the height of the reQ F. is only 26 cm! As a result, the ceilingmounted recuperator takes up very little space and will even fit into small false ceiling spaces.

The unit does not have a condensate drain, so it can be installed practically anywhere in the house. This makes it easier to layout the installation in buildings that are already occupied or where there is no garage or separate boiler room.

A dedicated stainless steel mounting bracket allows for very easy and stable installation under the ceiling or on the wall.

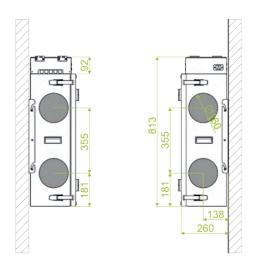


Model	
Maximum air flow	
Heat recovery efficiency	
Type of exchanger	
Type of exchanger	
Exchanger material	
Moisture recovery efficiency	
Energy consumption	
Sound power level emitted by the housing at a distance	
Sound power level - nominal value	
Fans	
Energy efficiency class	
Bypass	
Communication	
Interaction with the smart home system	
Diameter of spigots	
Filters	
Pre-heater	
Constant flow system	
Humidity sensor	
CO <sub>2</sub> sensor	
Housing material	
Dimensions (H x W x D)	
<ul> <li>* with filter class M5</li> <li>** The reOnet F.350 ERV recuperator, due to its enthaloy exchanger, does</li> </ul>	***for mo Europ

not meet the requirements of the "Clean Air 2019" programme for applications submitted before 15.05.2020. The statement for the "Clean Air 2020" programme for applications submitted after 15.05.2020 can be found cennik24.pl in the product tab

\* according to EN779 \*\*\*\*\* according to ISO 16890





r	eQ F.350 ERV	
350 m³/ł	n by150 Pa*	
	up to 85%**	
coun	terflow	
ERV: with heat and moisture recovery (enthalpic)		
plastic +	- polymer membrane	
up t	o 65%	
100 m3/h (50 Pa)	33 W	
175 m3/h (100 Pa)	68 W	
350 m3/h (150 Pa)	270 W	
100 m3/h (50 Pa)	29 db(A)	
of 1 metre	38 db(A)	
350 m3/h (150 Pa)	53 db(A)	
46 db(A)		
radial with EC direct current motors (ebm-papst)		
A***		
automatic, 100% supply air bypass		
built-in wi-fi module control via mobile app (iOS 12.0 and Android 6.0 or newer) and web browser		
Т	AK (REST API)	
4 x Ø	160 mm	
pleated class M5**** / ePM10 75%*****(optional air supply: anti-smog F9**** / ePM1 80%*****)		
built-in, continuously variable PTC, maximum power 1 kW		
Y	′ES	
YES,	built in	
YES,	built in	
stainle	ess steel	
810 x 1210 x 260 mm		
ate climates in accordance with Directive 2009/	/125/EC and the	

bean Commission Regulation 1254/2014

# Air Handling Unit with enthalpic exchanger



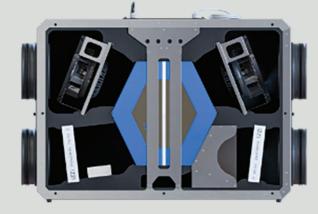
iZZi 302 ERV is a compact recuperator with a modern enthalpy exchanger with an innovative polymer membrane, which allows to recover, apart from heat energy, also moisture and latent energy. The touch control panel, extensive automation as standard and many control modes allow for simple and convenient control of the recuperator. Ideally suited for installation in places where it was previously impossible, such as apartments, finished houses or even in living spaces such as above the false ceiling.

Enthalpic counterflow heat exchanger with moisture recovery as standard, characterized by high heat and moisture recovery with latent energy, no outflow of condensate and the ability to work even at negative outside temperatures without an additional pre-heater.



# **Key features**

The highest level of equipment in this class of recuperators, based on our own dedicated solutions and components from renowned global suppliers. Additionally, recuperator can be easily and quickly expanded with modules increasing its functionality.





sensor

(optional)



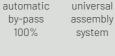








built in humidity extensive automation





antismog box

no





condensation



Touch control panel, extensive automation as standard and **many control modes** allow easy and convenient control of the recuperator





automatic (optional)



away from home



gear II



schedule



ventilation



fire place



gear III





off

**Universal installation in any position:** under the ceiling, on the wall or on the floor, but also in the living space, for example above the false ceiling.

