

Data center solutions



WE CARE FOR BETTER AIR



LOCATIONS

We are your partner for innovative, customized, environmentally friendly air conditioning systems and Air Handling Units. Our local contact persons will be happy to advise you and present numerous possible solutions.

Thanks to our **local presence in more than 60 countries**, we can ensure comprehensive **service in sales and customer service**. Our broad distribution network spans sales and service offices throughout Europe, Asia, the Middle East, North Africa and Australia.

We have been providing better air and a healthy indoor climate for more than 60 years and are a true pioneer in this area. Since inception, we have continuously advanced innovations and developed into a global leader in customised, eco-friendly air conditioning and Air Handling Units. Our many years of expertise are reflected in the quality of our products. We always strive to meet the needs of our customers and look forward to shaping the future of indoor air technology in the coming decades.

As the demands on data centers continue to increase, Euroclima offers complete solutions of Air Handling Units for an efficient server rack cooling and reliable fresh air supply.



Europe

Dubai

Mumbai

- » ITALY (Brunico, Rovereto)
- » AUSTRIA (Sillian)
- >> Since 1963 with more than 60 years of experience
- >> Numerous innovation and technological leadership
- Reliability
- >> Global design with local content
- >> Technology leader



5 PROD. SITES

PROJECTS IN 120 COUNTRIES



530+



WORLDLWIDE PRESENCE

WITH DISTRIBUTION AND SERVICE



50.000 m²

PRODUCTION AREA



WE MAKE THE INDOOR AIR TECHNOLOGY SMARTER

CONTROL SYSTEMS & REMOTE SUPPORT

Our Air Handling Units come with factory-mounted control systems and all essential protective components. The freely programmable controller manages all peripheral devices such as sensors, actuators, and valves. Each unit is factory pre-commissioned to ensure high reliability, fast start-up, and minimal on-site effort.

Our data center software is perfectly matched to the control types to be executed. **No programming knowledge is required** for commissioning. All control strategies are preloaded and adapted to the unit via SD card. **Operation is done through an external display**.

The data center software ensures high flexibility and reliability through internal communication and balanced control of airflow, temperature, and humidity. BACnet SC enables secure, encrypted communication with building management systems.

Control panels include an integrated **UPS** to maintain controller power for up to 60 seconds during outages, ensuring protection and stability. An **ATS** (Automatic Transfer Switch) enables automatic switching to backup power – crucial for data centers.

With the optional Climatix IC Cloud, remote access via smartphone, tablet, or PC allows predictive maintenance, fast troubleshooting, and data logging.

Reliable, efficient, and tailored for modern data centers.



- From planning to commissioning all from one source
- >> High-end components: Siemens, Rittal, WAGO
- Compatible with all major building management systems (BMS)
- Significant cost reduction service operations can be optimised thanks to remote access
- >> Independent communication between units
- >> Cloud-ready, with predictive features
- API service for simple connection to existing or new applications
- Continual software updates and control via the cloud



PACKAGE UNIT

UNITS WITH INTEGRATED CONTROL



SERVICE



EUROCLIMA CLIMATIX CLOUD

TEST-ACCOUNT



VARIOUS OPTIONS FOR DATA CENTERS

OUR PRODUCT OFFER

Euroclima delivers the **full IT cooling chain**: from **fresh air units (FAU)** to in-room **Fan Wall Units (FWU)** – fully integrated, factory-tested and ready for plug & play. We ensure **maximum uptime**, **energy efficiency**, **and full system integration**.

