We treat the air that you breathe.

AERMEC


AERMEC
AERMEC

Breathing innovation: excellence in air treatment.

AERMEC is committed to creating highly efficient solutions to meet the different needs of plant engineering solutions in terms of air treatment. Combining innovation and deep expertise, we design customised solutions for centralised systems, embracing every application in the world of **HVAC&R** and complying with current regulatory standards. Our flexibility and expertise make us a reliable, customer-focused partner capable of creating high added value solutions.

Our mission is to guarantee the most suitable air for each environment and for the activities that take place there.

Thinking together about the characteristics and qualities of the air in the rooms, creating and putting together the technologies that will make the required result possible, being present for normal management requirements and all kinds of maintenance and assistance to ensure continuity of efficiency and results. This is our mission.

This is Aermec.

The air is not an empty space.
On the contrary, it is the condition in which we are immersed and within which all our activities take place.

From the past to the forefront: Aermec's journey with air innovation.

AERMEC, founded in 1961 by Giordano Riello, started a long tradition of innovation in air treatment with the first air conditioning units. Today, with more than 800 employees working on premises covering 130,000 m^2, it is one of the world leaders in HVAC&R, with more than 300 product lines, including chillers, heat pumps, fan coils and air handling units. With more than 10,000 possible configurations, it can meet any specific need that the Customer may have.

Part of the **Giordano Riello International Group, a family business which has evolved into an international group**, Aermec benefits from the support and opportunities provided by the global network. The group, founded in the 1920s with Officine Fratelli Riello, was a pioneer in the air conditioning industry and today, with 1,800 employees in more than 150 countries, it continues to be a benchmark for innovation and quality.

Ettore Riello, founder in 1922
of Officine Fratelli Riello

Each company in the Group has its own unique identity, but works strategically with others to share knowledge and expertise, thereby creating a significant competitive advantage in the market. **As part of the Group, Aermec has access to significant synergies** and a whole range of technical, production and marketing experience of immense value.

In our world, we breathe an air of respect and collaboration.

Customer Care
We put the customer at the centre of everything we do.
We are committed to understanding their needs and providing customised solutions.

Industrial culture
We have deep roots in the industrial sector, with a deep understanding of market needs and trends.
We are committed to maintaining the highest standards of quality and innovation.

Sustainability
We are committed to operating in a sustainable way, reducing the environmental impact of our activities and promoting responsible practices within our supply chain.

Flexibility
We are flexible in our responses to the customer, adapting our solutions to their specific needs.

Team
We promote an inclusive and collaborative working environment; We value the power of the team and the ability to work together towards a common vision.

Synergies of the Giordano Riello International Group
We are able to use the synergies within the Riello Group for technological development, collaborating with other divisions and companies of the group to implement innovative and cutting-edge solutions.

Production autonomy
Our production autonomy allows us to produce almost all the components in-house, thereby ensuring direct control over the quality and delivery times of our supplies.

Quality Standards and Certifications: a commitment of excellence and safety.

The machines and their components are tested in adequately equipped laboratories in order to give the customer the greatest confidence in the product purchased. The **Eurovent, Vision 2000 and ISO 14001** quality certifications represent a guarantee of the maximum attention to quality in all of the company functions. We pay particular attention to the training of personnel at every stage of production activity, with the aim of achieving maximum specialisation.

EUROVENT CERTIFIED PERFORMANCE
AHU N° 04.04.052
Range NCD
www.eurovent-certification.com

EUROVENT - Performance certification

Aermec is a member of the Eurovent program for air handling units (AHUs). Eurovent is a European association made up of 15 national bodies. Voluntary certification programs managed by Eurovent compare the technical characteristics declared by manufacturers in documentation and selection software with test results on actual products.

Quality - UNI EN ISO 9001 - Vision 2000

Aermec has been UNI EN ISO 9001 certified since 1997. This international standard defines the requirements to ensure that companies provide products that comply with customer requirements or applicable regulations. In addition, it aims to increase customer satisfaction through a system of continuous improvement.

Environment - EN ISO 14001

Aermec has been the leader in the air treatment sector to be certified UNI EN ISO 14001 since 2004. This international standard establishes the requirements for companies that want to reduce the environmental impact of their activities.

Safety - UNI ISO 45001: 2018

Aermec is certified UNI ISO 45001:2018 the international standard for the certification of the Occupational Health and Safety management system. The safety of people is a fundamental value, one which we put into practice every day.

VDI 6022 - Hygiene certification

Aermec air handling units can be certified VDI 6022. This German certification ensures that the sizing, materials, installed components and production facilitate cleaning operations of the units themselves, reduce microbial proliferation and are resistant to detergents and disinfectants used for maintenance.

DIN 1946 - Hygiene certification

The certification in accordance with German standard DIN 1946 represents an evolution compared to the VDI 6022 version, which Fast has implemented for its range of air handling units. Intended mainly for hospital and pharmaceutical applications, these units take the quality requirements of materials and maintenance spaces to an extreme, improving the hygienic conditions of the systems with undoubted benefits for the occupants of the areas served.

NOISE - Sound-proofing power of the panels

In collaboration with the Department of Technical Physics at the University of Padova, laboratory measurements were conducted on different types of panelling which make up the casing of the air handling units (thickness 50 mm).

PED - Pressure Equipment Directive

Directive 2014/68/EU (PED) imposes design, fabrication and testing requirements for pressurised equipment. The aim of the directive is to guarantee standardised criteria throughout all the countries of the European Community, in order to develop safe products.

CE - Safety certification

Aermec pays particular attention to safety aspects, ensuring compliance with the CE mark, which certifies the conformity of products with the safety requirements of the applicable EU directives. The EC Declaration of Conformity is the last piece in a process that begins with the identification of the technical standards and ends with precise type-approval tests in specialised labs.

Reaction of the panels to fire

FAST, aware of the importance of every aspect of the design of air conditioning systems, has obtained a significant new result in terms of the certification of its machines. It regards the reaction of its buffer panels (injected with polyurethane foam) to fire.

Bacteriostatic treatment

Numerous laboratory tests were carried out at the Department of Environmental Medicine and Public Health of the University of Padova, to verify the effectiveness of the special bacteriostatic treatment applied to the inner surface of the air handling units.

Selection software: to optimise the work of professionals in the sector.

Aermec offers **innovative software for the selection of HVAC&R products**, allowing industry professionals to quickly view, choose and configure the characteristics of the products suitable for the air conditioning system in question. An in-house support service provides personalised assistance, while training courses are available to illustrate the features and new features of the software.

FastNET 2.0 (Aircalc)
The "FastNET 2.0" configuration software is dedicated to the air handling units. With the latest software evolution, professionals can complete the configuration of the air handling unit with regulation and control elements. in this way, the unit becomes a "plug & play" solution.

Training: to meet sustainability challenges.

Aermec has been offering training programmes for professionals in the HVAC&R sector for over 30 years, **with technical seminars and in-company courses**. Investments in training never stop, with courses taught by qualified teachers, both in the classroom and on-line, and guided tours of the production site.

With increasingly advanced systems, it is the after-sales service that makes the difference.

A relationship of trust with the market has been developed, thanks to the clarity and professionalism of our approach, combined with our experience, further strengthened by the reliability and professionalism of our after-sales service.

The immediate identification of any problems and quick interventions mean the customer is supported throughout the life cycle of the products, which are becoming more and more technologically complex.

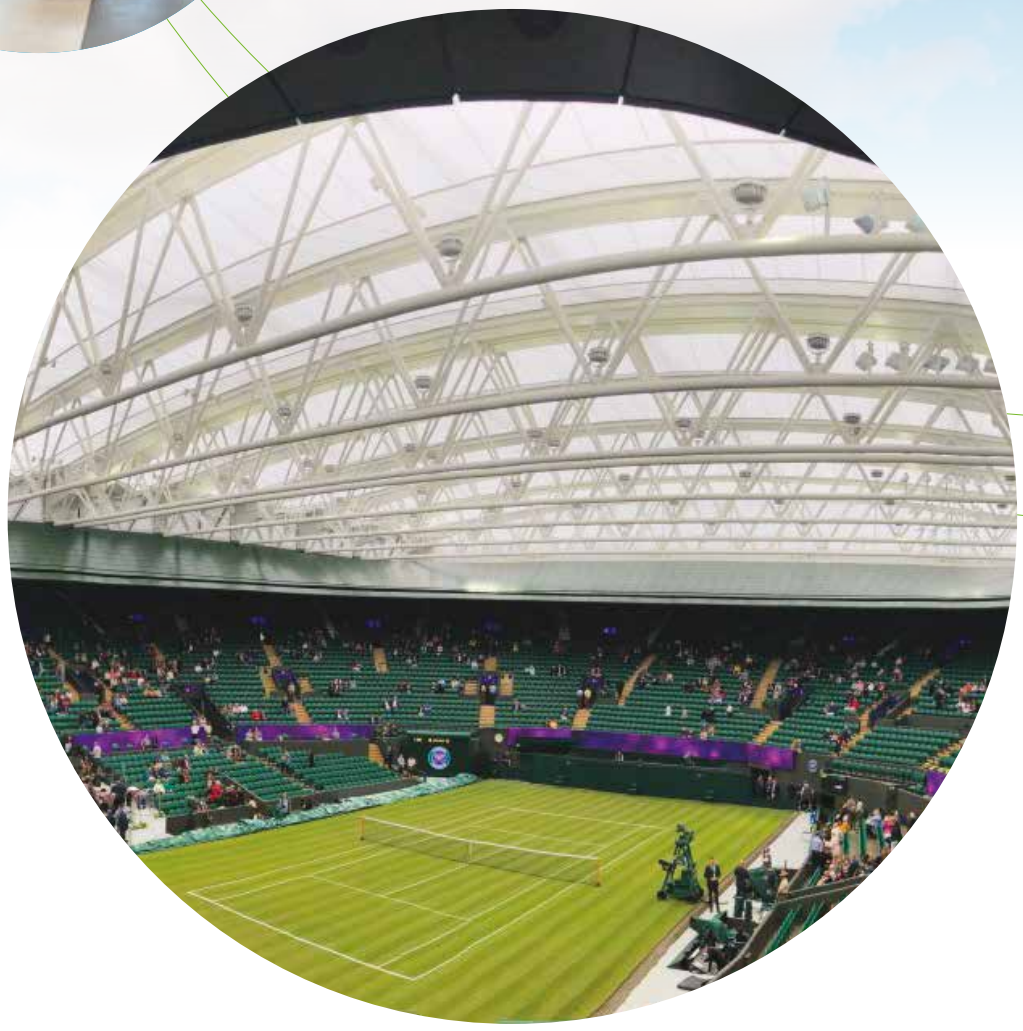
All this is possible thanks to an extensive service network (Technical Service Centres coordinated by dedicated on-site personnel) trained by the company with specific courses.

The after-sales service includes:

- Qualified technical support on all products ✔
- Organisation and commissioning of the installed units ✔
- Spare parts warranty ✔
- Inspections on construction sites to verify the installation ✔
- Scheduling of visits and maintenance ✔
- Warranty support and extensions ✔
- Provision of technical documentation on installed products ✔

If the air is Aermec, you'll feel the difference.

We design and manufacture state-of-the-art air handling units, heat recovery units and Rooftop units, perfectly integrated into systems for offices, hotels, hospitals, data centres, theatres, swimming pools, sports facilities and the food and pharmaceutical industries. Each of our products is synonymous with efficiency, reliability and innovation, with a constant focus on air quality, energy saving and operational continuity.



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Product

1 NCD

Air handling units

The **NCD air handling units** are the result of consolidated experience and in-depth studies and experiments in the **field of aeraulic machines**. The NCD series is designed to suit all contexts, both in terms of functionality and size, allowing you to meet different air treatment needs even in specific sectors such as hospital, food, pharmaceutical and microelectronics.

The NCD series is made in full compliance with the provisions of the EN 1886 norm as far as mechanical resistance, air leakage, heat performance and soundproofing is concerned. The precise coupling of the frame makes it possible to achieve casing performance levels that fall within the best classes provided for by the UNI EN 1886 standard.

EUROVENT CERTIFIED PERFORMANCE
AHU N° 04.04.052
Range NCD
www.eurovent-certification.com

Over 100 sizes to meet every need.

2 GERMICIDAL LAMPS
These are generally used in sequence with extremely high efficiency filtration systems, to keep the bacterial flora and germs that are mainly formed in heat exchange batteries and condensate collection tanks under control.

3 HEAT RECOVERY UNITS
Static cross-flow; static cross-flow with by-pass damper; static cross-flow with recirculation damper (group 3 dampers with heat recovery unit); heat pipe; rotary; dual coils.

4 SILENCER BAFFLES
With horizontal or vertical configuration.

5 FANS
Forward-curved or backward-curved blades with wing contour, EC motors.

6 FILTERS
With rigid or loose pockets, roller, absolute, activated carbon or electrostatic, with extractable cell pre-filters.

7 DAMPERS
Partial or total section.

8 HEAT EXCHANGER COILS
Water, steam, direct expansion or electric.

9 HUMIDIFICATION
Adiabatic humidification; isothermal humidification.

10 DROP BAFFLE PLATE
STAINLESS STEEL, aluminium alloy or polypropylene.

NCD AIR HANDLING UNITS

The NCD units are designed for civil, commercial and hotel contexts, with 109 sizes to cover applications in every room, whatever its dimensions.

1 The **load-bearing structure** uses aluminium alloy profiles, also available in an anodised version and with a thermal break to improve performance in terms of both corrosion resistance and thermal insulation.

See all the features

The **panelling has a twin sheet metal wall** available in a variety of materials, from galvanized steel to AISI 316 stainless steel, through pre-painted galvanized steel with antibacterial paint, or Magnelis steel.

The **insulation** can be made of polyurethane or mineral wool.

The **ground-breaking gaskets** guarantee reduced leakage, in accordance with EN 1886. The screw-free method for fixing the panels to the load-bearing structure means the panels themselves are not altered in any way and the pressure is evenly distributed across their entire edge, even when they need to be removed for extraordinary maintenance and subsequently reassembled.

EUROVENT CERTIFIED PERFORMANCE
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SPECIAL FEATURES

IONIZER MODULES
The installation of the ionizer modules keeps the unit sanitised over time. The oxidising ions generated by photocatalytic oxidation destroy bacteria, viruses, moulds, allergens and odours.

HUMIDIFICATION SYSTEMS
The humidification systems are chosen based on the specific use and the available fluid. The available options include:

isothermal humidification: steam distribution, with immersed electrodes, resistance heater elements or gas generator.

adiabatic humidification: paper pad, PVC pack, with or without a recirculation pump, high pressure, compressed air, ultra-sound and air washer.

HEAT RECOVERY UNITS
Various types of heat recovery systems make it possible to comply with energy saving regulations currently in force.
- cross-flow plate heat recovery units
- countercurrent plate heat recovery units (efficiency >90%)
- rotary heat recovery units (heat and humidity exchange)
- recovery and replenishment coils

FILTRATION
We offer all types of air handling unit filters, compliant with air quality regulations. Innovative electrostatic filters capture very small particles without losing effectiveness over time and eliminating up to 99% of bacteria, germs, moulds and yeasts.

ADVANTAGES

Aermec is able to offer air handling units equipped with regulation system, electrical power panel and fully wired and factory-tested elements.
A "**plug and play**" solution which only requires a connection to the power supply (as well as an aeraulic connection to the ducting system and a hydraulic connection for the heat exchanger coils).

- **Customisable** in terms of size, materials, insulation, type of treatment and components.
- **Constant updating** in the choice of materials and components to improve performance and configuration possibilities.
- Can be **universally adapted** for any application.
- **Full assistance** provided for selection and configuration needs.
- **Plug and play adjustment** for quick and easy installation.
- **Continuous support** during installation and start-up.
- **Components of primary brands** to guarantee free access to spare parts over the long term.
- **Single point of contact** for air handling units, saving on installation time.

THE MATERIALS

Aluminium profiles are available in the following versions:

- aluminium with natural finish
- anodised aluminium
- aluminium with natural thermal break finish
- anodised aluminium with thermal break

The thermal and acoustic insulation of the panels can be achieved with:

- polyurethane
- mineral wool

APPLICATIONS


Industrial


Service Sector


Healt Care


Food/Beverage


Winemaking


Chemical


Museums


Wellness/SPA


Education


Fair


Government


Sport/Leisure


Hotels


Agriculture


Commercial

NCD HYGIENIC

AIR HANDLING UNIT
AIR FLOW RATE FROM 1,000 TO 62,000 m³/h

See all the features

The units of the NCD VDI 6022 series are certified according to the strict requirements of the German standard VDI 6022, internationally recognised for hygiene standards in ventilation and air conditioning units.
The certification process was carried out by Eurocertifications Srl, the Italian partner of TÜV Hessen in Germany. These units must meet specific criteria in their sizing and they must use approved materials and components to **ensure ease of cleaning, reduction of microbial proliferation and resistance to detergents and disinfectants.**

Materials, finishes and Hygienic design for perfect sanitation.

- **Access sections** that facilitate inspections and cleaning.
- **Draining panels and tanks** for rapid evacuation of water during sanitisation.
- **Availability of 109 sizes.**
- **Modular support structure** for the standardisation of components and greater flexibility of use; sandwich panelling, 50 mm thick.

✓ Simplified maintenance and inspection
✓ Rapid and effective sanitation
✓ High flexibility and adaptability

NCD HYGIENIC

DIN 1946-4

AIR HANDLING UNIT
AIR FLOW RATE FROM 1,000 TO 62,000m³/h

The units of the NCD DIN 1946-4 series are certified according to the strict requirements of the DIN 1946-4 standard, certification of conformity referring to the hygiene requirements for ventilation in facilities and rooms of the health sector.

The units of the FM Hygienic series are designed for applications requiring special materials, ideal for environments where air handling units (AHUs) have to undergo sanitation procedures with the use of potentially aggressive disinfectants on surfaces and internal components.

In compliance with the strict requirements of hygiene and cleanliness, these units **comply with all the geometric-constructive characteristics dictated by recent regulations.**

When air treatment is a matter of maximum hygiene.

- **Stainless steel construction and special coatings** on fans and components.
- **Dedicated filters** to reduce the microbial load of the delivery air.
- **88 customisable sizes.**

✓ **Compliance with hygiene standards**
✓ **Sanitised and safe air quality**
✓ **Certified Materials and Components**

2 Air handling unit for specific applications

The characteristics of places like **swimming pools, wellness centres and fitness centres** require specific plant engineering solutions and air treatment systems that combine **top energy savings with environmental comfort needs**. These systems, generally of the "all-air" type, are distinguished by a high energy demand. Estimates indicate that, in the case of a swimming pool, the cost of energy can reach 35% of the total management costs.

The 3 key factors to reconcile well-being and energy efficiency

DEHUMIDIFICATION
Remove the internal air and replace it with external air to maintain the right environmental comfort.

AIR DISTRIBUTION
In swimming facilities, it is necessary to minimise the air speed near the tank (max 0.1 m/s) to avoid excessive evaporation.

PRECISE CLIMATE CONTROL
Because even small variations in temperature and humidity parameters can lead to an increase of energy consumption.

VENTILATION
Ensure the correct supply of external air to keep chloramine levels in the air under control.


AERMEC

Dive into comfort without wasting energy.

The **SPL 025/130** and **SPL 160/250** units are innovative solutions designed for dehumidification and air treatment in swimming pools, combining
energy efficiency, ease of use and durability. These units are the ideal choice to ensure a comfortable and safe environment in the swimming facilities.

SPECIAL FEATURES

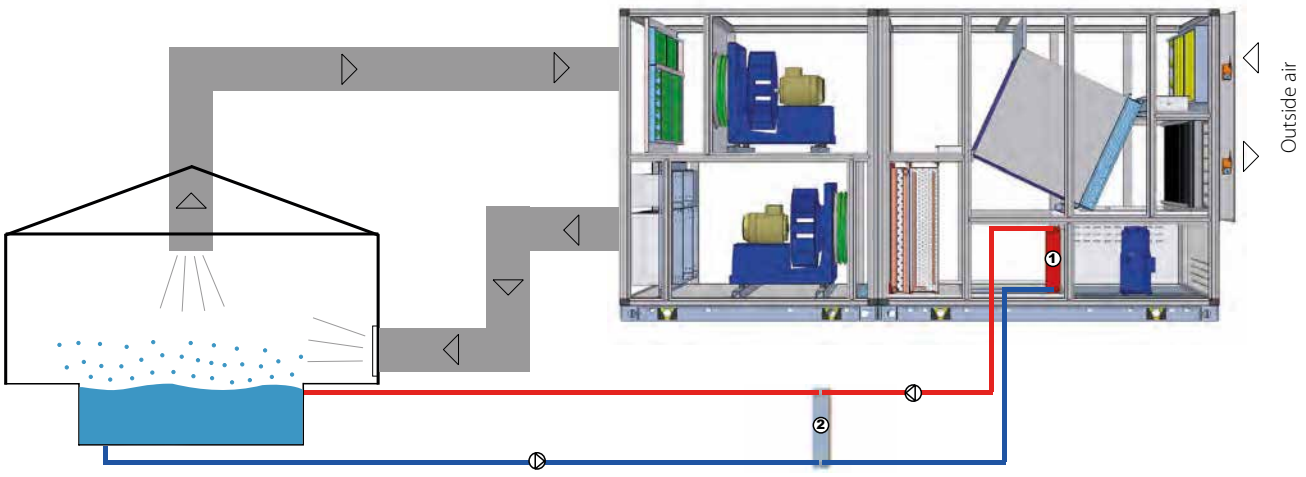
- **Thermal recovery** with a cross-flow heat recovery unit and a refrigerating circuit to optimise energy efficiency.
- **Water-side heat recovery system** to be used to partially reheat pool water at zero cost.
- **Anodised aluminium load-bearing structure and 50 mm sandwich panelling** to ensure corrosion resistance.
- **Plug fans** for efficient operation.
- **"Plug & Play" functionality** with electrical panel, regulation system and refrigerating circuit pre-installed for immediate use.