### Wall mounting

Low weight and dedicated mounting bracket, makes it easy to hang the recuperator on the wall **even by one person.** 

**Floor mounting** 



### Ceiling mounting

The included mounting bracket allows, you to **quickly and securely** install the device on the ceiling, where it does not take up additional space.





### Horizontal installation

No condensate drain, makes it possible to set the device on the floor, without using additional feet. In this position, the air handling unit can be installed in really **tight spaces**, or low attics- only service access must be provided.

# Possibility to **expand the recuperator**

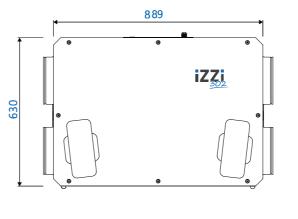
with additional modules:

- Constant flow module ensuring automatic balancing of the supply and exhaust flow in the ventilation system.
- CO2/hygro measuring module with a carbon dioxide and humidity sensor enabling automatic control of recuperator's efficiency on the basis of the air quality in the house, ensuring optimal operation of the unit adjusted to a given situation - without the user's interference.

Energy-saving DC fans with reduced noise emission and PE foam insulation allow to maintain **excellent acoustic properties** of the recuperator.

**Efficient filtration** of supply air by means of pleated filter of high filtration class M5.

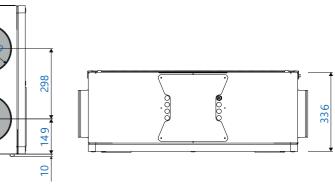
**Compact casing** made of stainless steel, **convenient assembly console** and **two versions** of recuperator: left and right, allow for flexible installation, even in small spaces.



Model		iZZi 302 ERV	
Maximum air flow	300 m³/h at150 Pa		
Heat recovery efficiency		Up to 95%	
Exchanger type		cross-flow counter-current	
Exchanger type	ent	halpic (with moisture recove	ery)
Exchanger material		plastic + polymer membrane	9
Moisture recovery efficiency	Up to 65%		
Maximum power of fans	165 W		
Gears	l gear (90 m3/h at 30 Pa)	ll gear (180 m3/h at 100 Pa)	III gear (400 m3/h at 150 Pa)
Energy consumption	26 W	60 W	165 W
Sound power level emit- ted by the housing at a distance of distance of 1 meter	30 dB(A)	39 dB(A)	46 dB(A)
Sound power level - nominal value	39 dB(A)		
Fans	radial Redicals	with EC direct current moto	ors (ebm-papst)
Efficiency class energy efficiency class	Α*		
Bypass	automat	ic, insulated, 100% supply a	ir bypass
Anti-freeze system	negative pressure, works only below -7°C		w -7°C
Controller	L	CD 3.2″ with color touch pan	el
Controller connection device	4x0.5** shielded cable (3 meters included)		
Filters	pleated class M5*** / ePM10 75%****		
Stub pipe diameter	4 x Ø200 mm		
Condensate drain	no		
Degree of protection	IP 40		
Equipment insulation class	I. I		
Supply voltage	230V (AC), 50Hz		
Weight (with dedicated rack)	26+2 kg		
Dimensions (LxWxH)		L 889 x W 336 x H 630	

182





# iZZi 402 ERV recuperator

iZZi 402 ERV is a compact **air handling unit** with an innovative and modular design. It **consists of two independent but interconnected parts:** the upper and lower part, which enable **installation by one person** and easy service access. **Compact dimensions** allow the unit to be mounted in small spaces, even in a closet, **above a washing machine or refrigerator**. The extensive equipment with enthalpy exchanger as standard and touch panel ensures comfortable operation.



# **Key features**

The modular design of the recuperator allows **easy access to the operation and maintenance of the unit**, which consists of two parts upper, where the heart of the device is located, that is: automatics, filters with external inspection hole and EC fans.

The lower suspended part, where the permanent enthalpy exchanger is located, designed to recover thermal energy and moisture together with latent energy from the exhausted air from the premises.

