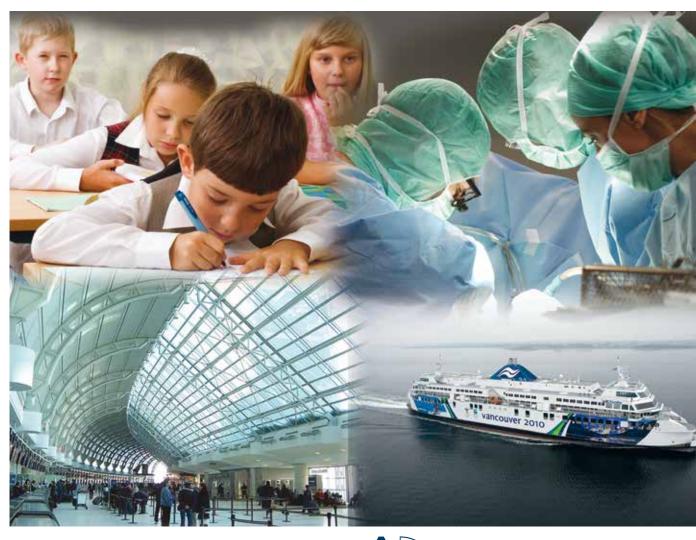




COMPANY PROFILE

CUSTOMIZED AIR HANDLING SYSTEMS

ENVIRONMENT AND HYGIENE-FRIENDLY SOLUTIONS







INDEX

page
Index
The Euroclima company
Manufacturing and distribution
High tech manufacturing.
Customer services
Certifications
Certified performances
Euroclima refrigeration
Controls and Integrated refrigeration.
Energy saving solutions
Medical and pharmaceutical solutions
Design & selection software
ZHK – Customized solutions
CLEANLINE - Medical solutions
ETA ACCU – Green building solutions
ETA POOL – Indoor swimming pool solutions
ETA PAC – Adiabatic cooling
MARINE – Marine and offshore solutions
ZHK nano – Compact air handling unit
ASEPSIS / FI – Food industry
KITCHEN – exhaust solutions
Euroclima fan coil units
References 2.

THE EUROCLIMA COMPANY





Your best partner for air handling

Since 1963 Euroclima has been the market leader in custom-made climate control and air-conditioning units.

We develop, produce and market high quality climate control and ventilation products for all areas, from simple convenient applications to solutions in hygiene and air processing plants and the use of highly efficient heat recovery systems. Euroclima is an international industrial business working across 5 production sites in Italy, Austria, India and the United Arab Emirates with over 40000 squared metres of production sites. Our core competencies are the production and the worldwide distribution of high-end, fully-developed climate control units and fan convectors.

We strive to exceed our clients' expectations through innovation, quality and a comprehensive service. Euroclima currently employs over 450 permanent members of staff. Furthermore, Euroclima has a widespread distribution network with sales and service branches in the whole of Europe, Asia, the Middle East, North Africa and Australia. Cooperation with partners in various countries enables us to cover an extensive market providing optimal customer service.

Success story

The secret of Euroclima's long-standing and continuous success lies in the efficient project-management and the distinctive customerorientation. We understand and address to our customer's needs and offer tailor-made solutions to optimize operating costs. This is achieved by:

- our professionalism and the commitment of all our employees
- our teamwork and the close relationships with our distributors, customers and suppliers
- our many years of experience and know-how in elaborating innovative solutions
- the quality, sustainability and reliability of our products

Our strengths

Outstanding quality management processes through ISO 9001:2015; customized solutions through unmatched flexibility; low energy consumption due to high-efficiency components and ideal unit selections; high reliability thanks to high quality components; innovation based on 50 years of experience; integration of the latest and best technologies; unique hygienic and clean concept solutions for an optimal indoor climate and a healthy and productive environment; guaranteed results due to certified products; design of products with the main focus on safety; products featuring quick installation and easy maintenance; customer service from the design stage through to spare-part supply; customized controls; plug and play solutions thanks to compact units with integrated refrigeration circuit; special solutions for particular projects such as ATEX requirements, data-centers, installations in the food industry or sound sensitive projects.