ADVANTAGES

- **Optimisation of energy efficiency** with heat recovery and savings on pool water heating costs.
- **Improved durability** thanks to the anodised aluminium structure and corrosion-resistant panelling.
- **Efficient operation** and reduced operating costs thanks to the use of painted plug fans.
- **Simplified installation and start-up**, reducing time and costs thanks to the "Plug & Play" system.
- **Plug and play adjustmen**t for quick and easy installation.
- **Creating a comfortable and safe environment** in swimming pools, improving comfort and safety.
- **Optimal air exchange**, essential for the reduction of chloramines, thanks to the possibility of working with up to 100% outside air.

Cycle with air-to-water heat transfer

If the air temperature conditions in the room are met, the heat produced by the refrigerating circuit is transferred to the pool water by means of a double plate heat exchanger (standard). A plate heat exchanger is an integral part of the refrigerating circuit of the unit (R410A air-to-water heat exchanger of the intermediate circuit, in the following figure indicated with 1). Another inspectable heat exchanger is supplied with the unit. This heat exchanger works with water from the intermediate circuit/pool water (item 2 in the following figure). A heat recovery system constructed in this way facilitates maintenance operations. The Customer is responsible for the components and hydraulic connections between the two heat exchangers.



The diagram is by way of example only. Not all the components necessary to complete the water circuits have been indicated.

SPL 025/130

AIR HANDLING UNIT FOR SPECIFIC APPLICATIONS

AIR FLOW RATE FROM 2,500 TO 13,000 m^3/h

The units of the SPL 025/130 series are ideal for providing **well-ness conditions in small and medium-sized environments**, such as spas, wellness centres, small swimming pools, and sports facilities.

See all the features

Immediate well-being with the Plug & Play solution.

- Refrigerating circuit combined with **sensitive and latent heat recovery system** from the expelled air.
- Ready-to-use **"Plug & Play" solution**, designed for dehumidification and control of thermo-hygrometric conditions.
- **5 sizes available** to meet the specific needs of the environments.

✓ **Optimised energy saving**

✓ **Easy to use** and quick to install

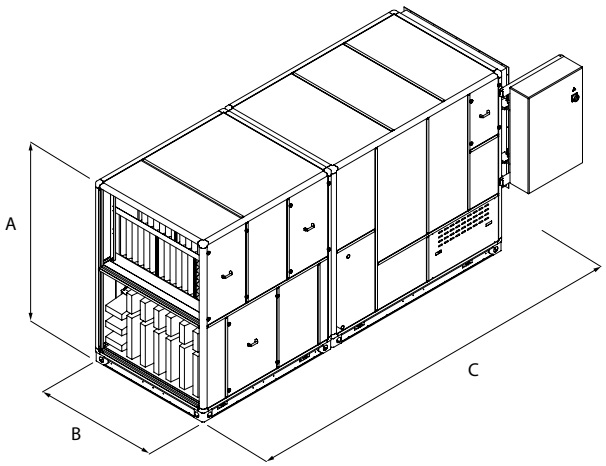
✓ **Can be adapted to different environments** with efficient performance

Technical data

			025	040	060	100	130
Nominal airflow (supply/extract)		M^3/h	2500	4000	6300	10000	13000
Available pressure (supply/extract)		Pa	400	400	400	400	400
Heat recovery capacity recovered	(1)	KW	7,90	12,60	20,40	32,00	41,50
Max heat recovery efficiency	(1)	%	80,80	79,30	80,10	79,50	79,40
Refrigerant circuit recovered capacity	(1)	KW	7,50	10,50	21,30	31,70	45,70
Total recovered capacity	(1)	KW	15,40	23,10	41,60	63,70	87,30
Compressor absorbed power	(1)	KW	1,30	1,60	3,70	6,00	8,40
COP	(1)	-	11,80	14,40	11,20	10,60	10,40
COP	(2)	-	3,90	4,00	4,10	4,00	4,10
Total dehumidification capacity	(1)	Kg/h	15,50	25,20	40,10	63,70	82,70
Supply fan power input		KW	1,60	2,60	3,70	5,90	7,60
Extract fan power input		KW	1,20	1,90	2,70	4,50	5,70
Type / number of compressors		No.			Scroll / 1		
Hot water heating coil (standard)							
Capacity (without recovery active)	(1)	KW	26,10	35,40	61,60	95,30	124,50
Water flow rate	(3)	L/h	2250	3050	5300	8200	10700
Water pressure drop	(3)	KPa	23,50	43,70	33,10	48,80	46,30
Plate heat exchanger R410A/non aggressive water (standard)							
Nominal water flow rate	(4)	L/h	950	1120	2500	3600	5400
Pressure drops	(4)	KPa	19,00	19,00	31,00	32,00	33,00
Plate heat exchanger accessible non aggressive water/pool water (standard)							
Water flow rate nominal pool	(5)	L/h	1200	1400	3100	4500	6800
Pressure drop pool side	(5)	KPa	32,40	34,00	31,40	33,00	34,50
Pressure drop intermediate circuit side	(5)	KPa	21,20	22,30	20,60	21,60	22,50
Electric data							
Unit power supply					400 V-3- 50 Hz		
Maximum total current input supply fan		A	3,50	6,20	11,00	14,60	15,00
Maximum total current input extract fan		A	2,60	4,90	6,40	11,30	11,30
Unit maximum current input		A	11,60	17,10	32,40	49,30	61,30
Unit starting current		A	32,10	46,10	91,40	181,90	184,30

(1) External air 0°C,80% RH; internal air 29°C,60% RH.
(2) Values as per conditions of D.M. 7 april 2008 for heating only operation
(3) Water temperature inlet/outlet 70/60°C; water pressure drop including 3 way valve
(4) Water temperature inlet/outlet non aggressive 27/37°C
(5) Water temperature inlet/outlet intermediate circuit 37/27°C; water temperature inlet/outlet pool 25/35°C

Dimensions



		025	040	060	100	130
A	mm	1765	1765	2245	2405	2405
B	mm	895	895	1055	1375	1695
C	mm	3230	3390	4190	4190	4670
Weight	Kg	900	1000	1350	2060	2600

SPL 160/250

AIR HANDLING UNIT FOR SPECIFIC APPLICATIONS

AIR FLOW RATE FROM 16,000 TO 25,000 m^3/h

SPL 160/250 units are the ideal solution for guaranteing well-being in medium/large-sized wellness areas such as spas, wellness centres, swimming pools, sports facilities, etc.

See all the features

The simplicity of Plug & Play also for large applications.

- Refrigerating circuit combined with sensitive and latent **heat recovery system** from the expelled air.
- **"Plug & Play" solution** for immediate use, it manages dehumidification and thermo-hygrometric control.
- **Available in 3 sizes.**

✓ **Optimised energy saving**

✓ **Quick and easy installation and start-up**

✓ **Optimised dimensions** for large volumes of air treated

Technical data

SPL			160	200	250
Nominal air flow rate (supply / recovery)		m^3/h	16000	20000	25000
Available pressure (supply/recovery)		Pa	400	400	400
Heat recovery capacity recovered	(1)	kW	59,6	68,6	89,2
Max heat recovery efficiency	(1)	%	93	86	89
Refrigerant circuit recovered capacity	(1)	kW	46,3	53,6	69,4
Total recovered capacity	(1)	kW	105,9	122,2	158,6
Compressor absorbed power	(1)	kW	8,5	9,2	12,8
COP	(1)	-	12,5	13,3	12,4
COP	(2)	-	4,0	3,9	3,9
Total dehumidification capacity	(1)	kg/h	102,2	127,6	159,5
Supply fan power input		kW	10,9	13,7	17,7
Extract fan power input		kW	8,3	9,8	12,4
Type / number of compressors		no.		Scroll / 1	
Hot water heating coil (standard)					
Capacity (without recovery active)	(1)	kW	131,9	182,7	205,9
Water flow rate	(3)	l/h	11300	15700	17700
Water pressure drop	(3)	kPa	43,7	37,9	42,2
Plate heat exchanger R410A/non aggressive water (standard)					
Nominal water flow rate	(4)	l/h	5760	6450	8260
Pressure drops	(4)	kPa	33	33	33
Plate heat exchanger accessible non aggressive water/pool water (standard)					
Water flow rate nominal pool	(5)	l/h	7200	8100	10400
Pressure drop pool side	(5)	kPa	34,2	34,7	34,2
Pressure drop intermediate circuit side	(5)	kPa	22,3	22,7	22,2
Electric data					
Unit power supply				400 V - 3 ph - 50 Hz	
Maximum total current input supply fan		A	29,2	41,0	42,0
Maximum total current input extract fan		A	22,0	22,6	30,0
Unit maximum current input		A	86,2	99,6	123,0
Unit starting current		A	209,0	223,0	287,0

(1) External air 0°C,80% RH; internal air 29°C,60% RH.
(2) Values as per conditions of D.M. 7 april 2008 for heating only operation
(3) Water temperature inlet/outlet 70/60°C; water pressure drop including 3 way valve.
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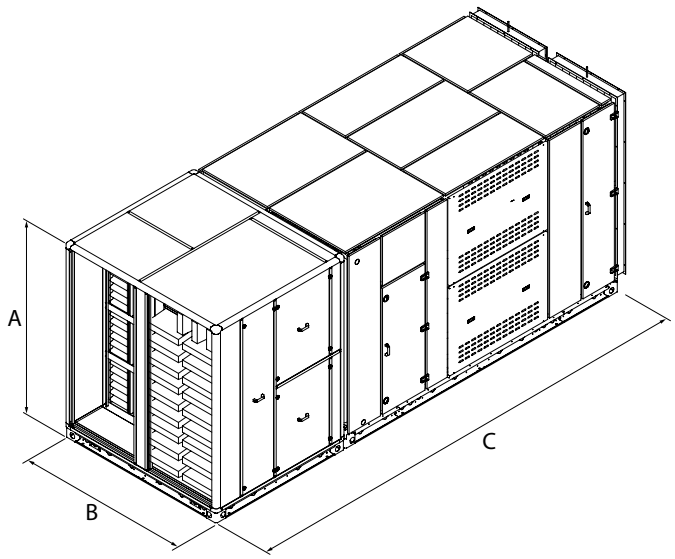
Dimensions



SPL			160	200	250
A (including base H=120mm)	*	mm	2085	2405	2405
B	*	mm	2015	2175	2335
C	*	mm	5790	5790	6430
Weight		kg	2780	3250	3580

*** The dimensions remain unchanged even if the unit, on request, is supplied without a refrigerant circuit.**

3 Heat recovery units

Units for the service sector

Recent research shows that people spend almost 90% of their time in closed spaces. In this situation, the HVAC&R (Heating, Ventilation, Air Conditioning, and Refrigeration) system must be able to ensure comfort, energy efficiency as well as the health of those present.

The "service sector" application includes a wide variety of intended uses such as: hotels, offices, retailers, banks, restaurants and bars, shopping centres, multifunctional structures.
The mechanical systems and therefore the air conditioning units must be adapted to their needs.


AERMEC

Air quality for quality of life in the service sector buildings.

Traditionally, **comfort was the main parameter** for evaluating an HVAC&R. This includes managing temperature and humidity to ensure a comfortable environment for people. **With the regulatory evolution, energy efficiency has become crucial**. Our systems guarantee optimised energy consumption to reduce environmental impact and operating costs.

High efficiency with rotary heat recovery unitwith performance efficiency exceeding 90%

- **High efficiency rotary heat recovery unit,** with low pressure drops and available with hygroscopic surface treatment, aluminium plates and countercurrent heat exchange, with certified efficiency exceeding 90% (EUROVENT standard).

- **Plug Fan fans equipped with electronic control motors EC** (up to size 17) or high-efficiency motors managed by inverters reduces electrical absorption and guarantees silent operation.

- Design aimed at **reducing the overall value of the SFP** (Specific Fan Power) for greater energy sustainability.

- **"Plug & Play" design** for easy installation and use, with integrated electronic control and electrical panel directly on the machine.

- **Dedicated control software** for optimising the use of the unit, aimed at ensuring favourable energy conditions.

- **Free-cooling and free-heating function** to make the most of favourable outdoor weather conditions.

- **Advanced ventilation and heat regulation control** with energy saving functions.

SPECIAL FEATURES

- **Focus on improving indoor air quality (IAQ)** to ensure healthy and safe environments.
- **Control of the presence of dust, pollutants and microorganisms in the air.**
- **Flexible and customisable solutions** for different service sector environments such as hotels, offices, restaurants and shopping centres.
- **Offering advanced and customised technologies** to address emerging air quality challenges.
- **Over 30 years of experience** in the sector.

ADVANTAGES

- **Contribution to the long-term health and well-being** of occupants through the improvement of indoor air quality
- **Adaptability of systems** to a wide range of service sector environments, with customised solutions for every specific need
- **Quiet and efficient** operation
- **Quick and easy installation** with "Plug & Play" design
- **Panel thickness 50 mm**
- **Maximised** energy recovery from expelled air
- **Advanced protection** against contaminants
- **Low energy consumption** and efficient and silent operation
- **Maximum flexibility** thanks to the possibility of vertical or horizontal installation
- **Internal or external execution**

RPS

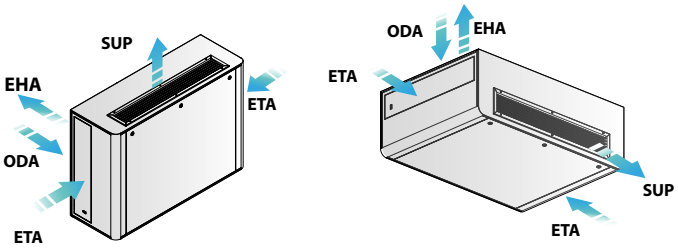
HEAT RECOVERY UNITS

AIR FLOW RATE 800 m^3/h

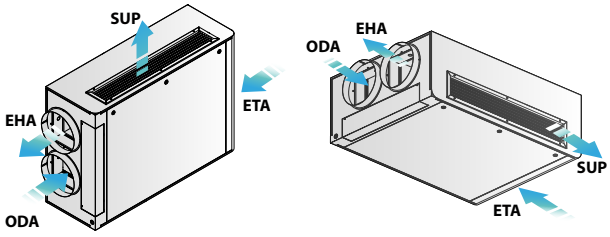
RPS is a cutting-edge counterflow heat recovery unit, perfectly suited for **retrofitting classrooms, offices, hotels, bars, restaurants, and retail spaces.** With its sleek, compact design and unmatched installation flexibility, it blends seamlessly into any environment—just two 300 mm holes in an outer wall are all it takes, with no need for external air ducting.

See all the features

RPS800A



RPS800B



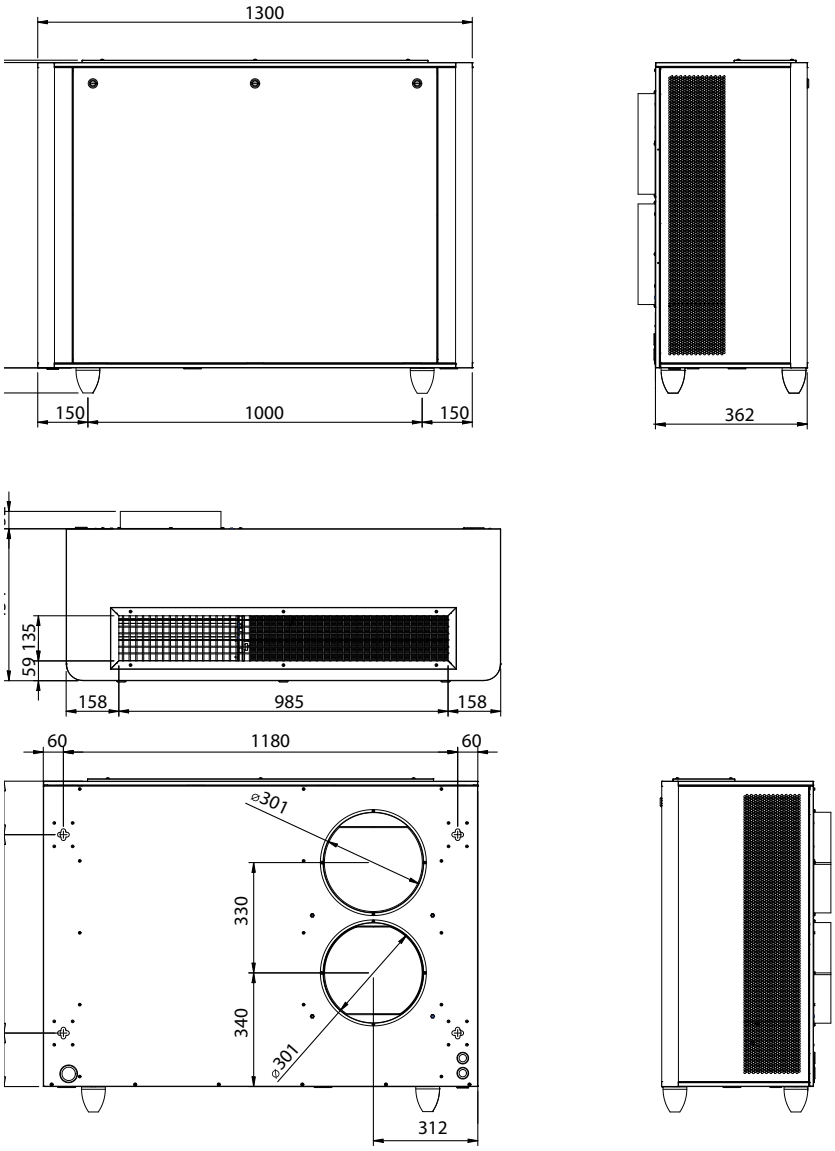
ODA = External air
ETA = Extracted air
SUP = Air introduced
EHA = Exhaust air

Technical data

RPS			800
Power supply			230V ~ 50Hz
Unit type			UVNR - UVB (Non-residential 2-way ventilation unit)
Nominal/maximum fresh air rate		m3/h	800
Nominal/maximum exhaust air rate		m3/h	750
Heat recovery system type			Statico a flussi controcorrente
Winter thermal efficiency	(1)	%	81
Heat capacity recovered in winter	(1)	kW	4,4
Summer thermal efficiency	(2)	%	77
Heat capacity recovered in summer	(2)	kW	1,9
Maximum electric input power		kW	0,300
Sound power L_wA		dB(A)	59,0
Fans			
Type			Plug fan EC
Number			1+1
Filters			
Fresh air filter			EPM1 50% (F7)
Exhaust air filter			EPM10 50% (M5)

(1) Fresh air: Tbs = 0°C; RH = 80%; Exhaust air Tbs = 20°C; RH = 50%; nominal air flow rate
(2) Fresh air: Tbs = 35°C; RH 50%; Exhaust air Tbs = 26°C; RH = 50%; nominal air flow rate

Dimensions



REPURO

HEAT RECOVERY UNITS

AIR FLOW RATE FROM 100 TO 650 m^3/h

REPURO is an innovative counterflow heat recovery system, designed to **ensure effective and continuous air renewal in enclosed spaces.** Thanks to its high-efficiency heat exchangers, **it delivers fresh air at a temperature close to the indoor climate, significantly reducing energy consumption** compared to traditional ventilation systems or uncontrolled air exchange.

See all the features

RePuro Distribution

It's the complete air distribution range which, combined with the innovative RePuro series of recovery and purification units, offers designers, installers, and end users an efficient solution that's easy to install and delivers long-lasting comfort throughout the entire lifecycle of the system.

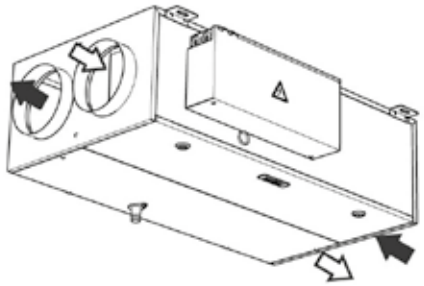
Technical data

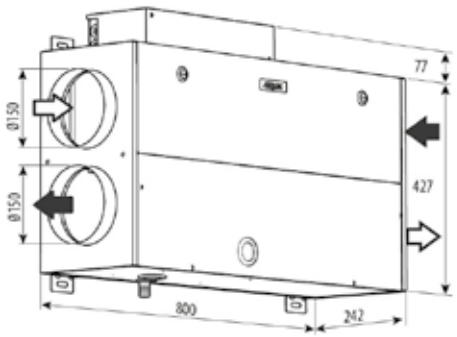
REPURO		100 (1)	170 (1)	250 (2)	350 (2)	450 (2)	550 (2)	650 (2)
Recuperatore								
Alimentazione					230V ~ 50Hz			
Recupero estivo (3)								
Efficienza di recupero	%	90	85	86	82	83	81	78
Potenza termica recuperata	W	180	289	430	573	750	887	1015
Recupero invernale (4)								
Efficienza di recupero	%	94	91	91	89	90	88	87
Potenza termica recuperata	W	957	1573	2329	3171	4118	4940	5734
Dati generali								
SEC	kWh/(m^{2}a)	-36	-38	-37	-40	-40	-40	-40
CLASS					A			
Potenza assorbita totale	W	45	65	160	180	220	280	360
Prestazioni recuperatori di calore								
Portata aria nominale	m^3/h	100	170	250	350	450	550	650
Pressione statica utile	Pa	85	20	195	133	100	120	70

(1) Installazione a soffitto o pensile
(2) Installazione a pavimento o pensile
(3) Temperatura aria espulsa 26°C b.s. 50% u.r.; Temperatura aria di rinnovo 32°C b.s. 50% u.r.
(4) Temperatura aria espulsa 20°C b.s. 50% u.r.; Temperatura aria di rinnovo -10°C b.s. 80% u.r.