### Recuperator iZZi 402 ERV, like the 302 ERV has:

• The highest level of equipment in this class of recuperators, based on its own dedicated solutions and components from renowned global suppliers. Additionally the recuperator can be **easily and quickly extended** by **modules** increasing its functionality.

# Possibility to expand the recuperator with additional modules:



**C02/hygro measuring module with a carbon dioxide and humidity sensor** - enabling automatic control of recuperator's efficiency on the basis of the air quality in the house, ensuring optimal operation of the unit adjusted to a given situation - without the user's interference.

# reQnet



• Enthalpy counterflow heat exchanger with polymer membrane as a standard, characterized by high heat and moisture recovery with latent energy, no condensate outflow and the possibility of operation even at negative outdoor temperatures without an additional pre heater.



**Constant flow module** - ensuring automatic balancing of the supply and exhaust flow in the ventilation system.

- Universal assembly in vertical position: on the wall or on the floor.
- Energy efficient DC fans with reduced noise emission and PE foam insulation allow to keep perfect acoustic properties of the recuperator.
- Efficient filtration of supply air by means of pleated filter of high filtration class M5.
- · Compact casing made of stainless steel, convenient assembly console allow for efficient installation, even in small spaces.

### Very compact unit dimensions:

600x600x750 mm make it possible to install it in places where it was not possible before, i.e. in a built-in closet, above a washing machine or refrigerator. Whereas quiet operation of the device, inter alia due to the use of special foam insulation and modern DC motors, allows for placement of the recuperator in the living space.

743

9



Touch control panel, extensive automation as standard and many control modes allow easy and convenient control of the recuperator











(optional)

ventilation



away from

home

-<u>|</u>2









gear II



gear III

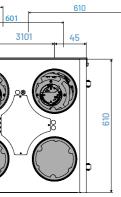
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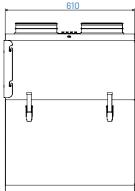
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601 i <u>Zi</u> 601 633	601 601 601 601 601 601 601 601			
	601			
	Model		iZZi 402 ERV	
	Maximum air flow		400 m³/h at 150 Pa	
	i Zi Heat recovery efficiency	i <u>Zi</u>	Up to 85%	
	Exchanger type	43	cross-flow counter-current	
	Exchanger type	ent	halpic (with moisture recove	ery)
	Exchanger material		plastic + polymer membrane	9
	Moistur <u>e recovery</u> efficiency	601 633	Up to 65%	
	Maximum power of fans		210 W	
	Gears	l gear (100 m3/h at 50 Pa)	ll gear (250 m3/h at 100 Pa)	III gear (400 m3/h at 150 Pa)
	Energy consumption	20 W	73 W	205 W
	Sound power level emit- ted by the housing at a distance of distance of 1 meter	30 dB(A)	39 dB(A)	46 dB(A)
	Sound power level - nominal value		39 dB(A)	
	Fans	radial Redicals	with EC direct current moto	ors (ebm-papst)
	Efficiency class energy efficiency class		Α*	
	Bypass	automat	ic, insulated, 100% supply ai	ir bypass
	Anti-freeze system	negati	ve pressure, works only belo	ow −7°C
	Controller	L	CD 3.2" with color touch pan	el
	Controller connection device		* shielded cable (3 meters in	
	Filters	pleated class M5*** / ePM10 75% ****		
	Stub pipe diameter		4 x Ø200 mm	
	Condensate drain		no	
	Degree of protection		IP 40	
	Equipment insulation class		I	
	Supply voltage		230V (AC), 50Hz	
	Weight (with dedicated rack)		30 kg	
	Dimensions (LxWxH)		600x600x700	



# reQnet

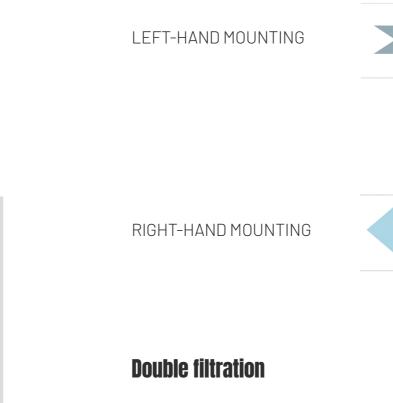




# **Filter box**

iZZi SP filter box thanks to double filtration (with F9 class fine filter) provides very high protection against smog by purifying the supply air by up to 96% (from PM10 smog particles). It also allows the use of anti-dust filters recommended especially for allergy sufferers. The box can **cooperate with most recuperators** available on the market.