MANUFACTURING AND DISTRIBUTION



Euroclima Bruneck (IT)



Euroclima Sillian (AT)



Euroclima Indien (IN)



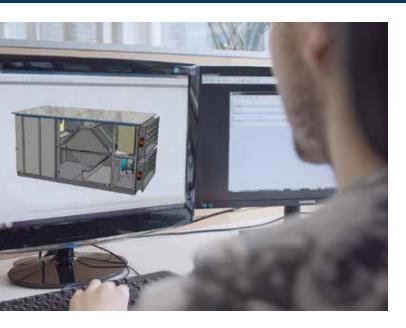
Bini Clima Rovereto (IT)

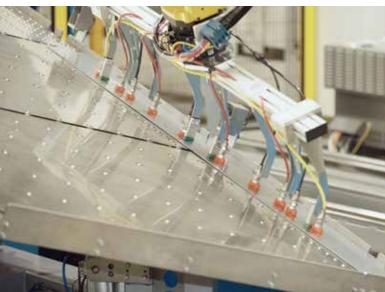


Euroclima Middle East



HIGH TECH MANUFACTURING





Quality is our absolute priority, as a result we have **first class suppliers**, high-quality production methods and toughest quality criteria. Detailed discussions with our customers contribute to a clear understanding of their needs and a thorough project elaboration. **Highly qualified and conscientious personnel** combined with the **latest manufacturing technologies** enable us to provide customized products with **highest quality and reliability**, at the right price and with shortest delivery times.



CUSTOMER SERVICES



Technical support

Our teams and partners are available to **help you on technical or commercial matters**, provide you information about deliveries, offers, orders, warranty or spare parts supply. Don't hesitate to call us.



Design assistance

Thanks to our experience, our expert teams and our powerful design software, Euroclima can help you find the best technical and economical solution to complete successfully your projects.



Factory acceptance tests and on site commissioning

To demonstrate the quality and the performances of our products, we are able to **perform witness tests either in our facilities** or on job site. Volumetric tests (airflow/pressure), acoustic, vibrations, air leakage, casing deflection, filter bypass leakage, casing thermal performances can be organized upon request. When required, Euroclima **service teams provide on site assembly assistance and unit commissioning**.



Service & spare parts supply

Euroclima ensure after sales service, maintenance and supply of spare parts for the entire range of our equipment's.

CERTIFICATIONS













Higher expectations

In addition to the quality management certification in place in all of our facilities, Euroclima has a policy to continuously improve its administrative and manufacturing processes to provide products with top quality and reliability for the satisfaction of our customers. Because every project is unique, every country has its own laws and regulations, every building it's own constraints, Euroclima participate to a number of international certification programs, related to quality, performances, hygiene or energy consumption.

In term of performances, the more complete certification program is definitively the Eurovent certifications which certify the performances of the components, as part of the units, but also the mechanical characteristics of the housing, as described in the next page. Components certified according to other programs can be offered, such as AHRI certified coils.

For medical applications, where the air cleanliness in the critical zones is essential, Euroclima has developed innovative and unique options to comply to highly demanding regulations such as the VDI 6022, the DIN 1946-4, the SWKI 99-3, the ONORM H 6020 or the HTM 03-01 NHS. Also, units to be installed in hazardous areas, can certified according to the ATEX directive 2014/34/EU.



CERTIFIED PERFORMANCES

The purpose of Eurovent certification program is to create a common set of criteria for the rating of products. Through specification of certified products, the engineer's tasks become easier, since there is no need to carry out detailed comparison and performance qualification testing. Consultants, contractors and end users can select products with the assurance that the catalogue data are accurate.

When a manufacturer participates in a certification program, he has to present its list of models or model ranges together with their performance data. The files are evaluated by Eurovent certification and a predefined number of units are selected for testing by independent laboratories. Models are subject to regular random testing to verify compliance with the catalogue data.

The selection software certified by Eurovent certification must calculate and indicate the Eurovent energy classes on the data sheets.