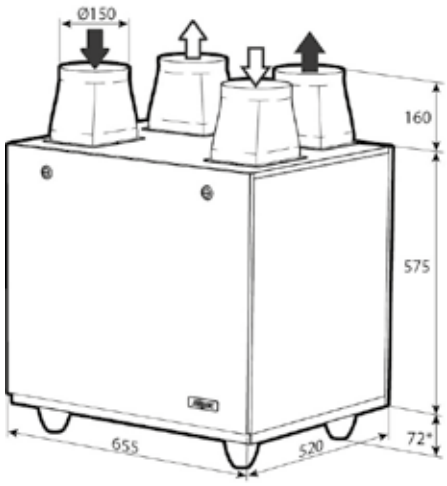
Dimensions

RePuro 100 - 170

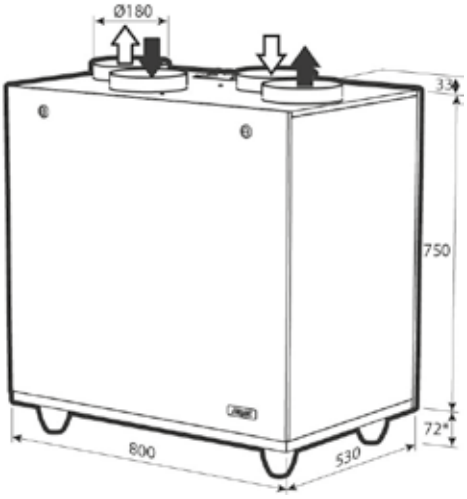




RePuro 250 - 350



RePuro 450 - 550 - 650



3

TRS

HEAT RECOVERY UNITS

WITH ENTHALPY EXCHANGER

AIRFLOW RATES FROM 250 TO 1.300 m^3/h

The unit features a high-efficiency counterflow heat exchanger made of special flat paper sheets, allowing for the recovery of both sensible and latent heat (humidity). As a result, there is no need for a condensate collection tray or drain piping.

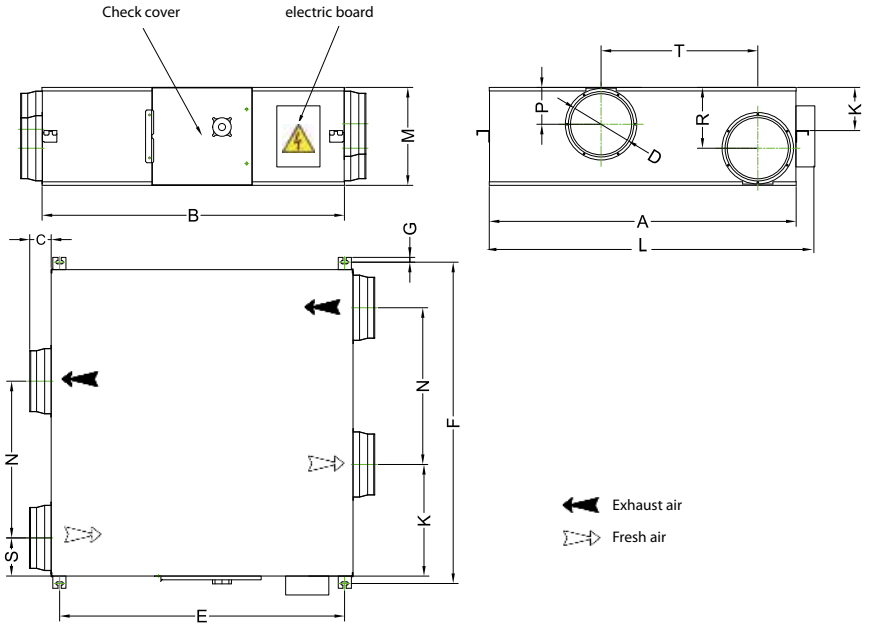
See all the features

Technical data

		TRS251	TRS351	TRS501	TRS651	TRS801	TRS1001	TRS1301
Fans								
Nominal air flow rate	m^3/h	250	350	500	650	800	1000	1300
Nominal useful head	Pa	90	140	110	100	140	140	140
Maximum input power	A	0,5	0,6	0,6	1,2	1,4	2,1	2,7
Type	type				EC			
Speed number	no.	10	10	10	10	10	10	10
SFP int.	$W/(m^3/s)$	812	670	547	846	865	881	873
Maximum input power	kW	0,08	0,13	0,15	0,23	0,32	0,39	0,50
Sound data (1)								
Sound pressure level (1 m)	dB(A)	34,0	37,0	39,0	40,0	42,0	43,0	44,0
Heating performances (2)								
Winter thermal efficiency	%	73,0	74,0	76,0	74,0	76,0	76,0	74,2
Enthalpy winter efficiency	%	65,0	65,0	67,0	65,0	65,0	62,0	59,0
Cooling performances (3)								
Summer thermal efficiency	%	73,0	74,0	76,0	74,0	76,0	76,0	74,0
Summer enthalpy efficiency	%	62,0	62,0	63,0	60,0	63,0	60,0	58,0
Heat recovery unit								
Dry heating efficiency	%	73,0	74,0	76,0	74,0	76,0	76,0	74,0
Power supply					230V~50Hz - 60Hz			

(1) Sound pressure level assessed at 1m from suction / discharge ports and the inspection side at nominal conditions in free field.
(2) Recovery air 20 °C 50%; External air 5 °C 80%.
(3) Recovery air 26 °C 50%; External air 34 °C 50%.

Dimensions



Model	Dimensions / [mm]																Net / Gross Weight [kg]
	A	B	C	D	E	F	G	L	T	K	M	N	P	R	S	Y	
TRS252	599	814	100	150	675	657	19	650	315	111	270	315	111	111	142	142	30/33
TRS352	804	814	100	150	675	862	19	855	480	111	270	480	111	111	162	162	37/41
TRS502	904	894	107	200	754	960	19	955	500	135	270	500	135	135	202	202	43/47
TRS652	884	1186	85	250	1115	940	19	945	428	170	388	428	170	170	228	228	65/70
TRS802	1134	1186	85	250	1115	1190	19	1200	678	170	388	678	170	170	228	228	71/76
TRS1002	1216	1199	85	250	1130	1273	19	1290	621	171	388	621	146	241	151	442	83/88
TRS1302	1216	1199	85	250	1130	1273	19	1290	621	171	388	621	146	241	151	442	83/88

RPLI

COUNTERFLOW HEAT RECOVERY UNITS

AIRFLOW RATES FROM 300 TO 3.900 m^3/h

The RPLI heat recovery unit, ideal for horizontal indoor installations, is the perfect solution for those seeking year-round energy efficiency and comfort. Its counterflow heat exchanger ensures optimal thermal recovery: **fresh air is preheated or precooled using the energy from exhaust air, reducing consumption and maximizing savings.**
Easily integrated into both direct expansion and hydronic systems, RPLI delivers outstanding performance in both winter and summer.

See all the features

Technical data

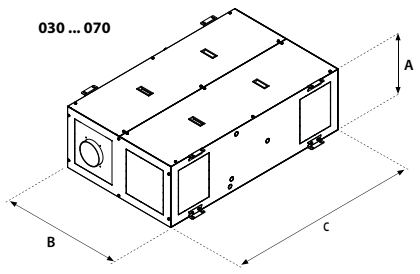
RPLI-L

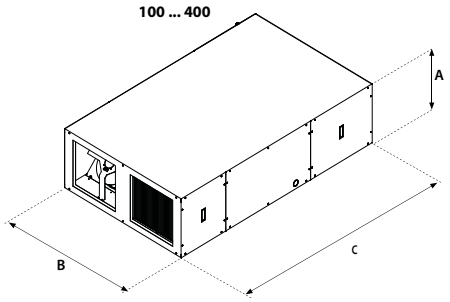
Size		030	050	070	100	140	200	300	400
Heat recovery unit									
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	400V 3~50Hz
Ventilation units type		UVNR (Unità di Ventilazione Non Residenziale)							
Heat recovery system type	tipo/n°	Statico a flussi controcorrente / 1							
Heat capacity recovered (EN308) (1)	kW	1,6	2,4	3,6	4,8	7,1	10,0	14,9	19,7
Dry heating efficiency (2)	%	81,1	78,1	76,8	75,3	76,0	76,3	75,5	75,6
Information in compliance with Annex V of regulation EU no. 1253/2014									
Nominal air flow rate supply / recovery	m^3/s	0,08	0,13	0,19	0,26	0,39	0,54	0,82	1,08
Nominal air flow rate supply / recovery	m^3/h	300	450	700	950	1400	1950	2950	3900
Minimum air flow rate	m^3/h	200	250	400	550	800	1150	1750	2350
Fans (3)									
Type	Type	EC							
Number	n°	2	2	2	2	4	2	2	2
Supplied electrical power consumption	kW	0,07	0,09	0,14	0,21	0,33	0,45	0,47	0,73
Recovered electrical power consumption	kW	0,06	0,09	0,14	0,20	0,31	0,41	0,44	0,69
Total input electric power	kW	0,13	0,17	0,28	0,41	0,64	0,86	0,91	1,42
SFP int.	$W/(m^3/s)$	820,00	953,00	907,00	1120,00	1132,00	1103,00	748,00	928,00
SFP int. lim. 2018	$W/(m^3/s)$	1329	1234	1185	1131	1132	1118	1053	1015
Air filter									
Expelled air filter	tipo/n°	M5/1							
Delivery air filter	tipo/n°	F7/1							

RPLI-P

Size		030	050	070	100	140	200	300	400
Heat recovery unit									
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	400V 3~50Hz	400V 3~50Hz
Ventilation units type		UVNR (Unità di Ventilazione Non Residenziale)							
Heat recovery system type	tipo/n°	Statico a flussi controcorrente / 1							
Heat capacity recovered (EN308) (1)	kW	1,6	2,4	3,6	4,8	7,1	10,0	14,9	19,7
Dry heating efficiency (2)	%	81,1	78,1	76,8	75,3	76,0	76,3	75,5	75,6
Information in compliance with Annex V of regulation EU no. 1253/2014									
Nominal air flow rate supply / recovery	m^3/s	0,08	0,13	0,19	0,26	0,39	0,54	0,82	1,08
Nominal air flow rate supply / recovery	m^3/h	300	450	700	950	1400	1950	2950	3900
Minimum air flow rate	m^3/h	200	250	400	550	800	1150	1750	2300
Fans (3)									
Type	tipo	EC							
Number	n°	2	2	2	2	2	4	4	2
Supplied electrical power consumption	kW	0,04	0,08	0,11	0,22	0,35	0,41	0,55	0,87
Recovered electrical power consumption	kW	0,04	0,08	0,11	0,21	0,33	0,38	0,50	0,82
Total input electric power	kW	0,09	0,16	0,23	0,42	0,68	0,79	1,04	1,69
SFP int.	$W/(m^3/s)$	543,00	903,00	694,00	1116,00	1095,00	918,00	770,00	999,00
SFP int. lim. 2018	$W/(m^3/s)$	1329	1234	1185	1131	1132	1118	1053	1015
Air filter									
Expelled air filter	tipo/n°	M5/1							
Delivery air filter	tipo/n°	F7/1							

(1) Expelled air: Tdb=25°C; Twb<14°C. Fresh air: Tdb=5°C.
(2) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K , excluding the heating gain generated by the fan motors and the internal leakage.
(3) Performances referring to clean filters





Size		030	050	070	100	140	200	300	400
A	mm	400	400	435	435	460	460	600	600
B	mm	800	800	945	945	1100	1600	1700	2050
C	mm	1300	1300	1600	1600	1800	1800	2350	2350
Empty Weight	kg	95	93	125	123	160	210	287	340

RTD

THERMODYNAMIC
HEAT RECOVERY UNITS
WITH INTEGRATED HEAT PUMP
AIRFLOW RATES FROM 1100 TO 3.200 m^3/h

A compact and highly efficient unit for air renewal, filtration, and treatment, **equipped with thermodynamic heat recovery via an integrated refrigeration circuit. Thanks to the Inverter compressor, it ensures significant energy savings while maintaining a constant supply air temperature, delivering maximum comfort in every season.**
Easily integrated into both direct expansion and hydronic systems, it is the ideal solution for year-round applications.

See all the features

Features
Versions
Horizontal Installation:
RTD: Standard unit with constant airflow control.
RTD_Q: Unit with variable airflow modulation based on CO_2 concentration.
RTD_W: Unit with integrated hot/cold water coil, complete with 3-way valve, modulating actuator, and antifreeze thermostat.

Main Components:
- Refrigeration circuit with BLDC Inverter compressor.
- Plug fan ventilators with EC Inverter motor.
- Safety valve.

Lower sandwich panel in galvanized sheet metal with injected polyurethane insulation; upper and side panels in galvanized sheet metal internally lined with insulating mat.

Synthetic filter, Coarse 85% class according to EN16890, on the outdoor air intake, complete with differential pressure switch for clogging detection.

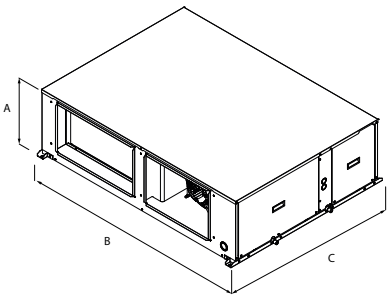
Technical data

		RTD11	RTD14	RTD17	RTD21	RTD26	RTD32
Air flow rates							
Nominal air flow rate	m^3/h	1100	1400	1700	2100	2600	3200
Minimum air flow rate	m^3/h	950	1200	1450	1800	2200	2700
Maximum air flow rate	m^3/h	1200	1550	1850	2300	2850	3500
Delivery fan							
Type	type	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan
Fan motor	type	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors
Number	no.	1	1	1	1	1	1
Nominal useful head	Pa	150	150	150	150	150	150
Maximum useful head	Pa	510	580	520	360	570	380
Cooling input power	kW	0,19	0,20	0,23	0,32	0,43	0,62
Heating input power	kW	0,18	0,18	0,22	0,30	0,39	0,56
Expulsion fan							
Type	type	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan
Fan motor	type	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors
Number	no.	1	1	1	1	1	1
Nominal useful head	Pa	150	150	150	150	150	150
Maximum useful head	Pa	530	600	520	370	590	400
Cooling input power	kW	0,17	0,16	0,19	0,27	0,33	0,46
Heating input power	kW	0,18	0,18	0,22	0,31	0,39	0,54
Performance in cooling mode at maximum compressor speed (1)							
Cooling capacity	kW	6,70	8,00	8,80	11,20	14,10	16,30
Sensible cooling capacity	kW	5,70	6,80	7,80	9,80	12,10	13,80
Compressors absorbed power	kW	1,80	2,20	2,30	3,20	4,00	4,50
Total input power EN14511 2017	kW	2,09	2,43	2,58	3,55	4,48	5,15
EER EN14511:2017	W/W	3,20	3,30	3,42	3,16	3,14	3,16
EER	W/W	3,11	3,15	3,24	2,96	2,95	2,92
Performance in heating mode at maximum compressor speed (2)							
Heating capacity	kW	7,70	9,30	10,60	13,80	16,90	20,00
Compressors absorbed power	kW	1,60	2,00	2,20	2,90	3,30	4,10
COP refrigerant circuit	W/W	4,83	4,64	4,82	4,74	5,12	4,87
COP EN14511:2017 (2)	W/W	4,07	4,13	4,26	4,20	4,45	4,18
COP	W/W	3,94	3,92	4,02	3,91	4,15	3,84
Total input power EN14511 2017	kW	1,90	2,20	2,50	3,30	3,80	4,80
Total input power	kW	2,00	2,40	2,60	3,50	4,10	5,20
Compressor							
Type	type	Twin-rotary BLDC	Twin-rotary BLDC	Twin-rotary BLDC	Twin-rotary BLDC	Twin-rotary BLDC	Twin-rotary BLDC
Compressor regulation	Type	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
Number	no.	1	1	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A	R410A	R410A
Electric data							
Input power at full load	kW	4,30	4,50	4,50	5,30	6,10	6,10
Input current at full load	A	14,40	13,80	13,80	17,90	16,90	16,90
Power supply							
Power supply		230V 50Hz	230V 50Hz	230V 50Hz	400V 3N 50Hz	400V 3N 50Hz	400V 3N 50Hz

(1) Cooling mode: aire temperature 35°C Tbs / 24 °C Tbh ; ambient air 27°C Tbs /19°C Tbh .
(2) Heating mode: aire temperature 7°C Tbs / 6°C Tbh ; ambient air 20°C Tbs /15°C Tbh.

Dimensions

RTD			11	14	17	21	26	32
Dimensions and weights								
A	.,Q,QW,W	mm	430	430	530	530	630	630
B	.,Q,QW,W	mm	1508	1508	1508	1508	1508	1508
C	.,Q,QW,W	mm	1100	1100	1100	1100	1100	1100
Empty weight	.	kg	133	135	148	160	179	179
	Q	kg	135	137	150	162	181	181
	QW	kg	135	142	161	172	197	197
	W	kg	140	142	159	170	195	195
Weight functioning	.	kg	133	135	148	160	179	179
	Q,QW,W	kg	-	-	-	-	-	-



RPF

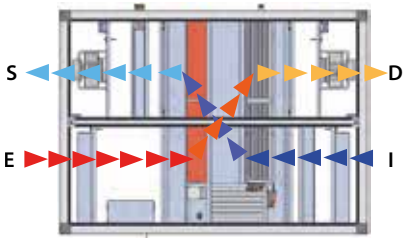
HIGH-EFFICIENCY HEAT RECOVERY UNITS WITH COUNTERFLOW HEAT EXCHANGER AIRFLOW RATES FROM 790 TO 4.250 m^3/h

RPF heat recovery units are the ideal solution for commercial applications requiring the perfect balance between indoor comfort and energy efficiency.
Thanks to their counterflow heat exchangers, RPF units deliver a real advantage—recovering over 90% of the energy from exhaust air, dramatically reducing consumption and optimizing overall system performance.
Easily integrated with traditional systems featuring fan coil units and chillers, **RPF units are suitable for both winter and summer operation, and can be installed horizontally or vertically,** offering maximum design flexibility.

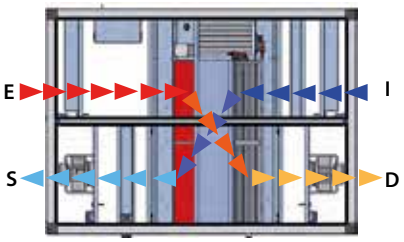
See all the features

Configurations

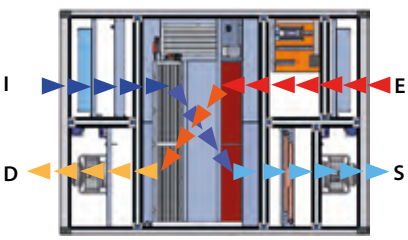
RPF O Horizontal Configuration
Right delivery (top view)



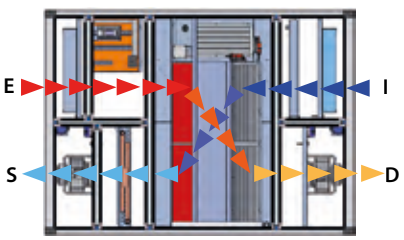
RPF P Horizontal Configuration
Left delivery (top view)



RPF V Vertical Configuration
Right delivery (view from accessible side)



RPF Z Vertical Configuration
Left delivery (view from accessible side)



D = Expulsion I = Renewal S = Sending E = Resumption

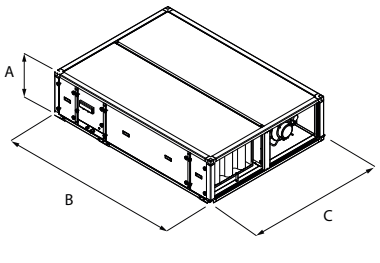
Technical data

		RPF008	RPF010	RPF013	RPF020	RPF031	RPF042
Heat recovery unit							
Power supply			230V~50Hz			400V 3~50Hz	
Ventilation units type			UVNR (non-residential ventilation unit)				
Heat recovery system type	Type/n°		Statico a flussi controcorrente / 1				
Heat capacity recovered (EN308) (1)	kW	4,2	5,4	7,0	10,7	16,6	22,8
Dry heating efficiency	%	80,0	79,9	80,0	79,9	79,9	83,8
Information in compliance with Annex V of regulation EU no. 1253/2014							
Nominal air flow rate supply / recovery	m^3/s	0,22	0,28	0,36	0,56	0,86	1,18
Nominal air flow rate supply / recovery	m^3/h	790	1000	1300	2000	3100	4250
Minimum air flow rate	m^3/h	200	200	400	1000	1000	1300
Maximum air flow rate	m^3/h	980	1260	1530	2350	3700	4600
Fans							
Commissioning	type			Analogue signal of EC fan (0-10Vdc)			
Type	type			EC			
Number	no.	2	2	2	2	2	2
Supplied electrical power consumption	kW	0,16	0,24	0,33	0,60	0,79	1,30
Recovered electrical power consumption	kW	0,15	0,23	0,33	0,56	0,76	1,20
Total input electric power	kW	0,31	0,47	0,66	1,16	1,55	2,50
Maximum input power	kW	0,60	1,24	1,26	1,66	5,26	5,26
Total Maximum Absorbed Current	A	4,6	7,5	7,5	9,3	11,1	11,1
SFP int.	$W/(m^3/s)$	625	667	743	1142	919	1211
SFP int. lim. 2018	$W/(m^3/s)$	1127	1118	1109	1227	1031	1253
Filters face velocity	m/s	1,8	2,0	1,8	2,2	2,2	2,1
Nominal external pressure Δp	Pa	200	250	250	250	250	225
Useful static supply pressure	Pa	191	218	169	134	215	143
Useful static recovery pressure	Pa	196	233	175	152	255	184
Supplied internal pressure drop Δps int.	Pa	174	198	219	319	304	372
Recovered internal pressure drop Δps int.	Pa	176	189	227	355	293	379
Fans static efficiency	%	61,7	57,2	57,2	61,8	66,9	62,7
Internal leakage	%	0,3	0,3	0,3	0,1	0,3	0,2
External leakage	%	< 3	< 3	< 3	< 3	< 3	< 3
Air filter							
Supply Filter Energy Classification				B			
Return Filter Energy Classification				On request			
Potenza assorbita a pieno carico	kW	4,30	4,50	4,50	5,30	6,10	6,10
Corrente assorbita a pieno carico	A	14,40	13,80	13,80	17,90	16,90	16,90
Power supply							
POwer supply		230V-50Hz	230V-50Hz	230V-50Hz	400V 3N-50Hz	400V 3N-50Hz	400V 3N-50Hz

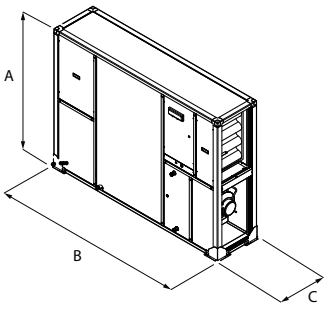
(1) Cooling: outdoor air 35°C db / 24°C wb; indoor air 27°C db / 19°C wb.
(2) Heating: outdoor air 7°C db / 6°C wb; indoor air 20°C db / 15°C wb.