The iZZi SF filter box has a **universal right or left-hand installation**. To change the direction of air flow, simply swap and rotate the filters used, remembering that the M5 pre-filter always comes first.



**F7** Spring



Fine Mould and

> **M5** Spring

Pre-filtration

Highly accurate filtration

pollen

Summer Fall Winter

# **Key features**

The box has thermal insulation made of water-resistant foam with additional soundproofing properties.

The iZZi SF box casing is made entirely of corrosion-resistant brushed stainless steel, and the special design ensures **high tightness** of filters and inspection flap.

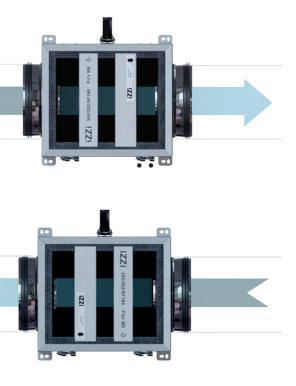
The applied **double filtration** system provides protection even against the finest smog particles PM1 of size below 1 micrometer.

The filter box allows for **universal left or right installation**, giving great flexibility in the layout of the installation.

The iZZi SF filter box is installed in the ductwork of the air intake or, in case of insufficient space or difficult access for filter replacement, it can be installed in the supply air duct.

Models:	iZZi 160	iZZi 200
Spigot dimension	Ø160	Ø200
Maximum airflow:	do 250 m³/h	do 550 m³/h





Summer







fungal spores and viruses



Smog

**F9** Fall Winter



Mould and fungal spores



Bacteria and viruses



Dust





Preliminary dirt (sand, insects, seeds and fine hair)

# Anti-smog filter box with PTC pre-heater

iZZi SF 200 in the version with pre-heater is a hybrid combining the advantages of a filter box with a set of anti-smog or anti-dust filters that purify the air supplied to the house from health-threatening pollutants and a pre-heater with a modern, continuously controlled PTC heater that supports the operation of the anti-freeze system in iZZi recuperators.



# **Kev features**

Advantages of installing a pre-heater:

Frost protection: the pre-heater helps to maintain the right temperature in the heat exchanger in the recuperator, which prevents it from freezing, even when the temperature outside is very low.

Energy saving: by preventing freezing and increasing heat recovery efficiency, the pre-heater saves energy.

No vacuum: switching on the preheater replaces the operation of the vacuum anti-freeze system that causes cold air to be drawn in through leaks in the building.

System reliability: the pre-heater protects the operation of the recuperator in adverse conditions of low temperature and high humidity, increasing its durability and reliability.

Improved air quality: the pre-heater prevents the filters from freezing and increases their efficiency, allowing the supply air to be cleaned more effectively.





**Box dedicated** for recuperators:

**iZZi 302 ERV** 

iZZi 402 ERV

# Stop the smog

Smog is polluted air created by the mixing of smoke and fog and harmful substances contained in exhaust fumes from cars, industry and coal burning. Smog is dangerous to health because it contains toxic substances such as nitrogen oxides and sulphur dioxide, which can cause asthma, respiratory and cardiovascular diseases. In some cities, smog is a particularly serious problem, but it can occur anywhere there is high air pollution.





The two-stage filtration process of the iZZi SF 200 filter box ensures the effective retention of more than 80% of the finest smog particles of the PM1 fraction, which are particularly harmful to our body as they can penetrate directly into the bloodstream through the lungs, spreading through our body to various internal organs. The filtration process is based on the use of two pleated filters, including an accurate F9 rated anti-smog filter, which is responsible for trapping fine PM1 particles. Unfortunately, most of the anti-smog filters on the market only provide protection against the larger PM10 and PM2.5 particles, which is in practice too little protection.