Shock appoing validity of certificate; eurovent-certification, con

	Reference table for energy efficiency calculations			
Class	All units	Units for full or partial outdoor air at design winter temperature ≤ 9° C		
Ö	Velocity	Heat recovery system		Fan Efficiency Grade
	V _{class} [m/s]	η _{class} [%]	Δp _{class} [Pa]	NG _{ref-class} [-]
A+/A+ /A+↑	1,4	83	250	64
A/A /A↑	1,6	78	230	62 (ErP Fan)
B/B /B↑	1,8	73	210	60
C/C /C↑	2,0	68	190	57
D/D /D	2,2	63	170	52 (ErP Vent)
<e <e="" <e↑<="" th=""><th colspan="3">No calculation required</th><th>No requirement</th></e>	No calculation required			No requirement

Performances certified by Eurovent

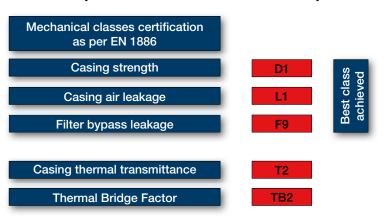
Rating performances, as per EN 13053:

- Air flow available static pressure
- Power input
- Octave band in-duct sound power level
- Radiated sound power level
- · Heating capacity
- · Cooling capacity
- Heat recovery
- Water pressure loss

Mechanical characteristics, as per EN 1886:

- Casing strength
- · Casing air leakage
- Filter bypass leakage
- Casing thermal transmittance
- Thermal bridging factor
- Casing acoustical insulation

Certified performances of Euroclima products





eurovent-certification.com

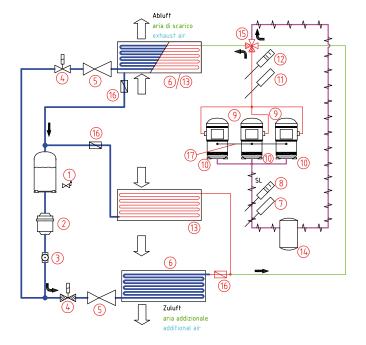
Euroclima participates in the EPC programme for Air Handling Units

(AHU) and Fan Coil Units (FCU); Check ongoing validity of certificate

EUROCLIMA REFRIGERATION

Customised refrigerant cooling system

This compression refrigeration system by Euroclima is sold complete with necessary components and corresponding controls. For smaller units which are constructed as mono-block, the cooling circuit is completely evacuated, subjected to a pressure test and then filled with a refrigerant. For units in sections, this must be carried out on site. To provide a seamless service for customers, Euroclima maintains a service team with refrigeration technicians. The technicians possess all the necessary certificates and training to meet the legal requirements of operating compression refrigeration systems. compressor with VFD. systems use the environment friendly R407C refrigerant.





- Nusgelegt, montiert und berechnet im Werk
- 1 Intelligente Regelungsstrategie
- Schnelle und einfache Installation
- Umweltfreundlich
 - Verantwortlichkeit liegt in einer Hand



Integrated refrigeration from Euroclima

CONTROLS & INTEGRATED REFRIGERATION

Euroclima controls

The Euroclima air handling units are available with factory mounted controls, including a complete control panel with circuit breaker, overload protection, variable frequency convertors and programmable controllers, control peripherals such as temperature and humidity sensors, pressure switches, damper actuators, valves etc. The units are tested and pre-commissioned in the factory; this has been proven to result in high reliability, time saving and trouble-free commissioning for our customers.







Controllers are supplied with programmed software

Euroclima integrated refrigeration

The Euroclima ETA and Cleanine series are available with built in cooling or reversible air cooled systems, installed in both exhaust and fresh air streams. The refrigeration systems can be customized with optimized components to reach the highest EERs & COP possible for your specific needs. The integrated air condensers are installed in the exhaust air streams (in cooling mode), which provide very high efficiency and minimized footprint as external condenser are not needed anymore. High quality scroll compressors, mounted on isolators make the systems highly reliable, with minimum maintenance. Protection devices such as low and high pressure switches, refrigerant dryers, and expansion tanks guaranty a safe and long lasting operation. The complete systems are controlled with dedicated cooling controllers and thermostatic expansion valves. Our refrigeration systems use the environment friendly R407C refrigerant.

Tactory designed, fitted & tested

Intelligent controls strategies

Easy and fast installation

Environment friendly

Single source of responsibility



ENGERGY SAVING SOLUTIONS

Euroclima recovery systems

The ZHK units are designed and manufactured with green environment in mind. The casing and 90% of the components used can be recycled.

Our advanced selection software allow us to optimize each unit to reach the best solution for each of your project, with the highest efficiency, the optimized dimensional constraints at the right price.

