

ZHK VISION

Freely configurable Air Handling Units with optimized thermal insulation T2/TB1



euroclima®
We care for better air



WE CARE FOR
BETTER AIR



THE COMPANY

Since 1963 Euroclima has been a market leader in the production and worldwide distribution of Air Handling Units and Fan Coil Units.

We develop, produce and market **high quality Air Handling Units and Fan Coil Units** for all areas. From simple, convenient applications to solutions in hygiene and air processing plants. Euroclima is an international industrial business working across **5 production sites in Italy, Austria, India and the United Arab Emirates and with over 40,000m² of production sites**. Our core competencies are the production and the worldwide distribution of customized Air Handling Units and Fan Coil Units.

We strive to exceed our clients' expectations through innovation, quality and a comprehensive service. Euroclima currently employs **over 450 members of staff** in addition to 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 whilst providing optimal customer service.



Euroclima participates in the EPC programme for Air Handling Units (AHU) and Fan Coil Units (FCU); Check ongoing validity of certificate: www.eurovent-certification.com

OUR CERTIFICATIONS

PROVEN QUALITY

Euroclima Air Handling Units will be checked and certified according to well-known guidelines.

The specified unit data are guaranteed by **different certifications**. This applies both to the components used and to the mechanical characteristics of the casing.

Our units are **tested for the casing characteristics according to EN 1886 by TÜV Süd**.

For medical and special hygienic applications, where the air cleanliness in the critical zones is essential, Euroclima has developed innovative and unique options to comply with highly demanding regulations such as the **VDI 6022, the DIN 1946-4, the SWKI 99-3, the ÖNORM 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**.

The **European regulation EU No. 1253/2014** is implementing the Ecodesign requirements from the European directive 2009/125/EG for non-residential ventilation units. Euroclima Air Handling units can be selected to this standards.

In addition to the **quality management certification ISO 14001:2015, ISO 45001:2018 and ISO 9001:2015** 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 its own constraints, Euroclima participate to a number of international certification programs, related to quality, performances, hygiene or energy consumption.

Our units are marked with the **CE symbol** according to EU-regulation 765/2008. With the CE marking, the manufacturer indicates the conformity of the product with the "basic requirements" to be fulfilled according to the relevant harmonization guidelines.





ZHK VISION **T2/TB1**



THERMAL PERFORMANCE

Our ZHK VISION casing offers optimized thermal insulation

The ZHK VISION series is characterized by the **standard unit design in T2 / TB1 and the enormous flexibility.**

The ZHK VISION series was developed to **optimize even further the thermal performance of the Air handling Units' casing.**

Projects in industrial and process technology, the automotive industry, halls for the aerospace industry, textile factories, power plants, research centers ... - all of these applications have special requirements and cannot always be covered by standardized Air Handling Units. **We are able to adapt our Air Handling Units to the needs of your processes and buildings.**

We therefore offer **freely configurable unit systems** and fall back on a large selection of **high-quality components.**

You tell us what your requirements are and we will work for the optimal solution.



OUR
COMPLETE SOLUTIONS



CONTROL & REFRIGERATION

Designed, assembled and calculated in the factory.

Euroclima Air Handling Units are available with **factory mounted controls**, including:

- » the complete control panel
- » the control peripherals
- » the units are tested and pre commissioned at the factory, which result in high reliability, time saving and trouble free commissioning for our customers
- » Climatix IC Cloud remote access

The Euroclima **ZHK VISION series** are available with **built in cooling or reversible air cooled systems**. 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. Our refrigeration systems use the environment friendly R407C and R410A refrigerant.

ZHK VISION

Gladly we insert also special components.



SMART DETAILED SOLUTIONS

Fan sections

- » Radial fan with belt drive
- » Plug fan
- » Plug fan with external runner engine
- » EFC three phase motor, conform to IEC standard, single speed or two speed
- » Measuring unit for air volume (analogue or digital)
- » Repair switch
- » Belt guard protection or grid for inspection door

Heater- Cooling section

- » Heating coil water / glycol
- » Condenser coil
- » Steam coil / Electric heater
- » Cooling coil water / glycol
- » Direct expansion coil

Humidifier section

- » Steam humidifier
- » Electrode steam generator
- » Resistance steam generator
- » Gas fired steam generator
- » Steam distribution systems for available on site steam
- » Adiabatic humidifier systems
- » High pressure atomisation
- » Hybrid air humidifier
- » Air washer
- » Contact pad evaporation humidifiers
- » Ultrasonic humidifiers