### Filtration efficiency for particulate pollutants of different diameters

PM10 (10 μm)	96%
PM2,5 (2,5 μm)	90%
PM1(1μm)	83%





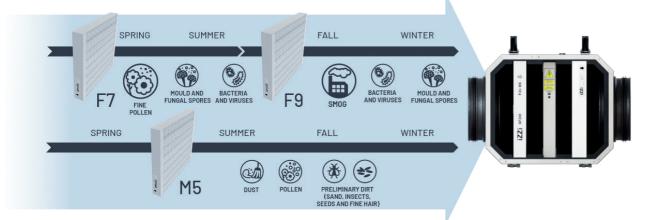
# Comfort even down to -15

The enthalpy heat exchanger used in iZZi series reQnet recuperators allows the unit to operate efficiently without need to defrost the exchanger, even when the outside temperature drops to around -7°C. Therefore, the iZZi recuperators do not have a built-in pre-heater. However, when it is colder, in order to protect the heat exchanger, the recuperator automatics switches on the vacuum anti-freeze system, which consists in temporary decrease of the supply fan speed. All additional operating modes, such as ventilation mode and the possibility of changing the fans' capacity, are also blocked for this time.

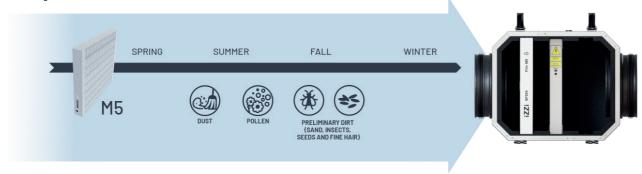
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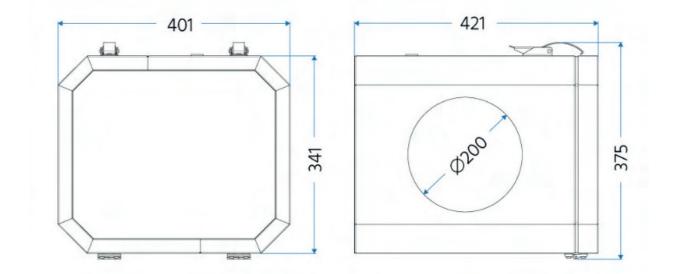
### Possible use of filter boxes during the year:

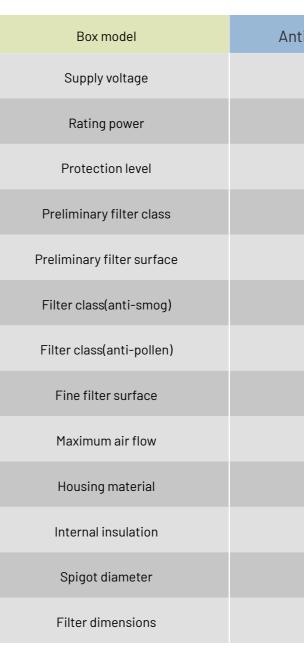
Highly accurate filtration



Fough filtration







# reQnet

i-smog filter box with PTC pre-heater
230V AC 50Hz
500 W
IPX3
M5 / ePM10 75%
1,1 m2
F9* / ePM180%**
F7* / ePM1 55%**
1,7 m2
do 550 m3/h
stainless steel 46 dB(A)
closed-cell foam PE 30 mm
Ø200 mm
350x300x40 mm

**CENNIK24.pl** is a sales platform, bringing together manufacturers of installation systems, including mechanical ventilation, recuperators and heat pumps. The portal offers all components of **PE-FLEX**<sup>®</sup> mechanical ventilation and **ReQnet** company recuperators. Buying on **CENNIK24**, you get high quality products at the most favorable prices.

# **Advantages**:

- buying directly from manufacturers
- best conditions of cooperation
- all products in one place
- fast delivery times
- possibility to configure individual manifold boxes with BOXMAKER software
- direct contact and support with manufacturers
- stability of catalog prices

# CENNI (24

# Looking for

# proven solutions?

Start cooperating with the *leader in* mechanical ventilation and recuperation!

We guarantee many years of production experience, thousands of completed investments and the highest quality of our products.

# Are you interested? Write or call us:

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