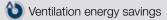
Euroclima use and promote the newest technologies to minimize the energy consumption of the complete air conditioning system.













Cooling production energy savings

EcoDesign compliance

Minimized carbon footprint and life cycle costs



High efficiency run around coils



Integrated refrigeration



Frequency invertors



Direct driven plug fans and EC motors



Adiabatic cooling



Thermal wheels



Plate heat exchangers



Accumulator

MEDICAL AND PHARMACEUTICAL SOLUTIONS

Clean concept as standard

Beside the environmental concern, Euroclima's focus is to insure comfortable and healthy indoor climate. As standard, our products provide the basic characteristics to provide the right Indoor Air Quality: Highest casing air tightness, smooth internal walls, minimized dust traps, anti corrosion protections, in compliance to the EN 13053 standard. Lots of options are also available to meet your own requirements: filters from G2 to H14, inclined floor in all sections, anti-bacteriological sealants, all components easily removable, 3 slope inclined drain pans easily removable, wash down sections...

Anti-microbial coating (AMC)

The Euroclima anti-microbial coating (AMC) is a surface treatment applied on the inner skin of the unit casing. This coating includes natural ingredients and silver ions having the propriety to stop the microbes and bacteria growth, thus to reduce the risks of contamination and infections. This coating, having active effects for more than 10 years has been tested by independent laboratories.





Smooth internal walls



Easy-to-clean design

High filtration efficiency

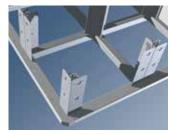
🐿 VDI 6022 & DIN 1946-4 compliant

Smooth internal walls for easier cleaning

Health care solutions

Euroclima has developed unique hygienic options for demanding applications such as operating theatres or pharmaceutical clean rooms:

- The Euroclima Anti-Microbial Coating (AMC) to avoid microbial growth in the air stream
- The new air-tight dampers, class 4 according to EN 1751
- Leak-proof Euroclima HEPA filter frame systems filter safe
- UVC systems to treat air or water against contamination



Leak-proof HEPA filter frames FILTER SAFE



Wide choice of filters from G2 to H14



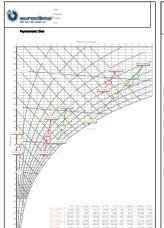
New Euroclima damper class 4 - EN 1751

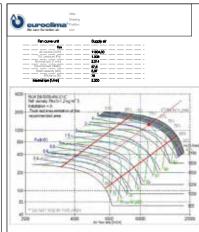
DESIGN & SELECTION SOFTWARE

Customized units designer

AirCalc++, our selection program is one of the most sophisticated design software for Air handling Units available on the market. It is the result of years of experience in designing and optimizing customized air handling units. The performances provided by this software are certified by Eurovent certification. It allows to select virtually all possible configurations, components or options to reach your exact project constraints. Detailed data sheets, in duct and radiated sound levels, Autocad format drawings, product specifications, Psychometric charts, fan curves, SFPs and energy classes can be viewed and printed from our software.

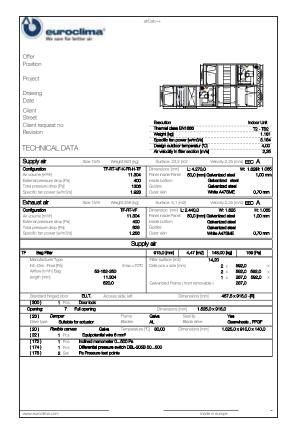












ZHK - CUSTOMIZED SOLUTIONS

Casing constructions

The innovative casing construction of the ZHK makes the units extremely flexible to cover a wide range of applications from comfort to process applications.

The standard range offer the highest flexibility available on the market place:

- Any possible unit configuration
- · Any type of components available on the market
- Anti corrosion protections, including galvanized steel, 130 mµ PVC coating, epoxy painting, peraluman, stainless steel 304 or 316L
- Large choice of options and accessories
- 100 % hygiene and attenuation material
- Factory mounted controls and refrigeration





- Unlimited flexibility
- High built quality & reliability
- Wagienic design
- W High efficiency
- Certified performances

Casing characteristics

- 50mm thick double skin panels
- Standard casing: metal sheet 0,7/1,0 mm
- Industrial casing: metal sheet 1,0/1,5 mm
- Incombustible insulation, glass fibber or rock wool, from 20 to 150 kg/m³
- Fire class: A1/A2 as per EN 13-501-1 A1 as per DIN 4102
- Upper profiles in epoxy painted aluminium
- Integrated base frame from 80 to 200 mm