Dimensions

RPF 008 - 031
Horizontal Installation



RPF 008 - 042
Vertical Installation



RPF			008	010	013	020	031	042
Dimensions and weights								
A	O,P	mm	450	450	524	560	700	-
	V,Z	mm	1054	1258	1374	1694	1948	1550
B	O,P	mm	1915	1915	2174	2334	2654	-
	V,Z	mm	1915	1915	2174	2334	2654	2974
C	O,P	mm	1054	1258	1374	1694	1948	-
	V,Z	mm	450	450	524	560	700	1130
Empty weight	O,P	kg	194	220	264	328	452	-
	V,Z	kg	194	220	264	328	452	585

URX-CF

HEAT RECOVERY UNITS

WITH INTEGRATED HEAT PUMP

AIRFLOW RATES FROM 750 TO 3.300m^3/h

The URX-CF units provide a complete and compact solution for air treatment. **This all-in-one monoblock integrates ventilation, filtration, heat recovery, and a heat pump refrigeration circuit with high-efficiency, low-noise scroll compressors and R410A refrigerant.**
Thanks to the refrigeration circuit, fresh air is heated or cooled depending on the season, ensuring consistent comfort and energy savings year-round.
URX-CF is a standalone unit, ideal for combining necessary air renewal with effective thermal recovery, optimizing energy consumption.
Its compact design facilitates ceiling installation, while excellent accessibility simplifies all maintenance operations.

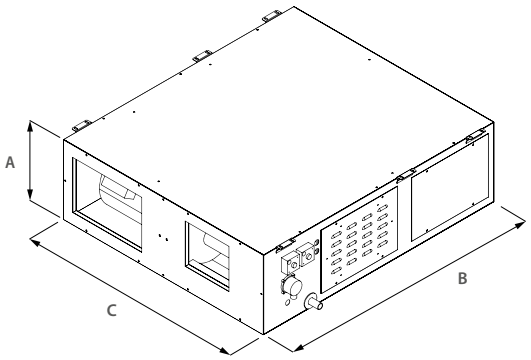
See all the features

Technical data

		URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
Heat recovery unit						
Power supply		230V~50Hz	230V~50Hz	400V~ 3N 50Hz	400V~ 3N 50Hz	400V~ 3N 50Hz
Cooling performances (1)						
Total cooling capacity (heat recovery + refrigerant circuit)	kW	6,1	7,3	10,2	15,0	23,0
Cooling capacity available	kW	1,4	1,7	2,2	3,4	5,1
Cooling capacity recovered	kW	0,9	1,3	2,0	2,8	4,2
Summer thermal efficiency	%	46,2	51,2	53,2	53,6	53,6
Total input power	kW	2,60	2,80	3,80	5,00	6,90
Heating performances (2)						
Heating capacity total (heat recovery + refrigerant circuit)	kW	8,8	10,8	15,8	22,8	33,3
Heating capacity available	kW	2,4	2,3	3,0	4,8	5,2
Recovered heating power	kW	2,9	4,3	7,1	10,1	14,3
Winter thermal efficiency	%	46,2	51,2	53,2	53,6	53,6
Total input power	kW	2,00	2,00	3,30	4,00	5,50
Compressor						
Type	type	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor regulation	Type	On-Off	On-Off	On-Off	On-Off	On-Off
Number	no.	1	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (3)	kg	2,4	2,9	3,0	3,7	4,5
Delivery fan						
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1	1
Nominal air flow rate	m^3/h	750	1000	1500	2100	3300
Minimum air flow rate	m^3/h	640	850	1275	1785	2800
High static pressure	Pa	278	233	239	166	289
Total fan input power	kW	0,37	0,42	0,51	0,62	1,25
Total fan input current	A	2,4	2,4	3,6	3,6	6,6
Recovery fan						
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1	1
Nominal air flow rate	m^3/h	750	1000	1500	2100	3300
Minimum air flow rate	m^3/h	640	850	1275	1785	2800
High static pressure	Pa	248	218	233	163	273
Total fan input power	kW	0,37	0,42	0,51	0,62	1,25
Total fan input current	A	2,4	2,4	3,6	3,6	6,6

(1) Recovery air 26 °C 50%; External air 34 °C 50%.
(2) Recovery air 20 °C 50%; External air 5 °C 80%.
(3) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Dimensions



		URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
Dimensions and weights						
A	mm	450	450	550	550	600
B	mm	1300	1300	1500	1500	1600
C	mm	1500	1500	1800	1800	1800
Empty weight	kg	205	218	272	298	328

URHE-CF

HEAT RECOVERY UNITS
WITH INTEGRATED HEAT PUMP
AIRFLOW RATES FROM 1.000 TO 3.300m^3/h

URHE-CF units deliver maximum efficiency by combining a high-performance crossflow plate heat exchanger with a heat pump refrigeration circuit using R410A refrigerant.
The high-efficiency heat exchanger significantly reduces the operating time of the refrigeration circuit throughout the year, contributing to substantial energy savings and low operating costs.
Compact and versatile, URHE-CF units are easy to install even in ceiling-mounted applications and offer excellent accessibility to all internal components for quick and convenient maintenance.

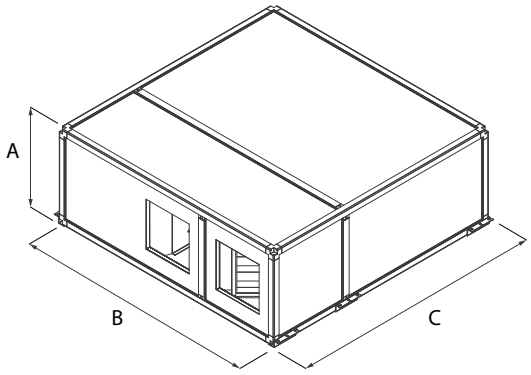
See all the features

Technical data

		URHE10CF	URHE15CF	URHE25CF	URHE33CF
Heat recovery unit					
Power supply		230V~50Hz	230V~50Hz	400V~ 3N 50Hz	400V~ 3N 50Hz
Cooling performances (1)					
Total cooling capacity (heat recovery + refrigerant circuit)	kW	6,6	8,7	13,8	19,8
Cooling capacity available	kW	1,8	3,1	3,3	5,4
Cooling capacity recovered	kW	2,2	3,2	4,5	5,8
Summer thermal efficiency	%	82,0	80,0	68,0	65,0
Total input power	kW	2,60	2,90	5,10	6,50
Heating performances (2)					
Heating capacity total (heat recovery + refrigerant circuit)	kW	10,9	14,2	24,8	33,1
Heating capacity available	kW	2,8	2,9	3,9	7,0
Recovered heating power	kW	3,6	10,0	15,3	19,6
Winter thermal efficiency	%	82,0	80,0	73,0	71,0
Total input power	kW	2,20	2,40	4,20	4,90
Compressor					
Number	no.	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A
Delivery fan					
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1
Nominal air flow rate	m^3/h	1000	1500	2500	3300
Minimum air flow rate	m^3/h	800	1100	2000	2500
High static pressure	Pa	320	245	140	220
Total fan input power	kW	0,42	0,46	1,10	1,10
Total fan input current	A	3,1	3,1	5,3	5,3
Recovery fan					
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1
Nominal air flow rate	m^3/h	1000	1500	2500	3300
Minimum air flow rate	m^3/h	800	1100	2000	2500
High static pressure	Pa	320	245	140	220
Total fan input power	kW	0,42	0,46	1,10	1,10
Total fan input current	A	3,1	3,1	5,3	5,3

(1) Recovery air 26 °C 50%; External air 34 °C 50%.
(2) Recovery air 20 °C 50%; External air 5 °C 80%.

Dimensions



		URHE10CF	URHE15CF	URHE25CF	URHE33CF
Dimensions and weights					
A	mm	580	580	580	580
B	mm	1640	1640	1640	1970
C	mm	1500	1500	1990	2310
Empty weight	kg	300	310	373	410

ERSR

HEAT RECOVERY UNITS

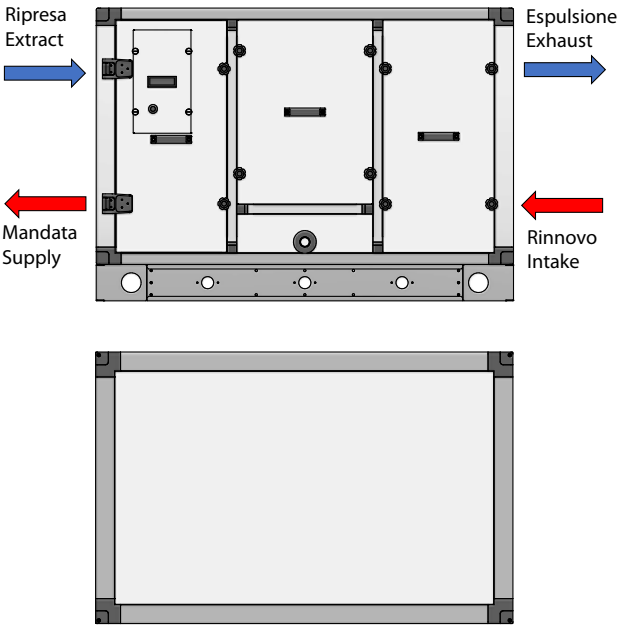
AIR FLOW RATE FROM 1,000 TO 30,000 m^3/h

The ERSR units are designed to offer superior performance in the management of air quality and thermo-hygrometric comfort in **residential environments.**

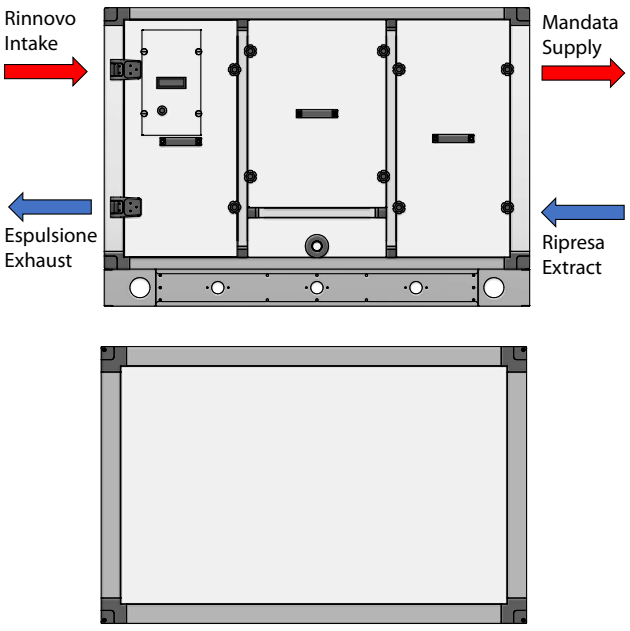
See all the features

Configurations

ERSR Horizontal Configuration
Right delivery (top view)



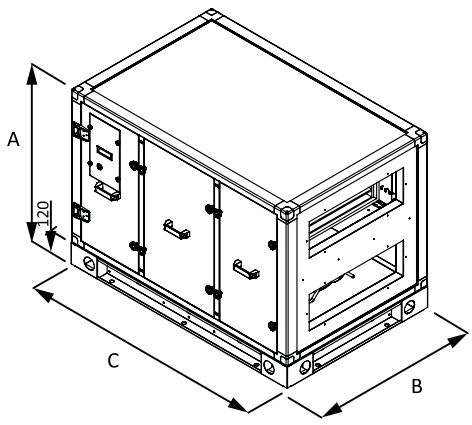
ERSR HRR Horizontal Configuration
left delivery (top view)



Technical data

ERSR		07	09	12	15	17	21	24
HEAT RECOVERY UNIT								
Power supplay					400V 3N ~ 50Hz			
Unit type					UVNR (Unit ventilation not residential)			
Heat capacity recovered (EN308) (1)	kW	5,8	10,3	19,4	31,4	41,3	64,3	85,0
Dry heating efficiency (2)	%	79,0	78,9	78,3	78,8	78,9	78,5	78,7
Information In Compliance With Annex V Of Regulation Eu No. 1253/2014								
Nominal air flow rate supply / recovery	m^3/s	0,31	0,54	1,03	1,65	2,17	3,39	4,47
Nominal air flow rate supply / recovery	m^3/h	1100	1950	3700	5950	7800	12200	16100
Fans (3)								
Commissioning	type				Analog signal of EC fan			
Type	type				Plug-fan			
Number	n°	1	1	1	1	1	1	1
Supplied electrical power consumption	kW	0,27	0,48	0,85	1,31	1,90	2,20	2,80
Recovered electrical power consumption	kW	0,27	0,48	0,86	1,30	1,90	2,20	2,80
Total input electric power	kW	0,84	2,04	6,10	8,78	10,20	22,37	30,37
SFP int.	$W/(m^3/s)$	1061,00	994,00	927,00	733,00	669,00	778,00	759,00
SFP int. lim. 2018	$W/(m^3/s)$	1141	1106	1033	942	887	886	887
Filters face velocity	m/s	1,8	1,9	1,8	1,8	1,8	1,6	1,7
Nominal external pressure Δp (3)	Pa	100	100	100	100	100	100	100
Useful static supply pressure	Pa	360	520	1000	1100	900	1440	1500
Useful static recovery pressure	Pa	360	520	1000	1100	900	1440	1500
Supplied internal pressure drop Δps int.	Pa	269	262	276	222	216	240	241
Recovered internal pressure drop Δps int.	Pa	272	265	280	225	219	243	244
Fans static efficiency (4)	%	64,5	65,5	62,8	64,1	67,2	64,7	65,8
Internal leakage (5)	%	< 3	< 3	< 3	< 3	< 3	< 3	< 3
External leakage	%	0,2	0,2	0,1	0,1	0,1	0,1	0,1
Air filter								
Delivery filter energy classification					D			
Recovery filter energy classification					D			

(1) Expelled air: Tdb=25°C; Twb<14°C. Fresh air: Tdb=5°C.
(2) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K , excluding the heating gain generated by the fan motors and the internal leakage.
(3) Performances referring to clean filters
(4) According to regulation EU 327/2011
(5) External leakage test performed at +400 Pa and -400 Pa; internal leakage test performed at 250 Pa



Dimensions

ERSR		07	09	12	15	17	21	24
A	mm	965	1285	1445	1765	2085	2405	2725
B	mm	895	1005	1375	1695	1855	2335	2665
C	mm	1375	1535	2045	2365	2365	3005	3005
Empty weight	kg	240	340	570	820	1010	1610	1980

The dimensions and weights are subject to changes.

4 HANDLING UNIT
Applications for the Tertiary Sector

Fan coil units are the **ideal solution to ensure maximum indoor comfort in any setting—residential, commercial, or industrial.** Designed to heat, cool, and distribute air evenly throughout the space, these units combine efficiency, quiet operation, and rapid response.

Available in various configurations (horizontal, vertical, ductable), they integrate seamlessly into any HVAC system, offering tailored solutions for every application.

- **Filtration**
- **Thermo-hygrometric control**
- **Air quality control**

4

TVS

AIR HANDLING UNITS

AIRFLOW RATES FROM 800 TO 5.200 m^3/h

High-Performance Ductable handling Unit. Designed to deliver high static pressure in small and medium-sized environments, ensuring comfort and installation flexibility.

Standard-configured for 2-pipe systems, it can be easily adapted to 4-pipe systems with the addition of a secondary water coil (optional), installable directly inside the unit.

Available for horizontal ceiling-mounted or vertical wall-mounted installation, the TVS unit fits perfectly into any HVAC layout, offering reliable performance and a compact design.

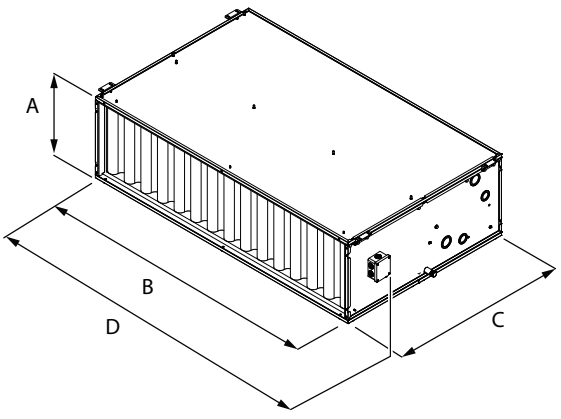
See all the features

Technical data

		TVS084	TVS154	TVS204	TVS274	TVS344	TVS404	TVS524
Performance in heating mode 70 °C / 60 °C - Main coil 2-pipe system (1)								
Heating capacity	kW	10,50	18,80	25,10	31,90	41,40	54,20	66,40
Water flow rate	l/h	901	1615	2157	2738	3557	4659	5705
Pressure drop	kPa	26	25	37	23	41	38	55
Performance in heating mode 45 °C / 40 °C - Main coil for 2-pipe systems (2)								
Heating capacity	kW	5,20	9,30	12,40	15,80	20,50	26,80	32,70
Water flow rate	l/h	896	1600	2139	2718	3525	4610	5640
Pressure drop	kPa	28	27	40	24	44	40	58
Heating performance 65 °C /55 °C - Secondary coil 4-pipe system (3)								
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
Cooling performances 7 °C / 12 °C - Main coil 2 pipe system (4)								
Cooling capacity	kW	4,40	7,70	10,90	13,20	17,90	23,20	27,80
Sensible cooling capacity	kW	3,30	6,00	8,20	10,40	13,60	17,10	20,70
Water flow rate	l/h	753	1322	1870	2266	3078	3979	4766
Pressure drop	kPa	22	20	33	20	36	34	46
Fan								
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	n°	1	2	1	1	2	2	2
Nominal air flow rate	m^3/h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Sound data								
Sound power level (inlet + radiated)	dB(A)	66,0	68,0	77,0	77,0	78,0	80,0	80,0
Sound power level (outlet)	dB(A)	66,0	68,0	74,0	76,0	74,0	77,0	78,0
Power supply								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz

(1) Room air temperature 20°C d.b.; Water (in/out) 70 °C / 60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C / 40 °C
(3) Room air temperature 20 °C d.b.; Water (in/out) 65 °C / 55 °C
(4) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C

Dimensions



Unit for horizontal installation

		TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
Dimensions and weights															
A	mm	300	300	300	300	390	390	390	390	390	390	390	390	390	390
B	mm	700	700	1000	1000	1000	1000	1400	1400	1400	1400	2000	2000	2000	2000
C	mm	700	700	700	700	850	850	850	850	850	850	850	850	850	850
D	mm	770	770	1070	1070	1070	1070	1470	1470	1470	1470	2070	2070	2070	2070
Net weight	kg	27,0	28,0	42,0	44,0	56,0	59,0	79,0	83,0	89,0	94,0	119,0	125,0	120,0	126,0

TVH

AIR HANDLING UNITS

AIRFLOW RATES FROM 800 TO 5.200 m^3/h

High-Performance Ductable handling Unit
Designed to deliver high static pressure in small to medium-sized environments, ensuring comfort and installation flexibility.

Standard configuration is suitable for 2-pipe systems, but it can be easily adapted for 4-pipe systems using the optional secondary water coil, which can be installed directly inside the unit.

Available exclusively for horizontal installation.

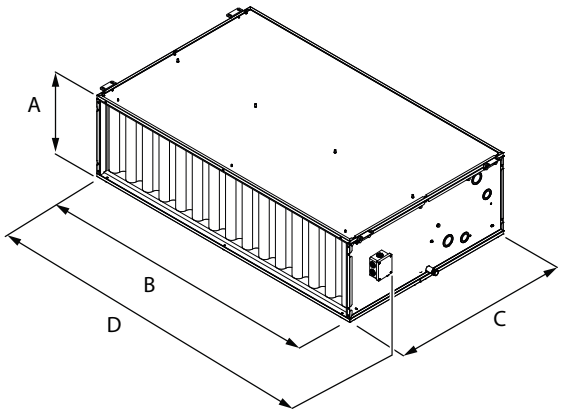
See all the features

Technical data

		TVH084	TVH154	TVH204	TVH274	TVH344	TVH404	TVH524
Performance in heating mode 70 °C / 60 °C - Main coil 2-pipe system (1)								
Heating capacity	kW	11,60	20,80	28,50	36,60	47,10	60,30	73,90
Water flow rate	l/h	994	1787	2454	3150	4054	5189	6353
Pressure drop	kPa	31	31	48	31	53	42	60
Performance in heating mode 45 °C / 40 °C - Main coil for 2-pipe systems (2)								
Heating capacity	kW	5,70	10,30	14,10	18,20	23,40	29,80	36,50
Water flow rate	l/h	985	1769	2431	3123	4017	5125	6270
Pressure drop	kPa	33	32	51	33	56	45	64
Heating performance 65 °C /55 °C - Secondary coil 4-pipe system (3)								
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
Cooling performances 7 °C / 12 °C - Main coil 2 pipe system (4)								
Cooling capacity	kW	4,70	8,30	11,90	14,30	19,30	24,90	29,30
Sensible cooling capacity	kW	3,50	6,20	8,50	10,80	14,10	17,60	21,40
Water flow rate	l/h	815	1422	2038	2447	3316	4267	5032
Pressure drop	kPa	27	25	41	23	44	38	51
Fan								
Type	type	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	n°	1	2	1	1	2	2	2
Nominal air flow rate	m^3/h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Sound data								
Sound power level (inlet + radiated)	dB(A)	74,0	74,0	70,0	76,0	72,0	73,0	79,0
Sound power level (outlet)	dB(A)	72,0	75,0	72,0	78,0	73,0	75,0	81,0
Power supply								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz

(1) Room air temperature 20°C d.b.; Water (in/out) 70 °C / 60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C / 40 °C
(3) Room air temperature 20 °C d.b.; Water (in/out) 65 °C / 55 °C
(4) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C

Dimensions



Unit for horizontal installation

		TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
Dimensioni e pesi															
A	mm	300	300	300	300	390	390	390	390	390	390	390	390	390	390
B	mm	700	700	1000	1000	1000	1000	1400	1400	1400	1400	2000	2000	2000	2000
C	mm	700	700	700	700	850	850	850	850	850	850	850	850	850	850
D	mm	770	770	1070	1070	1070	1070	1470	1470	1470	1470	2070	2070	2070	2070
Peso netto	kg	27,0	28,0	42,0	44,0	56,0	59,0	79,0	83,0	89,0	94,0	119,0	125,0	120,0	126,0

TS

AIR HANDLING UNITS

AIRFLOW RATES FROM 810 TO 4.225 m^3/h

Ductable handling Unit
An ideal solution for small to medium-sized residential, commercial, and hotel installations. Designed for ceiling-mounted installation, it stands out for its compact design and quiet operation. A wide range of accessories ensures maximum flexibility and the ability to adapt to any system requirement.