FAU-FRESH AIR UNITS

Fresh air supply from outside

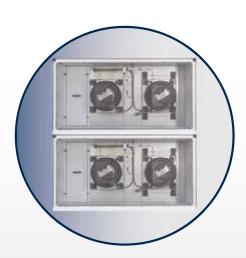
- » Freely configurable unit selections with a wide range of high-quality components
- » Control AHU unit & condensing unit from one source
- » No additional water piping required for heating and cooling
- » Quick installation thanks to package unit

FWU-FAN WALL UNITS

In-room cooling for server racks and active equipment with maximum operational reliability through redundancy and efficiency (UPS + ATS)

- » High-efficiency EC fans with Active PFC
- » Redundant setup (N+1 / 2N)
- » Compact design
- » Integrated Climatix IC Cloud and predictive maintenance
- » THD \leq 5%, power factor up to 0.998







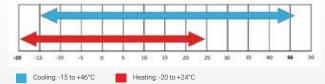
FRESH AIR UNITS

PERFECTLY ADAPTED, READY TO PLUG IN

The ZHK INOVA unit series stands for maximum flexibility and performance. Its **Eurovent-certified casing (T2/TB2)** forms the foundation for a highly adaptable air handling solution tailored to your specific needs. **We supply the air handling unit with the configuration and components as required for your project** and then we **combine** this customized AHU **with our condensing unit**. Highest energy efficiency is our standard. The air handling unit **can be used to run with a fresh air rate of 100%**.

Precise planning, exact configuration and **complete factory completion** guarantee an easy commissioning of the system at side. With experience and know-how, our specialized engineers ensure a **smooth handover** to you. The control of the unit can at any time be **adapted to your requirements**.

The condensing unit is **inverter-controlled** and we use R32 or R410 as refrigerant. The power supply for the condensing unit comes from the AHU and the regulation is perfectly coordinated between the units (AHU & condensing unit). The capacities are adapted to your requirements and cover the following range for heating and cooling:





- >> Control AHU unit & condensing unit from one source
- >> Freely configurable AHU's
- >> No more piping on site necessary
- >> 50 mm double-walled casing
- Sheet metal thickness up to 1.5 mm
- Non-flammable mineral wool insulation (up to 150 kg/m³)
- >>> Eurovent-certified casing (EN 1886):
- » Mechanical strength: Class D1(M)
- » Casing leakage at -400 Pa / +700 Pa: Class L1(M)
- » Filter bypass leakage: Class F9(M)
- » Thermal transmittance: Class T2
- » Thermal bridge factor: Class TB2
- >>> Delivered as a one-piece plug-and-play unit
- >> 100% factory tested before delivery





PLUG & PLAY Solutions

ZHK INOVA UNITS

CUSTOMER-SPECIFIC AIR HANDLING UNITS WITH BUILT-IN CONDENSING UNITS









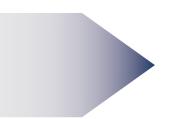








FAU - PRODUCT COMPONENTS



Fan sections

- » Plug fan
- » Plug fan with external runner engine
- » EFC three phase motor, conform to IEC standard, single speed or two speed
- » Measuring device for air volume (analogue or digital)
- » Repair switch



- » Condenser / Evaporator
- » Steam coil / Electric heater
- » Cooling coil water / glycol

Humidifier section

- » Steam humidifier
- » Electrode / resistance steam generator
- » Adiabatic humidifier systems
- » High pressure atomisation
- » 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 ISO Coarse ISO ePM10
- » V-bank filter ISO Coarse ISO ePM10
- » Bag filter ISO Coarse ISO ePM1
- » Compact filter ISO Coarse ISO ePM1
- » Absolute filter ISO ePM2,5 ISO ePM1
- » Activated carbon filter
- » Filter Safe® (Euroclima filter frame for absolut filter)

Control unit

- » Connections for main power supply + backup power supply
- » Main switch for cutting the power supply
- » Fuses / over current protect.
- » Programmable RAM controls with alphanum, display and one-button navigation
- » Flexible BMS protocols
- » 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





FAN WALL UNITS

IN-ROOM COOLING FOR SERVER RACKS

For data center applications, the **ZHK INOVA** casing ensures maximum reliability through its **fan wall configuration**. Our units are **freely configurable and built with premium components**. Sizes and shapes are optimized to fit the spatial and technical **conditions of our customers**.