Eurovent certified classes, as per EN 1886 (MB):

- D1/L1/F9/T3/TB2 (ZHK Standard)
- D1/L1/F9/T3/TB2 (ZHK Industry)
- D1/L1/F9/T2/TB2 (ZHK INOVA) with thermal break



ZHK - CUSTOMIZED SOLUTIONS

ZHK - Industry

The incredible flexibility of the ZHK range make it the best choice for industrial and process projects: car industry, aerospace halls, textile factories, power stations, research centers... All these kinds of applications require sometimes higher features than what is typically needed for comfort and commercial applications: Very large air volumes, very accurate temperature and/or humidify control, very high external static pressure, extremely aggressive environment, filtration of special compounds...

The ZHK units can be manufactured in accordance to the ATEX regulations. The integrated components such as fans, filters, belts, motors, and all electrical components shall be ATEX compliant.







T3 (inside/outside)

ATEX compliant solutions

Areas with danger of explosion have to be classified in zones according to the frequency and period of time when occurrence of explosive atmospheres (gas/air, vapor/air mixtures and/or mixtures of dust/air) occurs. This is defined in directive 2014/34 EU. The manufacturer shall declare the conformity in accordance with the ATEX regulation.

ATEX classification is split into two groups:

Group I: Underground mining. Not applicable for AHU Group II: Over ground installations, categories 1, 2 and 3.

Euroclima can provide ATEX compliant units which are approved by TUV Süddeutschland.



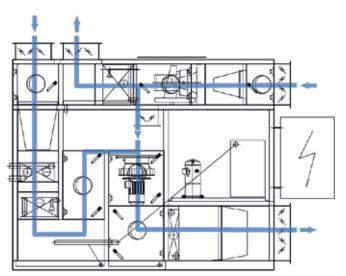


CLEANLINE - MEDICAL SOLUTIONS

Air handling units for operating theatres

The challenges in providing precise and reliable air-handling equipment in operating theatres and critical care rooms in hospitals are greater than in any other sector. Yet, the Cleanline series has been developed to meet these requirements. The Cleanline unit is used to optimise indoor air temperature, ventilation and humidity levels to suit your individual settings. This is done in line with legal requirements and also allows for an unrivalled sense of comfort and well-being. A further emphasis is placed on optimal energy consumption, which is achieved via a sophisticated integrated heat pump system and an advanced control unit. The Cleanline range is available in 5 unit sizes ranging from 1.000 to 10.000 m³/h.





Accurate indoor conditions

DIN 1946-4 & VDI 6022 compliant

Factory mounted controls

Integrated heat pump option

Compact, easy installation





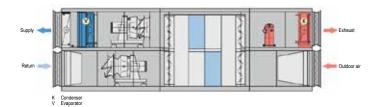
CleanLine

ETA ACCU - GREEN BUILDING SOLUTIONS

Energy recovery with power pack

The energy required in the treatment of fresh air is a significant part of a building's total energy consumption. Euroclima has developed the ETA ACCU; a packaged unit equipped with a regenerative heat exchanger plus at least two static storage matrices. A damper system periodically alternates the airstreams. While one storage matrix is loaded with a warm airstream – the other is discharged with a cold airstream. This process is repeated in short intervals. This series encompasses 14 standard sizes with air volumes ranging from 1.500 to 40.000 m³/h.







- > 90% efficiency (sensitive) (EN 308)
- > 75 % humidity efficiency (EN 308)
- Nackaged, compact unit with "plug & play"
- Optimised operation sequences
- Minimum maintenance



Accumulator with switching dampers



ETA POOL - INDOOR SWIMMING POOL SOLUTIONS

High de-humidification efficiency

Due to the high humidity in indoor swimming pools, it is essential that the air is dehumidified to provide comfort to visitors and to protect the furniture and the interior of the building. The ETA POOL series includes packaged units, cutting edge controls and an optional high efficiency dehumidification heat pump system. The series is divided into two product lines: ETA POOL SPA for small indoor pools e.g. private homes, hotels etc. from 1.000 to 5.200m³/h and ETA POOL OLYMPIC for medium sized and large indoor swimming pools from 6.000 to 37.000 m³/h, with dehumidification capacities from 6 to 215 kg/h. This new range is the result of our long-standing experience in indoor pool applications, combined with the finest technologies available on the market.