Energy recovery section

- » Plate heat exchangers with efficiencies up to 90% (cross flow, counter flow)
- » Heat wheel RT: condensation wheel, enthalpy wheel, sorption wheel
- » Heat pipe
- » Energy recovery for special applications with glass tube or stainless steel tube exchanger
- » SPC-System
- » Accumulator

Filter sections

- » Panel filter G2-G4, F5
- » V-bank filter G2-G4, F5
- » Bag filter G4-F9
- » Compact filter M5-F9
- » Absolute filter H10-H14
- » Activated carbon filter
- » Filter Safe® (Euroclima filter frame for absolute filter)

Control unit

- » Connections for mains supply / external inputs
- » Main switch for cutting the power supply
- » Fuses / over current protect.
- » Programmable RAM controls with alphanumeric, display and one-button navigation
- » PGU interface
- » Menu levels: manual/emergency
- » Climatix IC Cloud remote access

Silencer sections

- » Attenuation at 250 Hz from 14 to 40 dB depending on splitter length
- » Standard VDI 6022 conform

ZHK VISION

TECHNICAL DESCRIPTION

The ZHK VISION unit series is a frameless, modular panel construction with continuous aluminum profiles on the top and bottom edges of the unit. The construction consists of a double-shell casing panel with a thickness of 50 mm, composed of an inner cover and a removable outer cover. These are thermally separated by PVC plug-in profiles. Non-flammable mineral wool is used for unit insulation (fire protection class 0 according to ISO II 82.2 and A1 according to DIN 4102), which is ideal for sound and heat insulation. Various types of insulation with densities of up to 150 kg / m³ are optionally possible. We use sheets up to 1.5 mm thick for the panels. The units can be made of galvanized sheet metal, epoxy or PVC coated sheet metal, stainless steel 304 and stainless steel 316 or aluminum in order to do justice to the most diverse applications.

Our Air Handling Units are equipped with spacious inspection and maintenance doors in panel thickness. The door leaves are thermally separated between the inside and outside by plastic frames. We use adjustable hinges made of die-cast zinc for fastening the door leaves. Alternatively, we can also use clamping brackets for inspection accesses, which are opened less frequently. All door handles are equipped with locks.

All materials used have been tested by an autonomous testing institute for the requirements of VDI 6022 and found to be good.

Casing data (MB ZHK VISION) certified according to EN 1886:

- » Mechanical casing strength: Class **D1(M)**
- » Casing leakage at -400 Pa: class **L1(M)**
- » Casing leakage at +400 Pa: class **L1(M)**
- » Filter bypass leakage: Class **F9(M)**
- » Thermal transmittance: class **T2**
- » Thermal bridge factor: class **TB1**
- » Sound attenuation R_w (DIN52210-03): **36dB**

- » Sound insulation of the panel certified according to EN 1886 and EN ISO 3744:

Frq. Hz	125	250	500	1000	2000	4000	8000
Okt. dB	15	23	31	33	35	36	45

- » Performance data certified according to DIN EN 13053

Special materials

- » Stainless steel AISI 304 / AISI 316
- » Peraluman
- » Epoxy coating
- » Powder coating
- » AMC coating (antimicrobial powder coating)

"Weatherproof" version

- » Weatherproof roof with drip nose in inclined and flat design
- » Sealing of the panels and large watertight service doors

Hygiene version (in addition to the standard)

- » All components are removable
- » Floor panel made as a tub in 3-fold inclined design
- » Panel joints on the inside with permanently elastic, fungicidal sealing compound, seamlessly and steam-tight puttied
- » Manufactured in accordance with DIN 1946-4 / VDI6022 / SWKI / ÖNORM ...

ATEX

In compliance with ATEX directive 2014/34 EU.



JABER AL AHMED AL JABER AL SABAH HOSPITAL KUWAIT



HOLY HARAM MOSQUE MEKKAH - SAUDI ARABIA



CRUISERS, FERRIES, YACHTS, TANKER - WORLDWIDE



PARCO DELLA MUSICA - ITALY



HILTI INNOVATION CENTER - LIECHTENSTEIN



INFINEON



LOCKER - AUSTRIA



KASHAGAN ÖLPLATTFORM - KASACHSTAN

WORLDWIDE FLAGSHIP PROJECTS



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Euroclima product catalogues



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Due to its commitment of continuous product development and improvement, Euroclima reserves the right to change specifications without notice.



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