Mechanical & Hydraulic Features

- » Hinged EC-fans easy removal
- » Maintenance access from both sides (in airflow direction)
- » Air inlet/outlet protection grids
- » Quick hydraulic connectionsStraub coupling between upper/lower unit
- » Flanged top connections for customer integration

Control & Connectivity

- » Factory-mounted control systems
- » Data center software commissioning via display, no programming
- » External display for setup and operation
- » Climatix IC Cloud remote access, updates, long-term data logging
- » API interface for easy integration into existing systems

Cybersecurity & Redundancy

- » BACnet SC for encrypted communication
- » Integrated UPS (≤ 60 s runtime)
- » Integrated ATS automatic switch to backup power of



- >> Factory pre-commissioned plug & play
- >> Predictive maintenance-ready
- Designed for service: hinged, removable EC-fans, dual access
- >> Independent unit communication and balancing
- >> Leakage detection, safety grids, cloud access
- **>>** Active PFC EC-Fans (THD) values ≤ 5%
- PICV control valves (Pressure Independent Control Valves)
- From engineering to operation one partner, one solution



PACKAGE UNIT

UNITS WITH INTEGRATED CONTROL UNIT



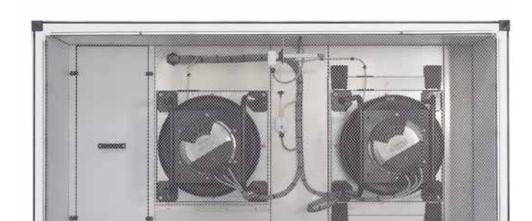
SERVICE

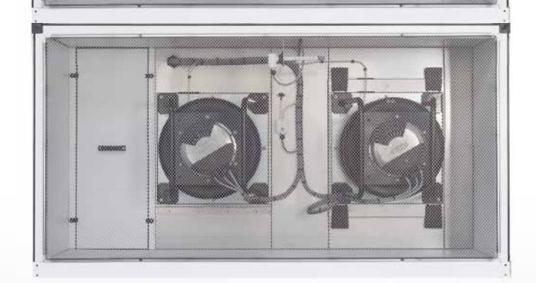


CONTROL STRATEGY

DRLDWIDE DESIGNED, ASSEMBLED AND CALCULATED IN FACTORY









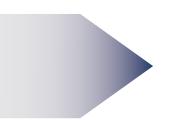








FWU-PRODUCT COMPONENTS



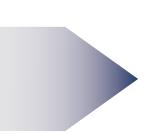
Fan section

- » EC fans
- » Easy removable
- » Maintenance access from both sides
- » Fan wall arrangement
- » Redundancy



Cooling section

- » Cooling coil water
- » Aluminium fins with copper tubes
- » Connection from lower to upper unit
- » Connected with energy valves
- » Coil connection on top of the unit



Filter section

- » Panel filter ISO Coarse
- » Panel filter ISO Coarse ISO ePM10
- » Easy removable
- » Accessable from both sides
- » Other filter types available on request



Piping section

- » Pre-assembled piping
- » With energy valve
- » Easy connection from lower to upper unit thanks to Straub coupling
- » Coil connection on top of the unit



Access for fan wall maintanance

- » Easy removable fans thanks to special hinging system
- » All sections easy accessable



Control unit

- » High-end components: Siemens, Rittal, WAGO
- » Compatible with all major building management systems (BMS)
- » Independent communication between units
- » Cloud-ready, with predictive features
- » API service for simple connection to existing or new applications
- » Active PFC EC-Fans (THD) values ≤ 5%
- » PICV control valves (Pressure Independent Control Valves)
- » Factory-mounted control systems
- » Data center software commissioning via SD card, no programming
- » BACnet SC for encrypted communication
- » Integrated UPS (≤ 60 s runtime)
- » Integrated ATS automatic switch to backup power

Productions sites of Euroclima group



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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