- Optimised operational sequences
- High dehumification (VDI 2089)
- Packaged & compact unit with plug & play
- Heat recovery up to 92% (EN 308)
- VDI 6022 options

up to 92 % efficiency





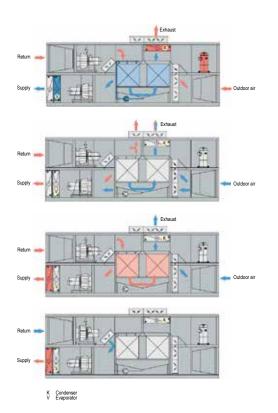
ETA POOL OLYMPIC ETA POOL SPA

17

ETA PAC - ADIABATIC COOLING

Efficient cooling equipment

The air conditioning and climate control system is one of the most important elements in data centres. Such centres require units to operate 24 hours a day, 7 days a week, 365 days a year, with high reliability, low running costs, easy maintenance, emergency management, and interconnectivity. The ETA PAC has been specifically designed for this purpose; a reliable compact unit equipped with double plate heat exchangers and an indirect adiabatic cooling system. Highly efficiency filters, factory mounted controls and an integrated heat pump, make this range the best choice for data centres, computer and server rooms, telecommunication rooms and laboratories. The application field covers air volumes from 1.000 to 30.000 m³/h.





- High quality and reliability
- Indirect adiabatic & free cooling
- Heat recovery up to 75 % (EN 308)
- Integrated refrigeration (optional)
- Packaged & compact unit with plug & play



Adiabatic cooling system



MARINE - MARINE & OFFSHORE SOLUTIONS

The best choice for ships & offshore

Marine and offshore applications require air-handling equipment to be especially designed in order to withstand extreme installation, working-and-operating conditions. The Marine Line series has been developed to meet the demands of the specific issues in this sector. Particular attention has been placed on the following: robust unit construction, high dimensional flexibility, components built to the highest standards, suitable corrosion protection, appropriately designed drainage trays, optimum system efficiency and compliance with the stringent marine & offshore standards and regulations. From containers ships and large cruise vessels to luxury yachts, the Marine Line is your best choice.





- High reliability, efficiency, unmatched flexibility in design
- Customised configurations and anti-corrosion protection
- Compliant with marine standards
- 🐿 Easy to install and maintain with a long service life
- Pactory tested and commissioned

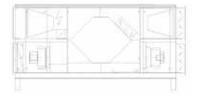


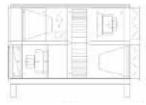
ZHK NANO - THE COMPACT AIR HANDLING UNIT

ZHK NANO - minimum space requirements

The new ZHK NANO series has been designed to provide your building with fresh air in the most economical way and with minimum space requirements. All components have been selected on the basis of the best price/performance ratio and operating parts conform to current safety standards. The ZHK NANO range includes energy efficient, direct driven plug fans, fibre glass filters on the ventilation and fresh air streams and heat recovery devices such as a counterflow plate heat exchanger or a heat wheel. The ZHK NANO is your first choice in providing the best indoor climate in; offices, schools, hotels, airports, shopping centres, fitness studios, etc. The ZHK NANO compact units are available in 3 sizes to cover air flow from 0,27 to 1,8 m³/s (1000 to 6500 m³/h). The unit performance data and the mechanical casing characteristics have been tested by a third party laboratory according to standards EN 13053 and EN 1886 and have been certified by EUROVENT.













- Packaged, compact, plug & play
- Integrated control
- High efficiency components
- DEASY to install and maintain and long lasting lifetime
- Tactory tested



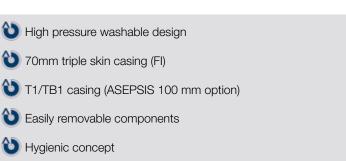
ASEPSIS / FI - FOOD INDUSTRY

ASEPSIS - design free from cold spots

Hygiene and strict contamination control are strategic issues for food production companies. They have a direct impact on the quality of the products, the health and the safety of the consumers and also on the brand's image. To meet the high requirements of food production or cold room storage, Euroclima has developed the ASEPSIS unit, which consists of a casing made from reinforced fibre-glass and PVC panels, insulated with polystyrene. The casing is free of cold spots. The components are easily removable for cleaning processes, or if desired, delivered as an extendable version. The floor of the unit is tilted, with rounded corners and drainage outlets. The casing complies with T2/TB1 (T1/TB1 as an option) thermal classes. Available in air volumes up to 50.000 m³/h.