See all the features

Technical data

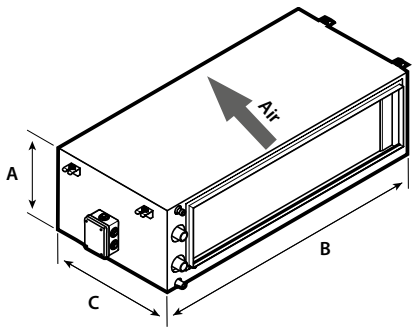
Unit designed to operate with all recirculating air or maximum 10% of external air.

		TS13			TS16			TS23			TS34			TS36			TS43		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Cooling performance 7 °C / 12 °C (1)																			
Cooling capacity	kW	4,39	4,65	4,85	4,44	5,21	5,81	7,18	7,65	7,98	8,59	9,20	9,61	9,40	10,08	10,52	7,14	9,35	11,11
Sensible cooling capacity	kW	3,39	3,60	3,75	3,41	3,99	4,45	5,82	6,20	6,46	6,80	7,28	7,61	7,43	7,96	8,31	5,75	7,54	8,96
Water flow rate system side	l/h	754	800	835	764	896	999	1235	1315	1372	1478	1583	1653	1617	1733	1809	1227	1608	1912
Pressure drop system side	kPa	17	19	21	6	7	9	20	23	24	20	22	24	13	15	16	10	17	23
Heating performance 70 °C / 60 °C (2)																			
Heating capacity	kW	8,89	9,43	9,83	9,75	11,34	12,61	14,14	15,04	15,67	17,71	18,92	19,76	19,36	20,71	21,60	14,24	18,33	21,67
Water flow rate system side	l/h	780	827	862	856	995	1106	1240	1319	1375	1553	1660	1733	1698	1816	1894	1249	1068	1900
Pressure drop system side	kPa	10	12	13	5	7	8	10	12	12	17	19	21	11	13	14	8	13	18
Fan																			
Air flow rate	m^3/h	810	877	930	656	803	930	1316	1432	1518	1376	1507	1600	1376	1510	1601	1170	1631	2050
High static pressure	Pa	68	80	90	27	41	55	77	91	102	62	75	85	33	40	45	37	72	114
Input power	kW	0,1	0,1	0,2	0,1	0,1	0,2	0,2	0,3	0,3	0,2	0,3	0,3	0,2	0,3	0,3	0,3	0,3	0,4
Type	type	Centrifugal																	
Fan motor	type	On-Off																	
Number	n°		1			1			2			2			2			2	
Power supply		230V~50Hz																	

		TS46			TS53			TS56			TS63			TS74			TS76		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Cooling performance 7 °C / 12 °C (1)																			
Cooling capacity	kW	8,57	11,27	13,44	8,05	11,06	13,86	9,50	13,13	16,47	8,11	12,84	16,62	17,47	20,65	21,92	19,79	23,38	24,93
Sensible cooling capacity	kW	6,90	9,06	10,81	5,68	7,80	9,77	6,73	9,31	11,68	6,40	10,12	13,11	14,20	16,78	17,82	16,04	18,95	20,21
Water flow rate system side	l/h	1474	1938	2311	1385	1902	2384	1633	2260	2833	1395	2208	2858	3006	3551	3771	3405	4022	4289
Pressure drop system side	kPa	8	13	17	12	21	32	10	18	27	7	16	26	19	25	28	17	23	26
Heating performance 70 °C / 60 °C (2)																			
Heating capacity	kW	18,17	23,45	27,83	15,55	20,82	25,89	19,63	26,43	32,90	18,32	27,78	35,61	37,33	43,80	46,45	42,00	49,25	52,44
Water flow rate system side	l/h	1593	2056	2440	1364	1826	2270	1722	2321	2886	1607	2436	3123	3274	3841	4073	3683	4319	4599
Pressure drop system side	kPa	6	10	14	9	15	22	9	15	22	6	13	21	16	22	24	15	20	22
Fan																			
Air flow rate	m^3/h	1173	1642	2076	1211	1775	2387	1202	1777	2391	1493	2570	3599	3117	3869	4200	3119	3869	4225
High static pressure	Pa	24	48	76	26	57	104	18	38	69	20	61	120	63	97	115	41	63	75
Input power	kW	0,3	0,3	0,4	0,3	0,4	0,5	0,3	0,4	0,5	0,3	0,4	0,6	0,7	0,8	0,8	0,7	0,8	0,8
Type	type	Centrifugal																	
Fan motor	type	On-Off																	
Number	n°		2			2			2			2			2			2	
Power supply		230V~50Hz																	

(1) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C;
(2) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C;

Dimensions



TS		13	16	23	34	36	43	46	53	56	63	74	76
Dimensions and weights													
A	mm	295	295	295	295	295	325	325	325	325	375	375	375
B	mm	645	645	1000	1000	1000	1100	1100	1345	1345	1345	1345	1345
C	mm	520	520	520	520	520	600	600	600	600	600	600	600
Empty weight	kg	25	27	35	38	42	42	46	48	52	56	61	67

TA

AIR HANDLING UNITS

AIRFLOW RATES FROM 810 TO 4.225 m^3/h

Ductable handling Unit
An ideal solution for small to medium-sized residential, commercial, and hotel installations. Designed for false ceiling installation, it features a compact design and quiet operation. Its extensive range of accessories ensures maximum flexibility and adaptability to any system requirement.

See all the features

Technical data

Unit designed to operate with all recirculating air or maximum 10% of external air.
Versions H/V

		TA09H4	TA09V4	TA11H4	TA11V4	TA15H4	TA15V4	TA19H4	TA19V4	TA24H4	TA24V4	TA33H4	TA33V4	TA40H4	TA40V4	TA50H4	TA50V4
Cooling performances 7 °C / 12 °C - 2 pipe system (1)																	
Cooling capacity	kW	4,20	4,20	5,70	5,70	8,70	8,70	12,40	12,40	17,30	17,30	21,70	21,70	27,20	27,20	33,50	33,50
Sensible cooling capacity	kW	3,50	3,50	4,20	4,20	6,20	6,20	8,30	8,30	11,20	11,20	14,30	14,30	18,00	18,00	20,90	20,90
Water flow rate	l/h	722	722	980	980	1496	1496	2132	2132	2975	2975	3732	3732	4678	4678	5761	5761
Pressure drop	kPa	6	6	6	6	7	7	12	12	16	16	23	23	11	11	31	31
Heating performance 70 °C / 60 °C - 2 pipe system																	
Heating capacity	kW	10,40	10,40	13,30	13,30	19,10	19,10	24,70	24,70	34,10	34,10	41,90	41,90	52,80	52,80	58,30	58,30
Water flow rate	l/h	894	894	1139	1139	1642	1642	2124	2124	2932	2932	3603	3603	4538	4538	5013	5013
Pressure drop	kPa	5	5	8	8	7	7	10	10	13	13	19	19	10	10	22	22
Fan																	
Type	type	Centrifugal															
Number	n°	1	1	2	2	2	2	1	1	1	1	2	2	2	2	2	2
Air flow rate	m^3/h	800	800	1100	1100	1500	1500	1900	1900	2400	2400	3300	3300	4000	4000	5000	5000
High static pressure	Pa	145	145	290	290	176	176	240	240	211	211	245	245	248	248	153	153
Input power	kW	0.25		0.31		0.38		0.61		0.83		0.81		0.98		1.28	
Power supply																	
Power supply		230V~50Hz															

(1) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C
(2) Water temperature (in/out) 70°C / 60°C.

Technical data

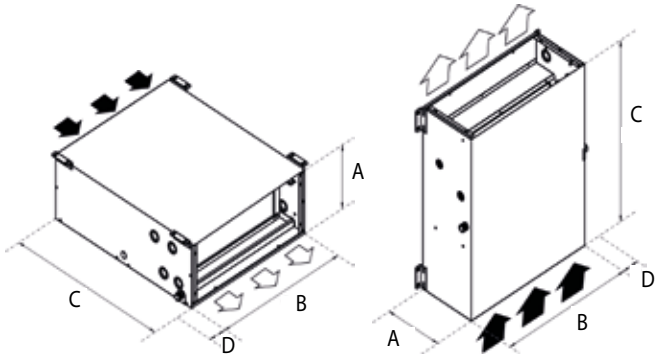
Unit designed to operate with all recirculating air or maximum 10% of external air.

Versions H/V

		TA09H6	TA09V6	TA11H6	TA11V6	TA15H6	TA15V6	TA19H6	TA19V6	TA24H6	TA24V6	TA33H6	TA33V6	TA40H6	TA40V6	TA50H6	TA50V6
Cooling performances 7 °C / 12 °C - 2 pipe system (1)																	
Cooling capacity	kW	5,10	5,10	6,70	6,70	11,70	11,70	15,50	15,50	20,60	20,60	26,30	26,30	33,50	33,50	39,60	39,60
Sensible cooling capacity	kW	3,40	3,40	4,70	4,70	7,50	7,50	9,80	9,80	12,80	12,80	16,60	16,60	20,90	20,90	25,00	25,00
Water flow rate	l/h	868	868	1152	1152	2012	2012	2666	2666	3543	3543	4523	4523	5761	5761	6810	6810
Pressure drop	kPa	4	4	6	6	15	15	29	29	27	27	41	41	31	31	42	42
Heating performance 70 °C / 60 °C - 2 pipe system																	
Heating capacity	kW	11,40	11,40	14,80	14,80	21,40	21,40	27,40	27,40	35,60	35,60	46,60	46,60	58,30	58,30	72,80	72,80
Water flow rate	l/h	976	976	1273	1273	1838	1838	2356	2356	3058	3058	4005	4005	5013	5013	6260	6260
Pressure drop	kPa	4	4	7	7	16	16	23	23	21	21	34	34	22	22	30	30
Fan																	
Type	type	Centrifugal															
Number	n°	1	1	2	2	2	2	1	1	1	1	2	2	2	2	2	2
Air flow rate	m^3/h	800	800	1100	1100	1500	1500	1900	1900	2400	2400	3300	3300	4000	4000	5000	5000
High static pressure	Pa	131	131	265	265	158	158	224	224	199	199	224	224	234	234	131	131
Input power	kW	0.25		0.31		0.38		0.61		0.83		0.81		0.98		1.28	
Power supply																	
Power supply		230V~50Hz															

(1) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C
(2) Water temperature (in/out) 70°C / 60°C.

Dimensions



Unit for horizontal installation

Unit H

		TA09H4	TA09H6	TA11H4	TA11H6	TA15H4	TA15H6	TA19H4	TA19H6	TA24H4	TA24H6	TA33H4	TA33H6	TA40H4	TA40H6	TA50H4	TA50H6
Dimensions and weights																	
A	mm	300	300	300	300	300	300	390	390	390	390	390	390	390	390	390	390
B	mm	700	700	700	700	1050	1050	1050	1050	1475	1475	1475	1475	2100	2100	2100	2100
C	mm	700	700	700	700	700	700	850	850	850	850	850	850	1000	1000	1000	1000
D	mm	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82

Unit for vertical installation

Unit V

		TA09V4	TA09V6	TA11V4	TA11V6	TA11VE	TA15V4	TA15V6	TA19V4	TA19V6	TA24V4	TA24V6	TA33V4	TA33V6	TA40V4	TA40V6	TA50V4	TA50V6
Dimensions and weights																		
A	mm	300	300	300	300	300	300	300	390	390	390	390	390	390	390	390	390	390
B	mm	700	700	700	700	700	1050	1050	1050	1050	1475	1475	1475	1475	2100	2100	2100	2100
C	mm	700	700	700	700	700	700	700	850	850	850	850	850	850	1000	1000	1000	1000
D	mm	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82

TN

AIR HANDLING UNITS

AIRFLOW RATES FROM 3.000 TO 23.000 m^3/h

Compact Solution Ideal for Filtration, Cooling, and/or Heating Only.
Suitable for residential, commercial, industrial, and hotel applications, these units can be installed in either horizontal or vertical configurations.
They feature low noise levels, versatile operation, and a wide range of available accessories.
Available with EC inverter plug fans or belt-driven centrifugal fans with AC motors.

See all the features

Technical data

TN 1-8 with 4-row water coil

TN		1	2	3	4	5	6	7	8
Cooling performance 7 °C / 12 °C (1)									
Cooling capacity	kW	15,6	21,3	29,1	38,1	44,8	56,7	74,7	96,4
Sensible cooling capacity	kW	10,7	14,7	20,1	26,2	33,3	41,7	55,1	70,9
Heating performance 70 °C / 60 °C (2)									
Heating capacity	kW	40,0	54,5	74,9	97,6	131,1	162,9	216,1	277,3
Performance in heating mode with additional coil for 4-pipe systems									
Heating capacity with 2 row water coil	kW	25,2	34,0	46,8	61,5	84,4	103,8	138,0	178,5
Heating capacity with 3 row water coil	kW	33,5	45,6	62,7	82,0	110,8	137,3	182,5	234,4
Heating capacity with 4 row water coil	kW	40,0	54,5	74,9	97,6	131,1	162,9	216,1	277,3
Heating performance 45 °C / 40 °C (3)									
Heating capacity	kW	23,4	31,9	43,7	57,0	76,3	94,8	125,8	161,4
Performance in heating mode with additional coil for 4-pipe systems									
Heating capacity with 2 row water coil	kW	14,7	19,8	27,3	36,0	49,0	60,3	80,1	103,8
Heating capacity with 3 row water coil	kW	19,6	26,6	36,6	47,9	64,4	79,8	106,1	136,3
Heating capacity with 4 row water coil	kW	23,4	31,9	43,7	57,0	76,3	94,8	125,8	161,4

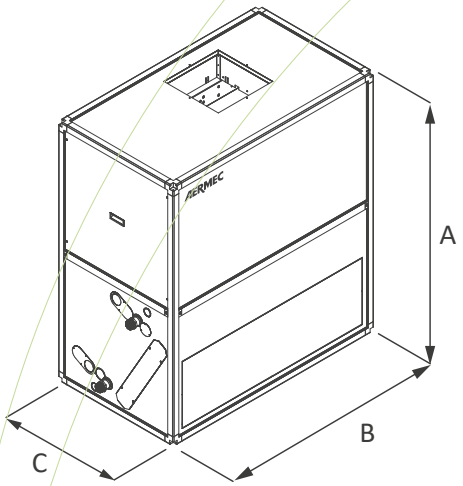
(1) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C;
(2) Room air temperature 10 °C d.b.; Water (in/out) 70 °C/60 °C
(3) Room air temperature 10°C d.b.; Water (in/out) 45 °C/40 °C;

TN 1-8 with 6-row water coil

TN		1	2	3	4	5	6	7	8
Cooling performance 7 °C / 12 °C (1)									
Cooling capacity	kW	20,0	27,4	37,7	49,2	58,3	74,5	98,9	127,8
Sensible cooling capacity	kW	13,4	18,3	25,2	32,8	41,1	51,8	68,8	88,5
Heating performance 70 °C / 60 °C (2)									
Heating capacity	kW	48,7	66,6	91,5	119,2	157,5	196,8	260,4	334,1
Performance in heating mode with additional coil for 4-pipe systems									
Heating capacity with 2 row water coil	kW	25,2	34,0	46,8	61,5	84,4	103,8	138,0	178,5
Heating capacity with 3 row water coil	kW	33,5	45,6	62,7	82,0	110,8	137,3	182,5	234,4
Heating capacity with 4 row water coil	kW	40,0	54,5	74,9	97,6	131,1	162,9	216,1	277,3
Heating performance 45 °C / 40 °C (3)									
Heating capacity	kW	28,5	38,9	53,5	69,6	91,7	114,3	151,7	194,6
Performance in heating mode with additional coil for 4-pipe systems									
Heating capacity with 2 row water coil	kW	14,7	19,8	27,3	36,0	49,0	60,3	80,1	103,8
Heating capacity with 3 row water coil	kW	19,6	26,6	36,6	47,9	64,4	79,8	106,1	136,3
Heating capacity with 4 row water coil	kW	23,4	31,9	43,7	57,0	76,3	94,8	125,8	161,4

(1) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C;
(2) Room air temperature 10 °C d.b.; Water (in/out) 70 °C/60 °C
(3) Room air temperature 10°C d.b.; Water (in/out) 45 °C/40 °C;

Dimensions



TN		1	2	3	4	5	6	7	8
Dimensions									
A	mm	1334	1334	1497	1497	1822	1822	2309	2309
B	mm	928	1172	1334	1659	1659	1984	1984	2472
C	mm	684	684	765	765	928	928	1172	1172

5 ROOF-TOP
Applications for the service sector

Designed for **rooftop installation**, high-efficiency Roof-top stand-alone HVAC units stand out for their **compactness** and **ease of installation** making them the ideal solution for commercial and industrial applications.

Available in **different configurations**, these units can act as both simple air conditioning systems as well as
advanced systems, providing the treatment and control of indoor air quality, integrating an air heat pump and the components necessary to manage the following functions in a single system:

- **filtering**
- **thermo-hygrometric control**
- **air renewal**
- **energy recovery from expelled air**
- **air quality control**


AERMEC

Efficiency and air quality configurable with various accessories.

ROOF-TOP units are characterised by **energy efficiency**, as well as high **air quality** and considerable **versatility**, thanks to their ability to adapt to different specific needs. Designed to be placed on the roof, these units allow you to optimise the internal space and simplify the installation
process.

Image by way of example only.
Components have no design value
and may vary depending on your configuration.

1 DELIVERY FAN
Plug-fan type coupled with brushless EC motors

2 EXTRACTOR FAN*
Plug-fan type coupled with brushless EC motors, for MB4 and MBT configuration

3 EXTERNAL FANS
Helical axial fans with the possibility of adjusting the number of rotations

4 REFRIGERATING CIRCUIT COMPARTMENT
With high-efficiency scroll compressors and electronic expansion valve

5 INDOOR HEAT EXCHANGER
With direct expansion and finned coil

6 EXTERNAL HEAT EXCHANGER
With direct expansion and finned coil

7 ADDITIONAL HEAT EXCHANGER *
Finned water heating coil with integration function

8 ELECTROSTATIC FILTERS *
On the delivery flow, in addition to the standard filter with Coarse efficiency 55%

9 EXTERNAL AIR INTAKE *
Depending on the configuration chosen, it may be on one side or on both sides, with rain hood

10 THERMODYNAMIC HEAT RECOVERY EXCHANGER *
Dedicated direct expansion finned coil, placed on the ejection flow with MBT configuration

11 CONDENSATE COLLECTION TANK
Aluminium with lower threaded discharge point

12 CASING
With painted galvanised sheet metal frame and insulated sandwich panels

13 SANITISATION DEVICE *
Photocatalytic-effect sanitising system

* Configurable optional components

A complete range

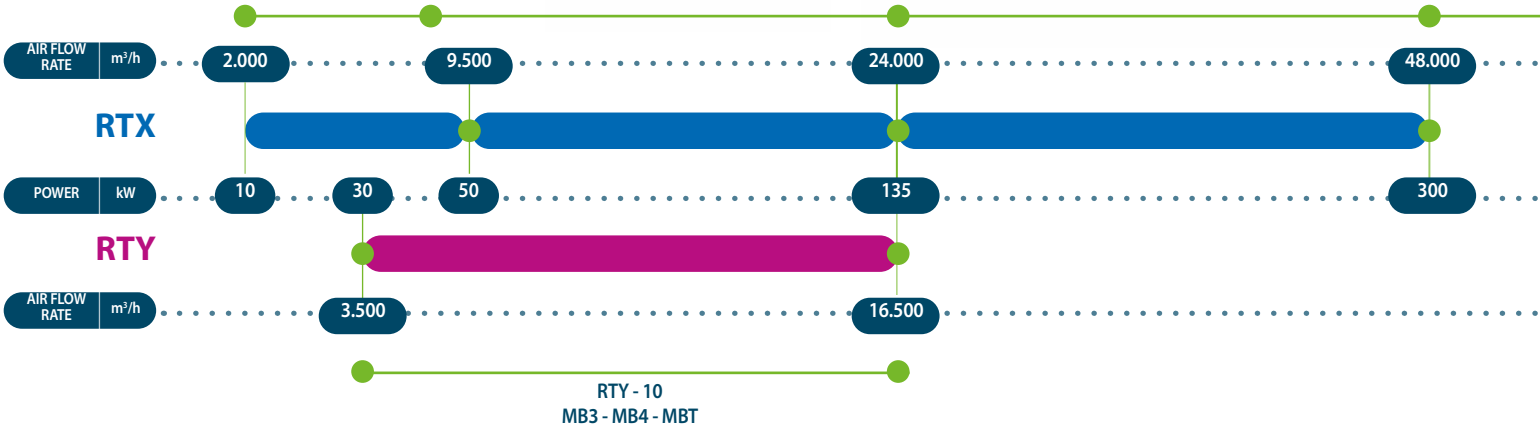
RTX Series Roof-top Unit: for medium sized applications such as shopping centres, with an external air flow rate not exceeding 50%. Available in 23 sizes, it has air flow rates from 2,000 to 48,000 m^3/h and thermal power from 10 to 300 kW. All units (except the first 8 sizes) can be configured for cooling only.

RTY Series Roof-top Unit: for large occupancy applications, such as cinemas and theatres, with an external air flow rate of up to 80%. Available in 10 sizes, it covers air flow rates from 3,500 to 16,500 m^3/h and thermal power from 30 to 135 kW.

RTX N1 - N8
MB1 - MB2 - MB4

RTX 09 - 16
MB1 - MB2 - MB3 - MB4 - MBT

RTX 17 - 23
MB1 - MB2 - MB3 - MB4



ADVANTAGES

- **Reduced operating costs:** thanks to advanced ventilation, optimised refrigerating circuits and smart electronics
- **Compact and "plug and play" structure**: facilitates transport and installation with factory pre-configuration and standardised connections
- **Customisation**: wide range of accessories to meet specific requirements
- **Easy maintenance**: easy access to components for ordinary and extraordinary operations

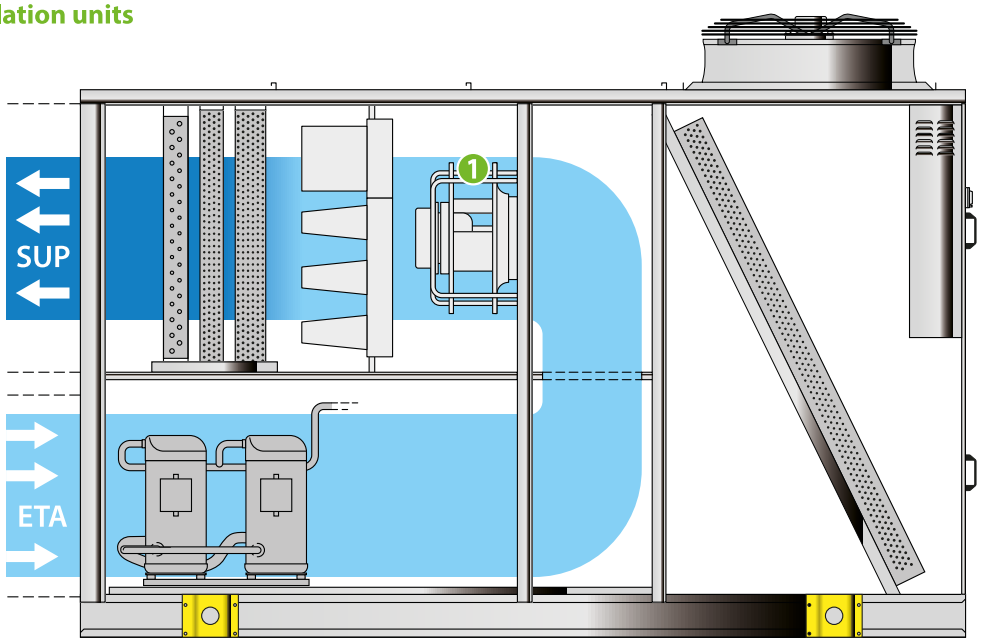
Available configurations

	MB1	MB2	MB3	MB4	MBT
Number of ventilating sections	1	1	2	2	2
supply	✓	✓	✓	✓	✓
return			✓		
exhaust				✓	✓
Fresh air	No	Yes	Yes	Yes	Yes
Exhaust air	No	No	Yes	Yes	Yes
Thermodynamic recovery	No	No	Yes	Yes	Yes
upgraded					✓
Models available	RTX 01-23	RTX 01-23	RTX 09-23 RTY 01-10	RTX 01-23 RTY 01-10	RTX 09-16 RTY 01-10

MB1 Full recirculation units

1 Supply/return fan

SUP : **Supply air**
ETA : **Return air**

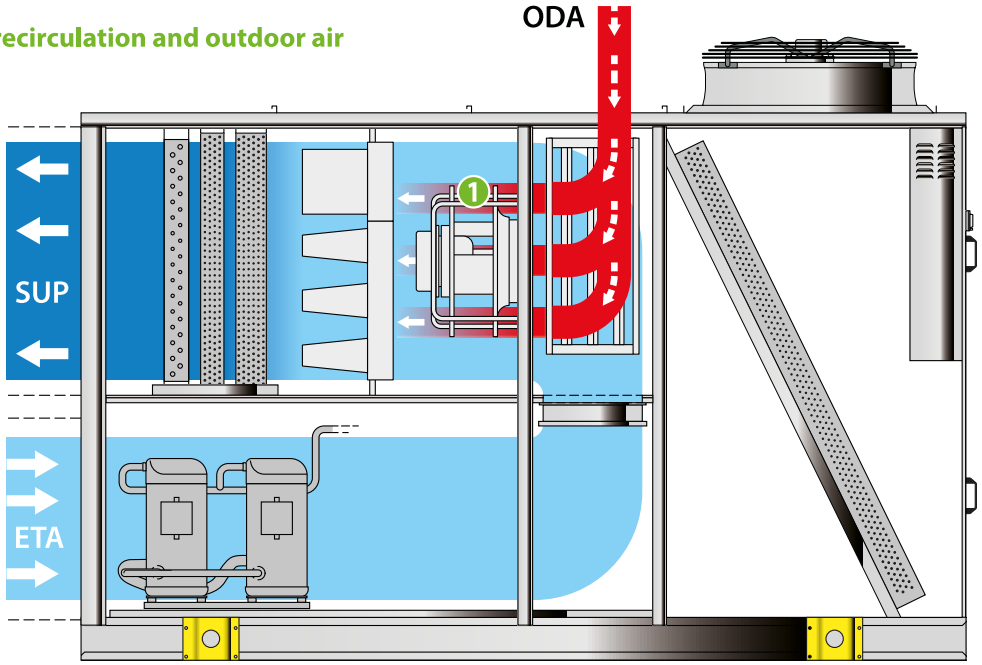


- Single internal ventilating section for supply and return air.
- Configuration suitable for air conditioning without fresh air make up.

MB2 Units with recirculation and outdoor air

Supply/return fan

SUP : **Supply air**
ETA : **Return air**
ODA : **Outdoor air**

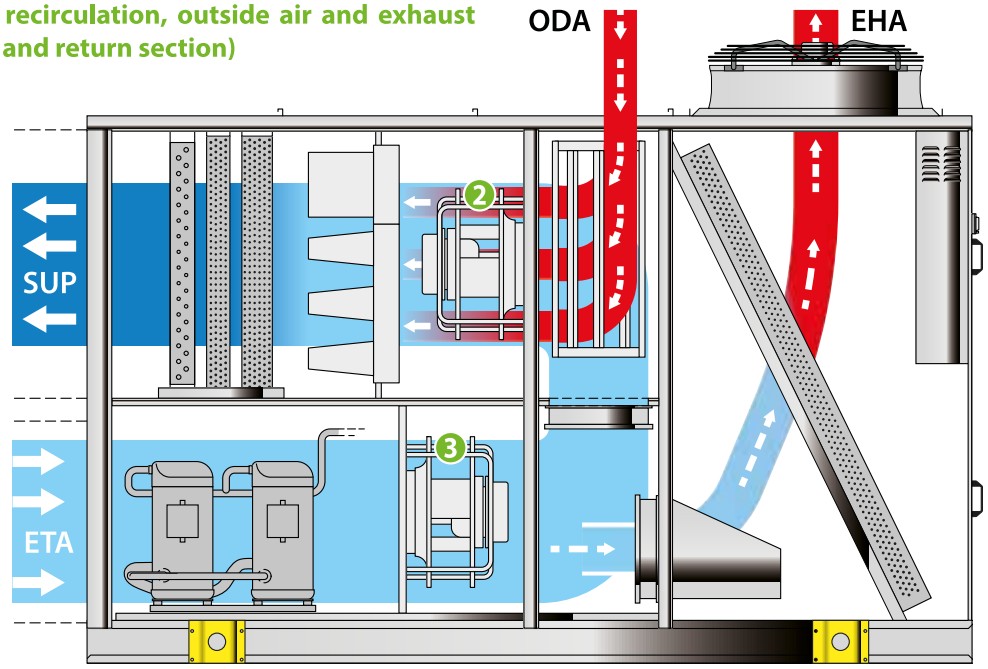


- Single internal ventilating section for return air, with outdoor air make up and supply air section.
- **Total freecooling** and **freeheating** (100% of handled outside air) to reduce electricity consumption.
- In the presence of outdoor air, the rooms are kept under **overpressure**, thus avoiding contamination from outside.

MB3 Units with recirculation, outside air and exhaust air (supply and return section)

Supply fan
Return fan

SUP : **Supply air**
ETA : **Return air**
ODA : **Outdoor air**
EHA : **Exhaust air**



- One ventilating section for return air and supply air, with an intake damper for outside air and an exhaust **damper for exhaust air**.
- **Total freecooling** and **freeheating** (100% of handled outside air) to reduce electricity consumption.
- Thermodynamic recovery of energy of exhaust air to increase energy efficiency.
- Balanced supply and exhaust airflows: it is possible to unbalance them to create a underpressure or overpressure.

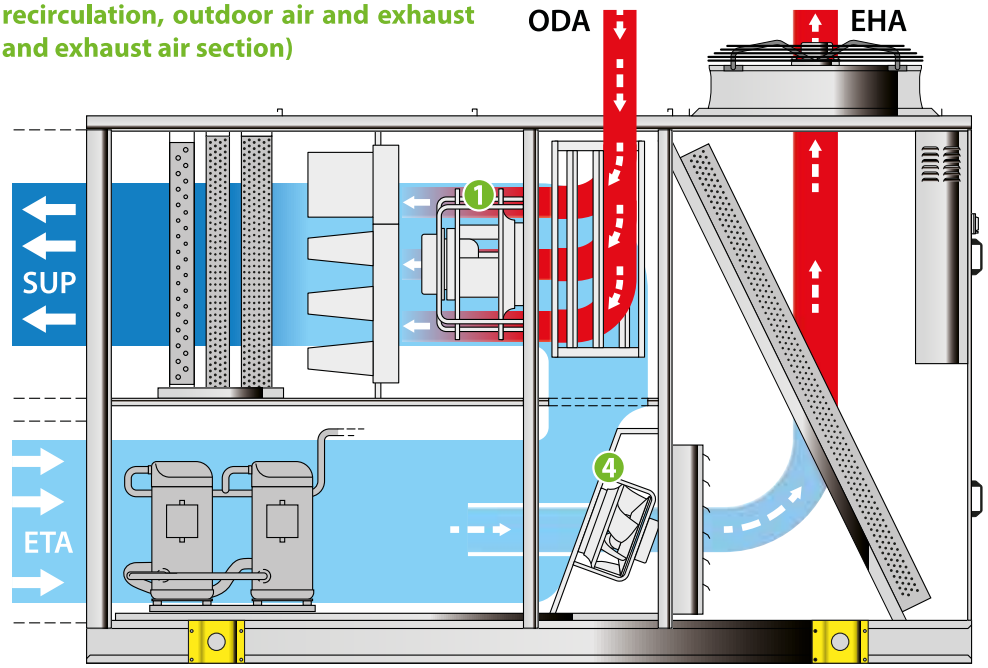
MB4

Units with recirculation, outdoor air and exhaust air (supply and exhaust air section)

1 Supply/return fan

4 Exhaust fan

SUP : **Supply air**
ETA : **Return air**
ODA : **Outdoor air**
EHA : **Exhaust air**



- Ventilation section for return air flow, with a damper for external air intake.
- **Reduced ventilating section** for exhaust air only.
- **Partial freecooling** and **freeheating** (50% of the handled outside air) to reduce electricity consumption.
- **Thermodynamic recovery** of energy from the exhaust air passing through the external heat exchanger to increase energy efficiency.

MBT

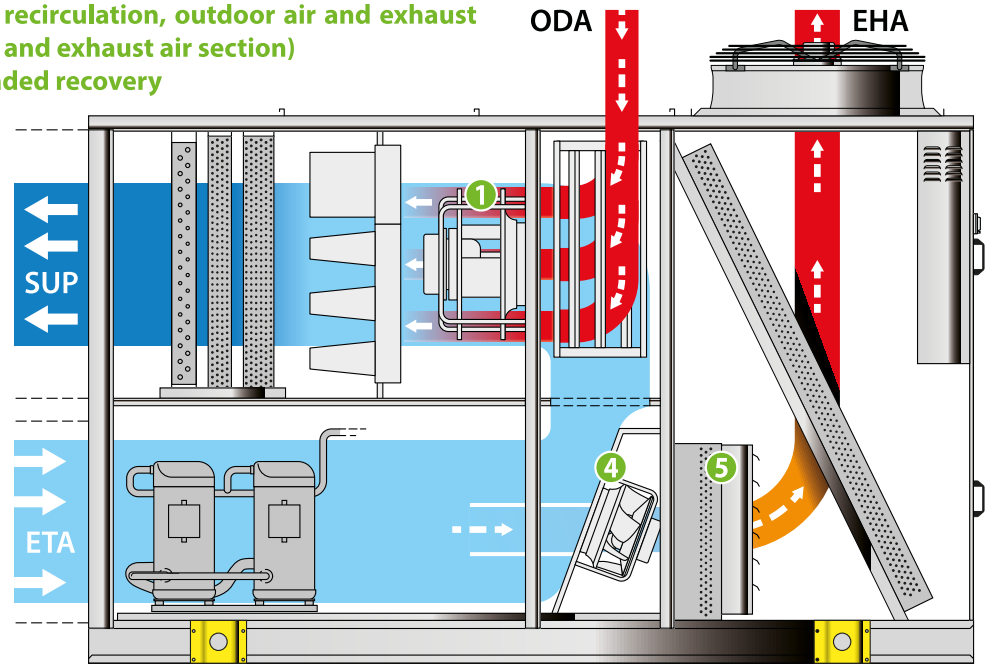
Units with recirculation, outdoor air and exhaust air (supply and exhaust air section) with upgraded recovery

1 Supply/return fan

4 Exhaust fan

5 Dedicated thermodynamic recovery coil

SUP : **Supply air**
ETA : **Return air**
ODA : **Outdoor air**
EHA : **Exhaust air**



- Ventilating section for return air flow, with a damper for external air intake.
- **Reduced ventilating section** for exhaust air only.
- **Partial freecooling** and **freeheating** (50% of the handled outside air) to reduce electricity consumption.
- **Upgraded thermodynamic recovery** of exhaust air through both a dedicated heat exchanger and the external heat exchanger for maximum energy efficiency.


AERMEC

RTX N1-N8

APPLICATIONS FOR THE SERVICE SECTOR

COOLING CAPACITY FROM 13 TO 50 kW

The roof-top units of the RTX range are designed for **applications with medium occupancy such as shopping centres**, shops, offices and production areas, as they can operate with 30% of fresh and exhaust air (MB4 version).

See all the features

Roof-top unit for applications with an average degree of crowding

- **Wide range of cooling capacities**
- **Integration with external air**
- Available version: **RTX F** Cooling-only
- Available version: **RTX H** heat pump operation for cooling and heating

✓ **Versatile solution**

✓ **Energy efficiency**

✓ **Operational flexibility** with the heat pump version

Technical data

RTX		N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1									
Cooling performances (1)									
Cooling capacity	kW	12,70	15,50	19,10	22,20	28,60	33,00	43,00	47,00
Sensible cooling capacity	kW	8,60	10,40	12,80	14,80	19,00	22,40	28,80	32,10
Compressors absorbed power	kW	3,30	4,20	5,00	6,00	7,20	8,70	11,40	12,50
EER compressors		3,87	3,71	3,82	3,69	3,98	3,79	3,75	3,75
Heating performances (2)									
Heating capacity	kW	13,50	16,10	19,90	23,00	29,60	34,00	44,70	48,50
Compressors absorbed power	kW	3,07	3,65	4,28	5,15	6,23	6,86	9,43	10,02
COP compressors		4,40	4,41	4,64	4,47	4,75	4,96	4,74	4,84

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

RTX		N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB2									
Cooling performances (1)									
Cooling capacity	kW	13,42	16,34	20,16	23,35	30,21	34,79	45,26	49,44
Sensible cooling capacity	kW	8,92	10,86	13,40	15,40	19,70	23,40	30,00	33,50
Compressors absorbed power	kW	3,33	4,22	5,04	6,07	7,29	8,85	11,65	12,74
EER compressors		4,03	3,87	4,00	3,85	4,14	3,93	3,88	3,88
Heating performances (2)									
Heating capacity	kW	13,65	16,24	20,02	23,18	29,87	34,22	45,17	48,94
Compressors absorbed power	kW	2,77	3,31	3,86	4,65	5,62	6,15	8,58	9,22
COP compressors		4,92	4,91	5,18	4,99	5,32	5,57	5,26	5,31

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

RTX		N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB4									
Cooling performances (1)									
Cooling capacity	kW	13,49	16,49	20,33	23,58	30,45	35,16	45,65	49,95
Sensible cooling capacity	kW	8,93	10,91	13,40	15,50	19,80	23,50	30,20	33,60
Compressors absorbed power	kW	3,27	4,12	4,92	5,90	7,13	8,59	11,39	12,43
EER compressors		4,13	4,00	4,13	4,00	4,27	4,10	4,01	4,02
Heating performances (2)									
Heating capacity	kW	14,00	16,81	20,69	24,05	30,77	35,50	46,63	50,79
Compressors absorbed power	kW	2,81	3,36	3,92	4,73	5,71	6,27	8,74	9,38
COP compressors		4,98	5,00	5,28	5,08	5,39	5,67	5,33	5,41

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Energy Index

RTX			N1	N2	N3	N4	N5	N6	N7	N8
Energy Index										
SEER	H	W/W	3,73	3,60	3,76	3,70	3,86	3,86	3,80	3,77
ηsc	H	%	146.1%	141.2%	147.5%	144.8%	151.5%	151.5%	148.8%	147.8%
Pdesignh	H	kW	7	9	11	13	16	19	25	26
SCOP	H	W/W	3,47	3,34	3,46	3,36	3,29	3,50	3,47	3,44
ηsh	H	%	135.6%	130.5%	135.4%	131.2%	128.7%	137.1%	135.7%	134.4%

RTX N1-N8

General Technical Data

RTX		N1	N2	N3	N4	N5	N6	N7	N8
Power supply									
Power supply		400V~3N 50Hz	400V~3N 50Hz	400V~3N 50Hz	400V~3N 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz
Compressor									
Type	type	Scroll							
Nymber	n°	2	2	2	2	2	2	2	2
Circuit	n°	2	2	2	2	2	2	2	2
Refrigerant	type	R410A							
Sound data									
Sound power level	dB(A)	73,3	73,7	76,4	76,3	81,2	79,7	82,8	82,9
Sound pressure level (1)	dB(A)	65,3	65,8	68,5	68,3	73,2	71,7	74,8	74,9

(1) MB1 configuration sound pressure measured in free field (Q=2), 1m away from the outer surface of the ducted unit, high static pressure 50 Pa (EN ISO 9614-2). 3 dB(A) tolerance on sound power level (Eurovent 8/1).

Fans

RTX			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1, MB2, MB4										
External fans										
Type	H	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	H	n°	2	2	2	2	2	2	2	2

RTX			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1, MB2, MB4										
Internal fans										
Nominal air flow rate	H	m^3/h	2000	2800	3500	4000	5000	6500	8000	9500
Minimum air flow rate	H	m^3/h	1800	1800	2700	2700	4000	4000	6500	6500
Maximum air flow rate	H	m^3/h	2900	2900	4100	4100	6900	6900	10100	10100

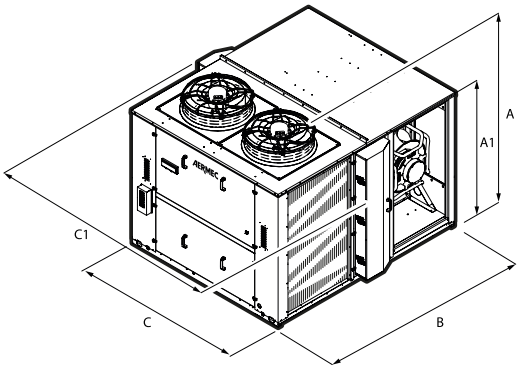
RTX			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1, MB2										
Delivery										
Type	H	type	Brushless EC	Brushless EC	Brushless EC	Brushless EC	Brushless EC	Brushless EC	Brushless EC	Brushless EC
Number	H	n°	1	1	1	1	1	1	1	1
Maximum useful head (1)	H	Pa	755	575	460	555	435	460	575	765
High static pressure (EN14511) (1)	H	Pa	100	100	124	124	124	150	150	200

(1) At the nominal/maximum flow rate with a new clean air filter.

RTX			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB4										
Delivery										
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	n°	1	1	1	1	1	1	1	1
Maximum useful head (1)	H	Pa	755	575	460	555	435	460	575	765
High static pressure (EN14511) (1)	H	Pa	100	100	124	124	124	150	150	200

(1) At the nominal/maximum flow rate with a new clean air filter.

Dimensions



RTX			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1										
A	H	mm	1170	1170	1470	1470	1610	1610	1710	1710
A1	H	mm	910	910	1210	1210	1410	1410	1510	1510
B	H	mm	1460	1460	1460	1460	1860	1860	2310	2310
C	H	mm	1560	1560	1560	1560	1910	1910	1910	1910
C1	H	mm	-	-	-	-	-	-	-	-
Empty weight	H	kg	335	335	405	405	594	594	745	745

RTX			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB2										
A	H	mm	1170	1170	1470	1470	1610	1610	1710	1710
A1	H	mm	910	910	1210	1210	1410	1410	1510	1510
B	H	mm	1460	1460	1460	1460	1860	1860	2310	2310
C	H	mm	1560	1560	1560	1560	1910	1910	1910	1910
C1	H	mm	-	-	-	-	-	-	-	-
Empty weight	H	kg	335	335	405	405	594	594	745	745

RTX			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB4										
A	H	mm	1170	1170	1470	1470	1610	1610	1710	1710
A1	H	mm	910	910	1210	1210	1410	1410	1510	1510
B	H	mm	1460	1460	1460	1460	1860	1860	2310	2310
C	H	mm	-	-	-	-	-	-	-	-
C1	H	mm	1850	1850	1850	1850	2200	2200	2200	2200
Empty weight	H	kg	345	345	429	429	619	619	775	775

The dimensions and weights are subject to changes.

RTX 09-16

APPLICATIONS FOR THE SERVICE SECTOR

COOLING CAPACITY FROM 50 TO 135 kW

The ROOF-TOP units of the RTX range are **autonomous air units** designed to completely treat the air.
These units are ideal for places with an **average degree of crowding such as shopping centres, shops, offices and production areas**, as they can operate with 30% of fresh and exhaust air (MB2 - MB3 - MB4 - MBT version).