FI - 70 mm tripe skin casing

Another unit, especially designed for the food industry, is the FI series featuring a 70mm thick triple skin casing. The triple skin is made as one piece, fully welded in stainless steel, with rounded corners to allow for regular high pressure washing. The floor in each section is tilted towards washing outlet-drains. Internal components can be protected against corrosion according to the project specifications. As with the Asepsis model, all internal components can be easily removed without the use of special tools, or if preferred, delivered in an extendable version.

KITCHEN - EXHAUST SOLUTIONS

Units for restaurants and kitchens

In cooking, barbequing and frying the size of the air particles can be less than 1 micron. Such particles cause unpleasant smells and can also penetrate human lungs, causing damage to health. It is therefore important to remove these substances from the working areas in the kitchen and to provide harmless and neutral air extraction. When cooking and heating fatty and oily foods and via the processes of hydrolysis, pyrolysis and oxidisation the following substances form; glycerine, free fatty acids, aldehyde, ketones, polymer triglyceride, nitrosamines and polycyclic aromatic hydrocarbons. Several of these are regarded as hazardous to health. The kitchen ventilation unit has been developed to clean the air and to neutralise odours before they are blown out into the atmosphere. To filter the broad spectrum of air particles and fission products, the unit is fitted with various filtration stages. The series encompasses 11 standard sizes from 1.000 bis 40.000 m/h.





Aerosol panel filters x > 100µm

Electrostatic filters

 $0.01 \mu m > x > 10 \mu m$



G4 panel filters $10\mu m > x > 100\mu m$





Activated carbon filters $x < 0.01 \mu m$ (odours)

- Nackaged, compact unit with "plug & play"
- Corrosion protection
- Easy to clean
- **(1)** Easy installation and maintenance
- Low noise levels



ZHK KITCHEN EXHAUST UNIT

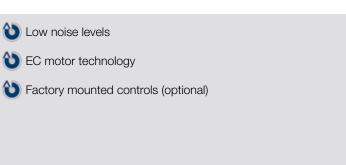
EUROCLIMA FAN COIL UNITS

Fan coil units

Euroclima offers a wide range of standardised terminal units for residential and commercial buildings such as; hotels, offices, schools, shops and hospitals. We produce fan coil units ranging from simple cost effective products for convenient use, to specialist equipment for marine or medical applications, such as double skin fan coils. Project specific products can also be designed with cutting edge components, such as EC motors or UVC lamps. All Euroclima terminals can be equipped with factory mounted controls.









Decorative units



Ducted units



Cassett



Double skin self-supporting units

REFERENCES



















Euroclima group factories Euroclima AG | SpA

St. Lorenzner Str. | Via S. Lorenzo 36 39031 Bruneck | Brunico (BZ) ITALY

Tel. +39 0474 570 900 Fax +39 0474 555 300 info@euroclima.com www.euroclima.com

Euroclima India Pvt Ltd.

info@euroclima.in

www.euroclima.com

Office No. 7, Ground Floor, Building No. 2, Sector 3 Millenium Business Park, Mahape 400 710 Navi Mumbai INDIA Tel. +91 22 4015 8934

Euroclima Apparatebau Ges.m.b.H.

Arnbach 88 9920 Sillian **AUSTRIA** Tel. +43 (0) 48 42 66 61 -0 Fax +43 (0) 48 42 66 61 -24 info@euroclima.at www.euroclima.com

Bini Clima S.r.I. Via A. Prato, 4 / A 38068 Rovereto ITALY Tel. +39 0464 437 232 Fax +39 0464 437 298 info@biniclima.eu www.biniclima.eu

Euroclima Middle East P.O.Box: 119870 Dubai UNITED ARAB EMIRATES Tel. +9714 802 4000

Fax +9714 802 4040 eumeinfo@euroclima.com www.euroclima.com

Euroclima product catalogues





