See all the features

Roof-top unit for applications with an average degree of crowding

- **Autonomous air units**
- Available version: **RTX F** Cooling-only
- Available version: **RTX H** heat pump operation for cooling and heating

✔ **Versatility of use**

✔ **Energy saving** thanks to the use of outdoor air

✔ **Comfort in all seasons** with the heat pump versions

Technical data

RTX		09	10	11	12	13	14	15	16
Configuration: MB1									
Cooling performances (1)									
Cooling capacity	kW	50,00	60,10	68,60	81,00	93,40	103,50	114,00	125,30
Sensible cooling capacity	kW	40,10	46,10	52,70	63,20	70,90	81,80	89,30	97,10
Compressors absorbed power	kW	11,90	14,40	18,80	17,90	23,10	25,60	30,50	35,50
EER compressors		4,20	4,17	3,65	4,53	4,04	4,04	3,74	3,53
Heating performances (2)									
Heating capacity	kW	49,40	61,10	69,30	80,60	93,70	102,20	113,70	126,60
Compressors absorbed power	kW	9,80	12,20	15,50	15,70	20,60	21,00	24,40	28,40
COP compressors		5,04	5,01	4,47	5,13	4,55	4,87	4,66	4,46

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

RTX		09	10	11	12	13	14	15	16
Configuration: MB2									
Cooling performances (1)									
Cooling capacity	kW	52,90	63,30	72,30	85,30	98,40	108,80	120,10	131,60
Sensible cooling capacity	kW	42,70	48,80	55,90	67,10	75,00	86,70	94,80	102,80
Compressors absorbed power	kW	12,10	14,60	19,00	18,10	23,30	25,90	30,90	35,90
EER compressors		4,37	4,34	3,81	4,71	4,22	4,20	3,89	3,67
Heating performances (2)									
Heating capacity	kW	50,50	61,90	70,60	82,20	94,90	103,60	115,30	128,10
Compressors absorbed power	kW	9,00	11,20	14,10	14,30	18,90	19,20	22,50	26,00
COP compressors		5,61	5,53	5,01	5,75	5,02	5,40	5,12	4,93

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

RTX		09	10	11	12	13	14	15	16
Configuration: MB3									
Cooling performances (1)									
Cooling capacity	kW	53,40	63,70	73,10	86,10	99,30	110,00	121,30	133,30
Sensible cooling capacity	kW	43,00	48,90	56,20	67,40	75,30	87,00	95,10	103,20
Compressors absorbed power	kW	11,80	14,20	18,50	17,70	22,80	25,10	30,10	34,80
EER compressors		4,53	4,49	3,95	4,86	4,36	4,38	4,03	3,83
Heating performances (2)									
Heating capacity	kW	52,10	64,10	74,10	85,00	98,60	107,80	120,60	134,30
Compressors absorbed power	kW	9,20	11,40	14,40	14,60	19,10	19,40	22,90	26,70
COP compressors		5,66	5,62	5,15	5,82	5,16	5,56	5,27	5,03

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

RTX		09	10	11	12	13	14	15	16
Configuration: MB4									
Cooling performances (1)									
Cooling capacity	kW	53,40	63,70	73,10	86,10	99,30	110,00	121,30	133,30
Sensible cooling capacity	kW	43,00	48,90	56,20	67,40	75,30	87,00	95,10	103,20
Compressors absorbed power	kW	11,80	14,20	18,50	17,70	22,80	25,10	30,10	34,80
EER compressors		4,53	4,49	3,95	4,86	4,36	4,38	4,03	3,83
Heating performances (2)									
Heating capacity	kW	52,10	64,10	74,10	85,00	98,60	107,80	120,60	134,30
Compressors absorbed power	kW	9,20	11,40	14,40	14,60	19,10	19,40	22,90	26,70
COP compressors		5,66	5,62	5,15	5,82	5,16	5,56	5,27	5,03

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

RTX 09-16

Technical data

RTX		09	10	11	12	13	14	15	16
Configuration: MBT									
Cooling performances (1)									
Cooling capacity	kW	57,10	67,80	78,00	90,50	103,70	116,90	128,80	140,60
Sensible cooling capacity	kW	46,60	53,00	61,20	71,90	79,70	94,00	102,60	110,60
Compressors absorbed power	kW	11,80	14,20	18,50	17,70	22,80	25,10	30,10	34,80
EER compressors		4,84	4,77	4,22	5,11	4,55	4,66	4,28	4,04
Heating performances (2)									
Heating capacity	kW	55,40	68,00	78,30	90,10	103,60	114,40	127,50	141,40
Compressors absorbed power	kW	9,20	11,40	14,40	14,60	19,10	19,40	22,90	26,70
COP compressors		6,02	5,96	5,44	6,17	5,42	5,90	5,57	5,30
Recovery efficiency	%	84%	92%	87%	90%	85%	85%	82%	78%

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Energy Index

RTX			09	10	11	12	13	14	15	16
Energy index										
SEER	H	W/W	4,24	3,94	3,76	3,92	3,89	4,22	4,10	4,05
ηsc	H	%	166.6%	154.5%	147.2%	153.9%	152.7%	165.7%	161.1%	159.1%
Pdesignh	H	kW	29	34	38	46	52	57	62	71
SCOP	H		3,59	3,50	3,30	3,27	3,22	3,47	3,41	3,38
ηsh	H	%	140.5%	137.0%	128.8%	127.7%	126.0%	135.9%	133.5%	132.3%

General Technical Data

RTX			09	10	11	12	13	14	15	16
Power supply										
Power supply	H		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz
Compressor										
Type	H	type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Numer	H	n°	2	2	2	2	2	2	2	2
Circuit	H	n°	1	1	1	1	1	1	1	1
Refrigerant	H	type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Partialization step	H	n°	2	2	3	3	3	2	3	3

Fans

RTX			09	10	11	12	13	14	15	16
Configuration: MB1, MB2, MB3, MB4, MBT										
External fans										
Type	H	type	Axial AC	Axial AC	Axial AC	Axial AC	Axial AC	Axial AC	Axial AC	Axial AC
Number	H	n°	2	2	2	2	2	2	2	2

RTX			**09**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Configuration: MB1, MB2, MB3, MB4, MBT										
Internal fans										
Nominal air flow rate	H	m^3/h	9500	11000	13000	15000	17000	20000	22000	24000
Minimum air flow rate	H	m^3/h	6650	7700	9100	10850	12600	14000	15400	16800
Maximum air flow rate	H	m^3/h	9500	11000	13000	15500	18000	20000	22000	24000

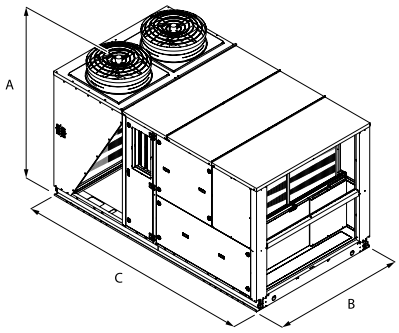
RTX			09	10	11	12	13	14	15	16
Configuration: MB3										
Recovery										
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	n°	1	1	1	2	2	2	2	2

Taglia			09	10	11	12	13	14	15	16
Configuration: MBT										
Exhaust										
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	n°	1	1	1	2	2	2	2	2

Technical data

RTX			09	10	11	12	13	14	15	16
Configuration: MB1, MB2, MB3, MB4, MBT										
Delivery										
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	n°	1	1	1	2	2	2	2	2
Maximum useful head (1)	H	Pa	770	510	445	555	740	640	525	675
High static pressure (EN14511) (1)	H	Pa	200	200	200	200	250	250	250	300

(1) At the nominal/maximum flow rate with a new, clean air filter.



Dimensions

RTX			09	10	11	12	13	14	15	16
A	H	mm	2061	2061	2061	2373	2373	2440	2440	2440
B	H	mm	1900	1900	1900	2100	2100	2200	2200	2200
C	H	mm	3400	3400	3400	3400	3400	4000	4000	4000

The dimensions and weights are subject to changes.

RTX 17-23

APPLICATIONS FOR THE SERVICE SECTOR

COOLING CAPACITY FROM 152 TO 305 kW

The roof-top units of the RTX range are **autonomous air-to-air units** designed to completely treat the air. The units are also characterised by their **extensive operating limits (from -20° C to +48° C)**.

These units are ideal for places with an average degree of crowding such as **shopping centres, shops, offices and production areas**, as they can operate with 30% of fresh and exhaust air.

See all the features

Roof-Top unit for average occupancy applications

- **Autonomous air-to-air units**
- Wide operating range
- Available version: **RTX F** Cooling-only
- Available version: **RTX H** heat pump operation for cooling and heating

- **Climatic reliability**: Consistent performance in a wide range of outdoor temperatures
- **Versatility of use**: suitable for different commercial and production environments, with the ability to manage both cooling and heating
- **Operational efficiency**: optimised operation thanks to the outdoor air management, improving indoor air quality

Technical data

Size			17	18	19	20	21	22	23
Configuration: MB1									
Cooling performances (1)									
Cooling capacity		kW	151,90	170,10	191,70	213,30	231,70	246,10	289,10
Sensible cooling capacity		kW	114,30	125,40	136,10	151,60	164,70	178,50	202,30
Compressors absorbed power		kW	32,70	39,20	45,30	54,00	60,70	69,00	68,90
EER compressors			4,65	4,34	4,23	3,95	3,82	3,57	4,20
Heating performances (2)									
Heating capacity		kW	152,70	170,80	192,80	216,20	230,80	245,50	296,30
Compressors absorbed power		kW	28,20	33,90	39,20	43,90	46,30	51,20	58,60
Compressor COP			5,41	5,04	4,92	4,92	4,98	4,79	5,06

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Size			17	18	19	20	21	22	23
Configuration: MB2									
Cooling performances (1)									
Cooling capacity		kW	160,20	179,40	201,80	224,60	243,90	258,90	304,50
Sensible cooling capacity		kW	120,90	132,60	143,20	159,70	173,50	188,30	212,90
Compressors absorbed power		kW	33,10	39,50	45,60	54,60	61,60	69,80	69,70
EER compressors			4,84	4,54	4,43	4,11	3,96	3,71	4,37
Heating performances (2)									
Heating capacity		kW	155,10	174,20	195,50	219,50	234,00	248,60	300,70
Compressors absorbed power		kW	25,80	31,10	35,70	40,40	42,50	47,00	54,10
Compressor COP			6,01	5,60	5,48	5,43	5,51	5,29	5,56

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Size			17	18	19	20	21	22	23
Configuration: MB3									
Cooling performances (1)									
Cooling capacity		kW	161,30	181,10	203,70	226,90	246,70	262,10	307,20
Sensible cooling capacity		kW	121,30	133,30	143,80	160,50	174,50	189,20	213,90
Compressors absorbed power		kW	32,50	38,80	44,50	53,20	59,90	67,70	68,30
EER compressors			4,96	4,67	4,58	4,27	4,12	3,87	4,50
Heating performances (2)									
Heating capacity		kW	159,10	179,00	202,30	227,70	243,60	259,90	310,90
Compressors absorbed power		kW	26,20	31,40	36,30	41,00	43,30	47,90	55,00
Compressor COP			6,07	5,70	5,57	5,55	5,63	5,43	5,65

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Size			17	18	19	20	21	22	23
Configuration: MB4									
Cooling performances (1)									
Cooling capacity		kW	161,30	181,10	203,70	226,90	246,70	262,10	307,20
Sensible cooling capacity		kW	121,30	133,30	143,80	160,50	174,50	189,20	213,90
Compressors absorbed power		kW	32,50	38,80	44,50	53,20	59,90	67,70	68,30
EER compressors			4,96	4,67	4,58	4,27	4,12	3,87	4,50
Heating performances (2)									
Heating capacity		kW	159,10	179,00	202,30	227,70	243,60	259,90	310,90
Compressors absorbed power		kW	26,20	31,40	36,30	41,00	43,30	47,90	55,00
Compressor COP			6,07	5,70	5,57	5,55	5,63	5,43	5,65

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Energy Index

Size				17	18	19	20	21	22	23
Energy index										
SEER	H	W/W		4,01	3,94	4,18	3,92	4,15	3,94	3,85
ηsc	H	%		157.6%	154.6%	164.3%	153.8%	162.9%	154.5%	150.9%
Pdesignh	H	kW		89	98	109	123	130	141	168
SCOP	H			3,47	3,31	3,45	3,36	3,49	3,43	3,26
ηsh	H	%		135.7%	129.4%	134.8%	131.5%	136.4%	134.2%	127.3%

RTX 17-23

General Technical Data

Size			17	18	19	20	21	22	23
Power supply									
Power supply	H		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz
Compressor									
Type	H	type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Number	H	no.	4	4	4	4	4	4	4
Circuits	H	no.	2	2	2	2	2	2	2
Refrigerant	H	type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Partialisation step	H	no.	6	6	6	6	6	6	6

Fans

Size			17	18	19	20	21	22	23
Configuration: MB1, MB2, MB3, MB4									
External fans									
Type	H	type	Assiali AC	Assiali AC	Assiali AC	Assiali AC	Assiali AC	Assiali AC	Assiali AC
Number	H	no.	4	4	4	4	4	4	4

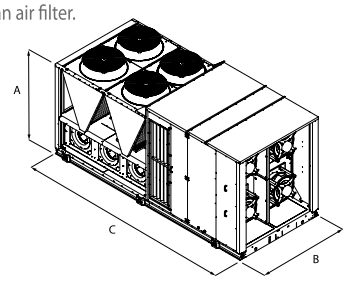
Size			17	18	19	20	21	22	23
Configuration: MB1, MB2, MB3, MB4									
Internal fans									
Nominal air flow rate	H	m^3/h	26000	29000	33000	37000	40000	44000	48000
Minimum air flow rate	H	m^3/h	18200	20300	23100	25900	28000	30800	33600
Maximum air flow rate	H	m^3/h	36000	36000	44000	44000	53000	53000	53000

Size			17	18	19	20	21	22	23
Configuration: MB3									
Recovery									
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	3	3	3	3	3	3	3

Size			17	18	19	20	21	22	23
Configuration: MB4									
Exhaust									
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	2	2	2	2	2	2	2

Size			17	18	19	20	21	22	23
Configuration: MB1									
Delivery									
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	2	2	3	3	3	4	4
Maximum useful head (1)	H	Pa	700	475	520	580	520	690	550
High static pressure (EN14511) (1)	H	Pa	350	350	350	350	350	350	350
Configuration: MB2, MB3, MB4									
Delivery									
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	2	2	3	3	3	4	4
Maximum useful head (1)	H	Pa	519	341	330	470	460	636	467
High static pressure (EN14511) (1)	H	Pa	350	350	350	350	350	350	350

At the nominal/maximum flow rate with a new, clean air filter.



Dimensions

Size			17	18	19	20	21	22	23
Dimensions and weights									
A	H	mm	2430	2430	2430	2430	2430	2430	2430
B	H	mm	2200	2200	2200	2200	2200	2200	2200
C	H	mm	5210	5210	5210	5210	7750	7750	7750

The dimensions and weights are subject to changes.


GUCCI

RTY 01-10

APPLICATIONS FOR THE SERVICE SECTOR

COOLING CAPACITY FROM 30 TO 140 kW

The roof-top units of the RTY range are **autonomous air-to-air units** designed to completely treat the air. These units are ideal for places where there is a **high degree of crowding such as cinemas, conference halls, restaurants, cafés and discos**, as they can operate with 80% of fresh and exhaust air.

See all the features

Roof-Top unit for high occupancy applications

- **Autonomous air-to-air units**
- **High percentage of outside air**
- Available version: **RTY H** heat pump operation for climate management in both cooling and heating

- ✓ **Comfort and air quality** in spaces with high occupancy levels
- ✓ **Optimal air exchange**
- ✓ **Optimisation of energy costs** in each season

Technical data

Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
Cooling performances (1)											
Cooling capacity	kW	30,20	39,60	48,70	65,40	75,30	84,30	90,90	107,60	121,40	133,60
Sensible cooling capacity	kW	21,20	27,10	32,60	43,10	48,90	55,20	61,10	70,50	80,60	87,40
Compressors absorbed power	kW	5,30	8,40	9,70	13,10	15,20	17,50	18,50	23,30	27,60	32,60
EER compressors		5,70	4,71	5,00	5,00	4,96	4,82	4,92	4,61	4,39	4,09
Heating performances (2)											
Heating capacity	kW	29,30	39,70	48,50	66,50	76,60	85,80	91,40	110,40	123,40	137,90
Compressors absorbed power	kW	4,40	7,00	8,40	12,40	14,20	15,70	15,50	19,20	21,80	25,50
Compressor COP		6,67	5,68	5,77	5,38	5,39	5,47	5,89	5,73	5,66	5,41

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Energy Index

Size			17	18	19	20	21	22	23
Energy index									
SEER	H	W/W	4,01	3,94	4,18	3,92	4,15	3,94	3,85
ηsc	H	%	157.6%	154.6%	164.3%	153.8%	162.9%	154.5%	150.9%
Pdesignh	H	kW	89	98	109	123	130	141	168
SCOP	H	W/W	3,47	3,31	3,45	3,36	3,49	3,43	3,26
ηsh	H	%	135.7%	129.4%	134.8%	131.5%	136.4%	134.2%	127.3%

Fans

Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
External fans											
Type	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	no.	1	1	2	2	2	2	2	2	2	2

Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
Internal fans											
Nominal air flow rate	m^3/h	3500	4500	5500	7000	8000	9500	11500	14000	15000	16500
Minimum air flow rate	m^3/h	2450	3150	3850	4900	5600	6650	8050	9800	10500	11550
Maximum air flow rate	m^3/h	3500	4500	5500	7000	8000	9500	11500	14000	15000	16500

Size			01	02	03	04	05	06	07	08	09	10
Configuration: MB3												
Recovery												
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	1	1	1	1	1	1	1	2	2	2

Size			01	02	03	04	05	06	07	08	09	10
Configuration: MB3												
Exhaust												
Type	H	type	-	-	-	-	-	-	-	-	-	-
Number	H	no.	-	-	-	-	-	-	-	-	-	-

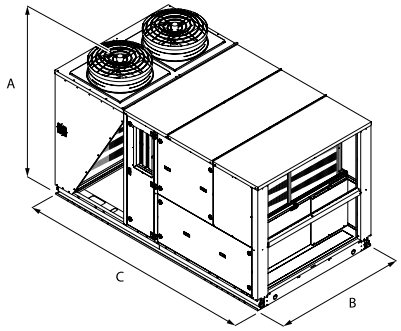
Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
Delivery											
Type	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	no.	1	1	1	1	1	1	1	1	1	2
Maximum useful head (1)	Pa	150	150	200	200	200	250	250	250	300	300
High static pressure (EN14511) (1)	Pa	-	-	-	-	-	-	-	-	-	-

(1) At the nominal/maximum flow rate with a new, clean air filter.

RTY 01-10

General Technical Data

Size			01	02	03	04	05	06	07	08	09	10
Configuration: MB3												
Power supply												
Power supply	H						400V 3 ~ 50Hz					
Compressor												
Type	H	type					Scroll					
Number	H	no.	2	2	2	2	2	2	2	2	2	2
Circuits	H	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	H	type					R410A					
Partialisation step	H	no.	3	3	3	3	3	3	3	3	3	3



Dimensions

RTY		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
A	mm	2061	2061	2061	2373	2373	2373	2373	2373	2373	2373
B	mm	1900	1900	1900	2100	2100	2100	2100	2100	2100	2100
C	mm	3400	3400	3400	3400	3400	3400	3400	3400	3400	3400

The dimensions and weights are subject to changes.

ROOF-TOP RTG

Efficiency and sustainability, with R32 refrigerant with low GWP

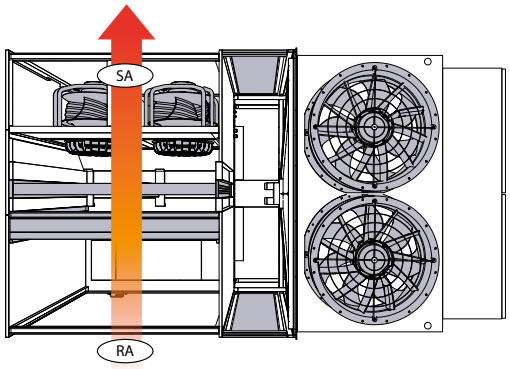
The RTG range consists of Roof-Top air condensed independent air conditioning units equipped with heat pump, suitable for shopping centres, shops, offices, production areas. Operation possible with up to 50% fresh air in MB2, MB4, MBT and MBF versions.

It uses the eco-friendly gas R32, which significantly reduces environmental impact through a reduced amount of refrigerant and has a low global warming potential (GWP). It also allows higher yields and efficiencies thanks to heat energy recovery (MB4 and MBT versions).

- **With the eco-friendly gas R32**
- **Average occupancy applications**
- **Air treatment, filtration and renewal**
- **Freecooling mode**

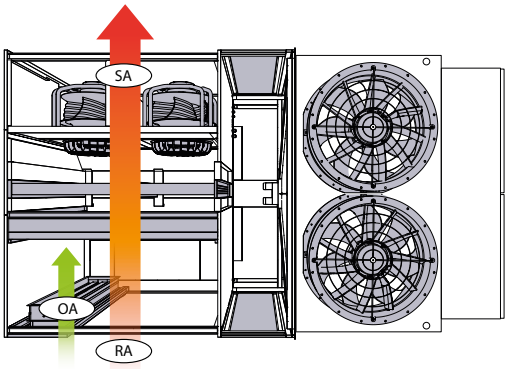
Available configurations

MB1
Single ventilating cross-section for recovery air



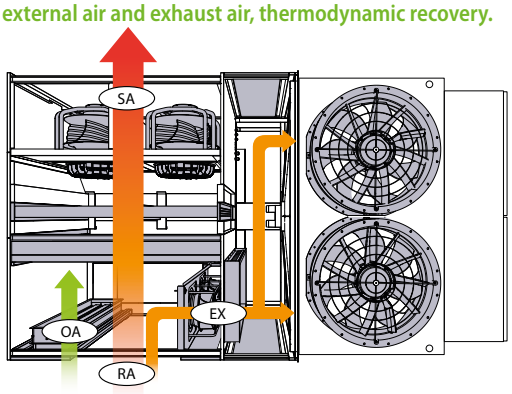
- Recovery air only configuration where no fresh air is required.
- The useful flow and recovery static pressure is provided by the flow ventilatin- cross-section.

MB2
Single ventilating cross-section for recovery and external air



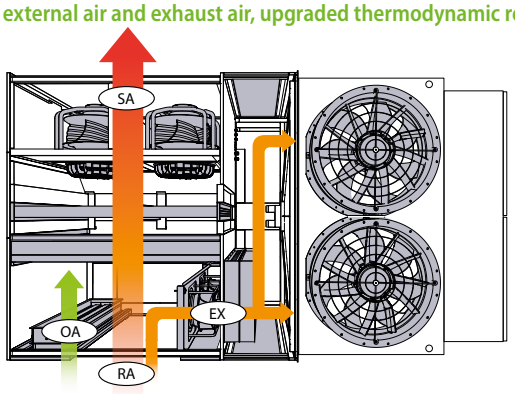
- Recovery and external air configuration. The useful flow and recovery static pressure is provided by the flow ventilating cross-section.
- If there are no extraction systems, the room will be in overpressure.
- Possibility of performing freecooling/freeheating.

MB4
Double ventilating cross-section (flow and expulsion) for recovery air, external air and exhaust air, thermodynamic recovery.



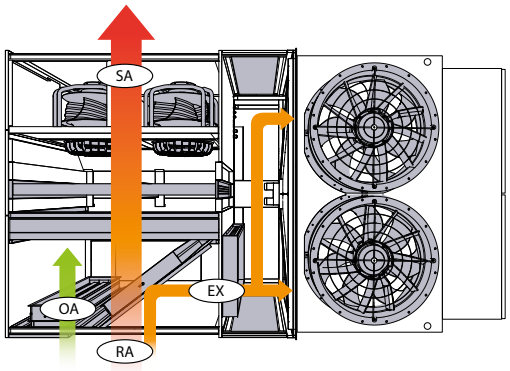
- Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure. The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.
- Thermodynamic recovery is performed by conveying expelled air on the external heat exchangers.
- Possibility of performing freecooling/freeheating.

MBT
Double ventilating cross-section (flow and expulsion) for recovery air, external air and exhaust air, upgraded thermodynamic recovery.



- Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure. With variable flow rate, in addition to the benefits in terms of environmental comfort, there are also economic benefits as the modulation of the air flow rate leads to a considerable reduction in the electricity consumption of the unit compared to a unit operating with a fixed flow rate. A function can also be enabled that in Economy mode, when the temperature set-point is reached, allows ventilation to be switched off, with considerable economic advantages.

MBF
Single fan section for return air, outside air and exhaust air



- Recovery, external and exhaust air configuration.
- The flow ventilating cross-section provides the flow and recovery useful static pressure.
- The flow rate of fresh and exhaust air is achieved through the use of two modulating dampers (fresh and exhaust air) and one gravimetric damper (exhaust air).
- The presence of the recirculation damper allows for total free-cooling (100% external air).
- This configuration makes it possible to exploit the overpressure in the room to expel stale air (maximum 50 Pa leakage in the duct) without having to use a dedicated fan.

SA: Flow air
RA: Return air
OA: External air
EX: Air expelled

RTG 060X – 085X – 125X – 160X

APPLICATIONS FOR THE SERVICE SECTOR
COOLING CAPACITY FROM 57.7 TO 165.3 kW
HEAT CAPACITY FROM 58.1 TO 164.6 kW

See all the features

Roof-top unit with R32 refrigerant

- **High power modulation capability**
- **Inverter compressors and fans**
- **Enhanced thermodynamic heat recovery**
- **Different configurations for easy installation**

✔ **Reduced environmental impact**
✔ **Reduced defrosting**
✔ **High efficiency** at partial loads

Accessories

Refer to the selection software for compatibility of accessories.

MB1: Single fan section - Recirculation
MB2: Single fan section - Recirculation + Renewal
MB4: Double fan section - Recirculation Renewal + Exhaust - Thermodynamic recovery
MBT: Double fan section - Recirculation + Renewal + Exhaust - Enhanced thermodynamic recovery
MBF: Single fan section - Recirculation + Renewal + Exhaust
MO: Horizontal air flow
MI: Lower air flow
MS: Upper air flow
RO: Horizontal air recovery
RI1: Lower air recovery for MB1 configuration
RI2: Lower air recovery for MB2 configuration
RI4: Lower air recovery for MB4/MBT configuration
RS1: Upper air recovery for MB1 configuration
RS2: Upper air recovery for MB2 configuration
RS4: Upper air recovery for MB4/MBT configuration
VSTD: Fans with standard static pressure
VPWR: Fans with increased static pressure
IAL: Internal coil with aluminium louvers
IPV: Internal coil with pre-painted aluminium louvers
EAL: External coil with aluminium louvers
EPV: External coil with pre-painted aluminium louvers
IALT: MBT internal coil with aluminium louvers
IPVT: MBT internal coil with pre-painted aluminium louvers
EALT: MBT external coil with aluminium louvers
EPVT: MBT external coil with pre-painted aluminium louvers
FCT: Thermal free-cooling
FCH: Enthalpy free-cooling
CMAN: Manual external damper control
SCM: Modulating external damper servocontrol
SCM-F: MBF modulating damper servocontrols
PCOST: Constant air flow rate
PVAR: Variable air flow rate
DML: Demand limit
PFS: Filter fouling control differential pressure switch
DEU: Summer dehumidification
DEUP: Summer dehumidification with post-heating
CUR: Provision for humidification control (digital contact and analogue output)
BPGC: Hot gas after-heating coil with aluminium louvers
BPGCPV: Hot gas after-heating coil with pre-painted aluminium louvers
BW2: Heating/Integration water coil with aluminium louvers
BW2PV: Heating/Integration water coil with pre-painted aluminium louvers
BW3: Water coil for recovery from refrigerated display cabinets with aluminium louvers
BW3PV: Water coil for recovery from refrigerated display cabinets with pre-painted aluminium louvers
V2V: Modulating 2-way valve + connecting pipes
V3V: Modulating 3-way valve + connecting pipes
BE: 2-stage electric heating coil (3 steps)
F7: F7 filters (ISO 16890 ePM1 55%)
F9: F9 filters (ISO 16890 ePM1 80%)
FE1: Electrostatic filters for MB1/MB2 configuration
FE4: Electrostatic filters for MB4/MBT/MBF configuration
SCO2: CO2 duct probe
SVOC: VOC duct probe
SCO2+SVOC: CO2 + VOC duct probe
ASCO2: Room CO2 probe
ASVOC: Room VOC probe
ASCO2+SAVOC: Room CO2 + VOC probe
STR: Recovery temperature probe
STA: Room temperature probe
STR+SUR: Recovery temperature and humidity probe
STA+SUA: Room temperature and humidity probe
PRT1: Remote panel up to 50m
PRT2: Remote panel up to 200m
AVG: Anti-vibration supports
MIP: Modbus TCP/IP communication protocol (standard)
MRTU: Modbus RTU communication module
BIP: Bacnet IP communication module
BMSTP: Bacnet MS/TP communication module
KON: KONNEX communication module
CAP: Hoods function
CFF: Fire/smoke contact

RTG 060X – 085X – 125X – 160X

Technical data

Unit input power: at nominal air flow rate, nominal high static pressure and standard fans

MB1

Size		060	085	125	160
Configuration: MB1					
Cooling performances					
Cooling capacity	kW	57,70	77,70	121,30	157,70
Sensible cooling capacity	kW	46,30	64,70	88,10	114,20
Compressors absorbed power	kW	15,80	20,70	38,00	47,40
EER compressors		3,65	3,75	3,19	3,33
Unit input power	kW	20,1	26,9	45,5	59,3
Heating performances					
Heating capacity	kW	58,10	78,30	119,30	157,50
Compressors absorbed power	kW	12,80	17,30	30,00	40,30
Compressor COP		4,53	4,53	3,98	3,91
Unit input power	kW	16,5	22,0	37,4	51,1

Performance in cooling mode: Ambient air 27 °C d.b./19 °C w.b.; Outdoor air 35 °C/24 °C w.b.
Heating performances: Ambient air 20°C d.b./15°C w.b.; External air 7°C/6°C w.b.

MB2

Size		060	085	125	160
Configuration: MB2					
Cooling performances					
Cooling capacity	kW	60,40	81,40	127,00	164,30
Sensible cooling capacity	kW	49,00	68,70	92,10	119,20
Compressors absorbed power	kW	15,90	20,80	38,40	47,90
EER compressors		3,79	3,91	3,30	3,43
Unit input power	kW	20,2	27,0	46,0	59,8
Heating performances					
Heating capacity	kW	58,50	78,80	119,70	158,00
Compressors absorbed power	kW	11,70	15,90	27,60	37,00
Compressor COP		5,02	4,96	4,33	4,27
Unit input power	kW	15,3	20,6	35,1	47,8

Cooling performances: Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external air.
Heating performances: Ambient air 20°C d.b./15°C w.b.; External air 7°C/6°C w.b.; Functioning with 30% of external air.

MB4

Size		060	085	125	160
Configuration: MB4					
Cooling performances					
Cooling capacity	kW	60,90	81,90	128,10	165,30
Sensible cooling capacity	kW	49,10	68,80	92,40	119,60
Compressors absorbed power	kW	15,50	20,40	37,40	46,60
EER compressors		3,92	4,02	3,42	3,55
Unit input power	kW	20,5	27,6	46,5	61,2
Heating performances					
Heating capacity	kW	61,20	82,10	124,60	164,60
Compressors absorbed power	kW	12,00	16,00	28,00	37,70
Compressor COP		5,12	5,12	4,45	4,37
Unit input power	kW	16,4	21,8	37,2	51,2

Cooling performances: Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
Heating performances: Ambient air 20°C d.b./15°C w.b.; External air 7°C/6°C w.b.; Functioning with 30% of external and expelled air.

MBF

Size		060	085	125	160
Configuration: MBF					
Cooling performances					
Cooling capacity	kW	60,40	81,40	127,00	164,30
Sensible cooling capacity	kW	49,00	68,70	92,10	119,20
Compressors absorbed power	kW	15,90	20,80	38,40	47,90
EER compressors		3,79	3,91	3,30	3,43
Unit input power	kW	20,2	27,0	46,0	59,8
Heating performances					
Heating capacity	kW	58,50	78,80	119,70	158,00
Compressors absorbed power	kW	11,70	15,90	27,60	37,00
Compressor COP		5,02	4,96	4,33	4,27
Unit input power	kW	15,3	20,6	35,1	47,8

Cooling performances: Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external air.
Heating performances: Ambient air 20°C d.b./15°C w.b.; External air 7°C/6°C w.b.; Functioning with 30% of external air.

MBT

Size		060	085	125	160
Configuration: MBT					
Cooling performances					
Cooling capacity	kW	66,00	88,80	139,10	180,20
Sensible cooling capacity	kW	51,50	72,20	97,00	132,30
Compressors absorbed power	kW	15,50	20,50	37,50	47,00
EER compressors		4,25	4,34	3,71	3,84
Unit input power	kW	20,5	27,7	46,6	62,0
Heating performances					
Heating capacity	kW	65,90	88,50	134,40	178,00
Compressors absorbed power	kW	12,50	16,60	29,10	37,70
Compressor COP		5,29	5,32	4,62	4,73
Unit input power	kW	16,9	22,4	38,3	51,7

Cooling performances: Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
Heating performances: Ambient air 20°C d.b./15°C w.b.; External air 7°C/6°C w.b.; Functioning with 30% of external and expelled air.

Energy Index

Size		060	085	125	160
Energy index					
Pdesignc=Pratedc	kW	58,6	79,0	123,4	161,6
SEER	W/W	5,94	6,41	5,81	6,36
ηsc	%	234,60	253,50	229,20	251,50
Pratedh	kW	56,9	76,7	116,7	152,8
Pdesignh	kW	40,60	57,90	90,70	117,20
SCOP	W/W	3,74	3,83	3,59	3,83
ηsh	%	146,70	150,30	140,70	150,20

In MB1 configuration according to EN 14825:2022

Indices for access to incentives

Size		060	085	125	160
Configuration: MB1					
Indices for access to incentives					
Cooling capacity	kW	58,60	79,00	-	-
EER	W/W	3,10	3,14	-	-
Heating capacity	kW	56,90	76,70	-	-
COP	W/W	3,71	3,73	-	-

In MB1 configuration according to EN 14511-3:2022

General Technical Data

Size		060	085	125	160
Power supply					
Power supply	V/Ph/Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz
Compressor					
Type	type	Scroll	Scroll	Scroll	Scroll
Number	no.	2	2	2	2
Circuits	no.	2	2	2	2
Refrigerant	type	R32	R32	R32	R32
Compressor regulation	Type	Inverter	Inverter	Inverter	Inverter
Sound data					
Sound power level	dB(A)	84,0	85,0	89,0	92,0

Sound power in MB1 configuration at nominal operating conditions calculated on the basis of measurements in accordance with UNI EN ISO 9614-1/2

Fans

External fans

Size		060	085	125	160
Configuration: MB1, MB2, MB4, MBF, MBT					
External fans					
Type	type	Axials EC	Axials EC	Axials EC	Axials EC
Number	no.	2	2	2	2

Internal flow fans

Size		060	085	125	160
Configuration: MB1, MB2, MB4, MBF, MBT					
Delivery					
Type	type		Plug fan EC		
Number	no.	1	2	2	3
Nominal air flow rate	m^3/h	12700	17500	23000	29000
Minimum air flow rate	m^3/h	9500	13000	17000	24000
Maximum air flow rate	m^3/h	14000	20500	25500	36000
Nominal high static pressure (EN14511)	Pa	200	200	250	350

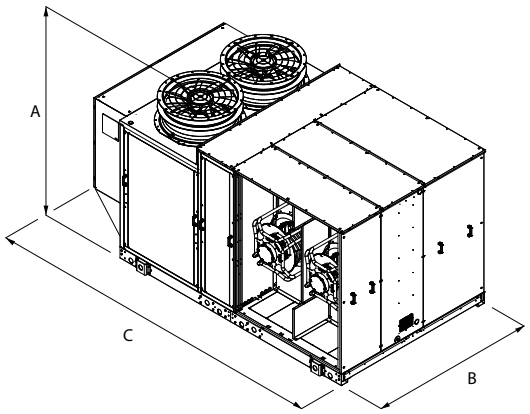
Expulsion fan MB4

Size		060	085	125	160
Configuration: MB4					
Exhaust					
Type	type		Plug fan EC		
Number	no.	1	2	3	3
Nominal useful head	Pa	100	100	125	175

Expulsion fan MBT

Size		060	085	125	160
Configuration: MBT					
Exhaust					
Type	type		Plug fan EC		
Number	no.	1	2	3	3
Nominal useful head	Pa	100	100	125	175

Dimensions



Size		060	085	125	160
Dimensions and weights					
A	mm	1570	1900	2165	2165
B	mm	2200	2200	2200	2200
C	mm	3305	3905	3905	5005
Empty weight	kg	1193	1518	1597	2030

Empty weight: in MB1 configuration without accessories

RTG 050Y – 090Y – 135Y

APPLICATIONS FOR THE SERVICE SECTOR

COOLING CAPACITY FROM 57,7 TO 128,1 kW

HEAT CAPACITY FROM 58,1 TO 124,6 kW

See all the features

Roof-top unit with R32 refrigerant

- **High power modulation capability**
- **Inverter compressors and fans**
- **Enhanced thermodynamic heat recovery**
- **Different configurations for easy installation**

✔ **Reduced environmental impact**

✔ **Reduced defrosting**

✔ **High efficiency** at partial loads

Accessories

Refer to the selection software for compatibility of accessories.

MB4: Double fan section - Recirculation Renewal + Exhaust - Thermodynamic recovery
MBT: Double fan section - Recirculation + Renewal + Exhaust - Enhanced thermodynamic recovery
MO: Horizontal air flow
MI: Lower air flow
MS: Upper air flow
RO: Horizontal air recovery
RI4: Lower air recovery for MB4/MBT configuration
RS4: Upper air recovery for MB4/MBT configuration
VSTD: Fans with standard static pressure
VPWR: Fans with increased static pressure
IAL: Internal coil with aluminium louvers
IPV: Internal coil with pre-painted aluminium louvers
EAL: External coil with aluminium louvers
EPV: External coil with pre-painted aluminium louvers
IALT: MBT internal coil with aluminium louvers
IPVT: MBT internal coil with pre-painted aluminium louvers
EALT: MBT external coil with aluminium louvers
EPVT: MBT external coil with pre-painted aluminium louvers
FCT: Thermal free-cooling
FCH: Enthalpy free-cooling
CMAN: Manual external damper control
SCM: Modulating external damper servocontrol
SCM-F: MBF modulating damper servocontrols
PCOST: Constant air flow rate
PVAR: Variable air flow rate
DML: Demand limit
PFS: Filter fouling control differential pressure switch
DEU: Summer dehumidification
DEUP: Summer dehumidification with post-heating
CUR: Provision for humidification control (digital contact and analogue output)
BPGC: Hot gas after-heating coil with aluminium louvers
BPGCPV: Hot gas after-heating coil with pre-painted aluminium louvers
BW2: Heating/Integration water coil with aluminium louvers
BW2PV: Heating/Integration water coil with pre-painted aluminium louvers
BW3: Water coil for recovery from refrigerated display cabinets with aluminium louvers
BW3PV: Water coil for recovery from refrigerated display cabinets with pre-painted aluminium louvers
V2V: Modulating 2-way valve + connecting pipes
V3V: Modulating 3-way valve + connecting pipes
BE: 2-stage electric heating coil (3 steps)
F7: F7 filters (ISO 16890 ePM1 55%)
F9: F9 filters (ISO 16890 ePM1 80%)
FE1: Electrostatic filters for MB1/MB2 configuration
FE4: Electrostatic filters for MB4/MBT/MBF configuration
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ASVOC: Room VOC probe
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STR: Recovery temperature probe
STA: Room temperature probe
STR+SUR: Recovery temperature and humidity probe
STA+SUA: Room temperature and humidity probe
PRT1: Remote panel up to 50m
PRT2: Remote panel up to 200m
AVG: Anti-vibration supports
MIP: Modbus TCP/IP communication protocol (standard)
MRTU: Modbus RTU communication module
BIP: Bacnet IP communication module
BMSTP: Bacnet MS/TP communication module
KON: KONNEX communication module
CAP: Hoods function
CFF: Fire/smoke contact

Performance specifications

Unit Power Input: at nominal airflow rate, nominal external static pressure, and with standard fans.

RTG-Y		050	090	135
Configuration: MB4				
Cooling performances				
Cooling capacity	kW	48,20	82,90	130,00
Sensible cooling capacity	kW	33,80	59,30	86,90
Compressors absorbed power	kW	10,50	19,90	36,90
EER compressors		4,60	4,16	3,52
Unit input power	kW	13,8	26,3	45,7
Heating performances				
Heating capacity	kW	49,00	84,90	129,20
Compressors absorbed power	kW	9,00	17,10	27,50
Compressor COP		5,45	4,96	4,69
Unit input power	kW	11,1	21,3	35,3

RTG-Y		050	090	135
Configuration: MBT				
Cooling performances				
Cooling capacity	kW	52,50	91,30	140,80
Sensible cooling capacity	kW	37,10	65,90	94,80
Compressors absorbed power	kW	10,50	20,10	37,00
EER compressors		5,01	4,55	3,80
Unit input power	kW	13,9	27,0	47,2
Heating performances				
Heating capacity	kW	52,70	91,60	139,50
Compressors absorbed power	kW	9,10	16,20	28,40
Compressor COP		5,82	5,66	4,91
Unit input power	kW	11,3	21,2	38,1

(1) Cooling performance: Room air at 27 °C DB / 19 °C WB; outdoor air at 35 °C / 24 °C WB; operation with 80% outdoor and exhaust air. (MB4, MBT)
(2) Heating performance: Room air at 20 °C DB / 15 °C WB; outdoor air at 7 °C DB / 6 °C WB; operation with 80% outdoor and exhaust air. (MB4, MBT)

RTG 050Y – 090Y – 135Y

Energy Index

Size		050	090	135
Energy index				
SEER	W/W	6,10	6,32	6,44
ηsc	%	241,20	249,90	254,60
SCOP	W/W	4,41	3,93	3,93
ηsh	%	173,30	154,20	154,10

In MB1 configuration according to EN 14825:2022

General Technical Data

Size		050	090	135
Power supply				
Power supply		400V 3~ 50Hz	400V 3~ 50Hz	400V 3~ 50Hz
Compressor				
Type	type	Scroll	Scroll	Scroll
Number	no.	2	2	2
Circuits	no.	2	2	2
Refrigerant	type	R32	R32	R32
Compressor regulation	Type	Inverter	Inverter	Inverter
Sound data				
Sound power level	dB(A)	84,0	86,0	90,0

Sound power in MB4 configuration at nominal operating conditions calculated on the basis of measurements in accordance with UNI EN ISO 9614-1/.2

Fans

External fans

Size		050	090	135
Configuration: MB4, MBT				
External fans				
Type	type		Axial EC	
Number	n°	2	2	2

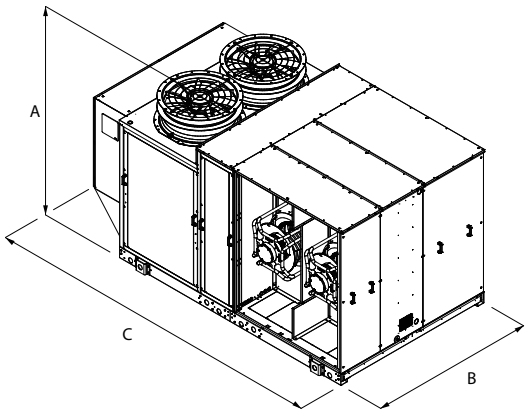
Internal flow fans

Size		050	090	135
Configuration: MB4, MBT				
Delivery				
Type	type		Plug fan EC	
Number	n°	1	1	2
Nominal air flow rate	m^3/h	6000	11000	16500
Minimum air flow rate	m^3/h	3800	7000	13000
Maximum air flow rate	m^3/h	7500	13500	20500
Nominal high static pressure (EN14511)	Pa	150	200	250

Expulsion fan

Size		050	090	135
Configuration: MB4, MBT				
Exhaust				
Type	type		Plug fan EC	
Number	no.	1	2	3
Nominal useful head	Pa	75	100	125

Dimensions



Size		050	090	135
Dimensions and weights				
A	mm	1570	1900	2165
B	mm	2200	2200	2200
C	mm	3305	3905	3905
Empty weight	kg	1263	1560	1718

- *Empty weight: in MB4 configuration without accessories*

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