Product overview

ClimaGold

climagold.com

ClimaGold

We have been manufacturing high-quality air handling units and ventilation equipment since 2007. Our products provide thermal and ventilation comfort in various types of buildings: residential, public utility, hospitals and facilities with the highest hygienic requirements.

We systematically expand our portfolio of devices, implementing state-of-the-art, energy-efficient solutions.

Our air handling units are equipped with high-quality assemblies and components coming from European suppliers, as well as control systems and default wiring.

Our priority is to design and manufacture high-quality devices. They conform with the strictest industry standards.

- DIN 1946-4:2018 (Optima in hygienic version)
- PN-EN 1886:2008 and PN-EN 13053:2020
- Requirements of European Union Directives (CE) and Eco Design

Our products have the following attestations and certificates:

- National Institute of Public Health
- TÜV Rheinland Certificate
- WCNiJK-NCAGE Certificate – our products can be installed in NATO facilities

We have also implemented a quality management system conforming with ISO 9001:2015.

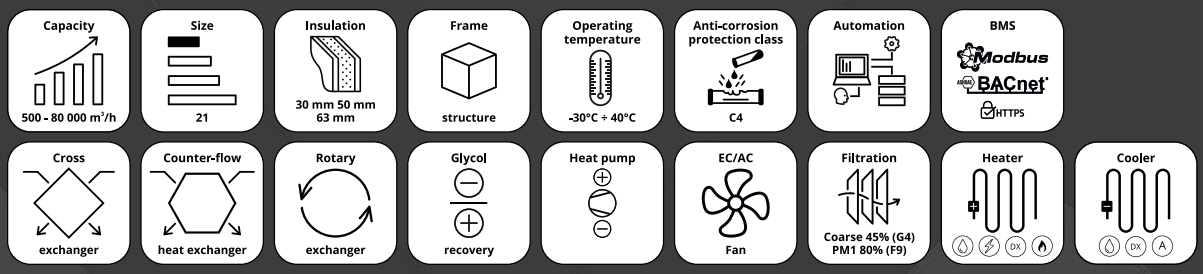
OPTIMA

Sectional air handling unit

- provides flexibility in device configuration based on various functional sections
- characterised by a wide range of uses
- allows unit size adjustment

Intended use:

- public utility buildings
- service and office buildings, hotels
- commercial and service centres
- recreational and sports facilities



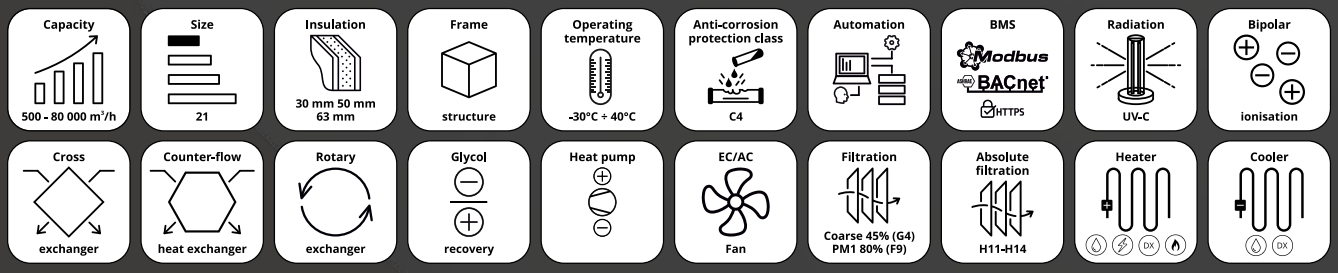
OPTIMA CRYSTAL

Hygienic air handling unit

- intended for ventilation and air-conditioning of premises with stricter hygienic requirements
- elaborate design solutions ensure the supply of perfectly clean air, free of suspended particles and dust, aromatic substances, fungi, mould or microorganisms
- also available in version conforming with the requirements of the DIN 1946-4 standard

Intended use

- healthcare facilities, including S1 rooms: hospitals, clinics, medical facilities, operating theatres
- pharmaceutical, food and electronic industry facilities



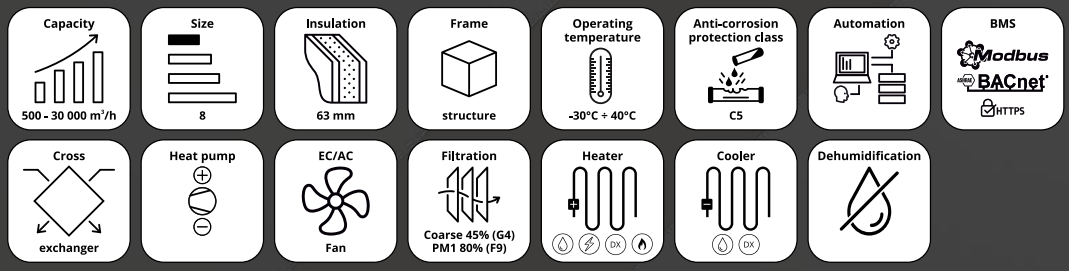
OPTIMA TURKUS

Air handling unit for swimming pools

- intended for providing a comfortable temperature and humidity in facilities characterised by high moisture content
- the Turkus air handling unit enables the supply of the required amount of air to the ventilated rooms, air dehumidification, and operation of the ventilation system with minimum energy consumption thanks to the use of heat recovery. Due to operation with air characterised with high moisture content, containing chemical compounds used in swimming pools, the air handling units feature special technical solutions

Intended use:

- swimming pools
- water parks
- factories



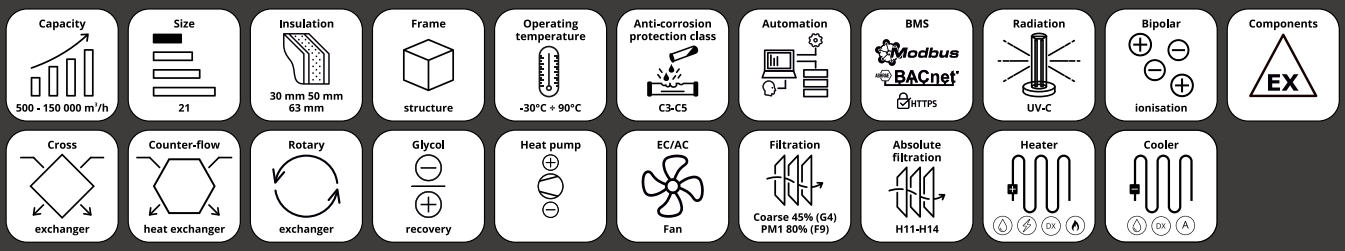
OPTIMA SPEC

Air handling unit with non-standard use and configuration

- sample technical solution: EX components, chemical resistant materials, or materials allowing device operation in an environment with increased salt content

Intended use:

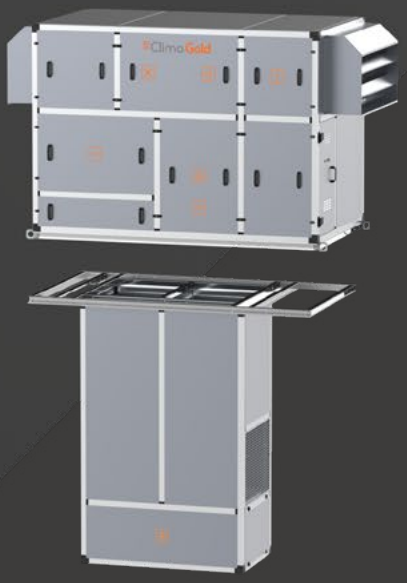
- factories
- refineries
- cogeneration plants



OPTIMA TOP

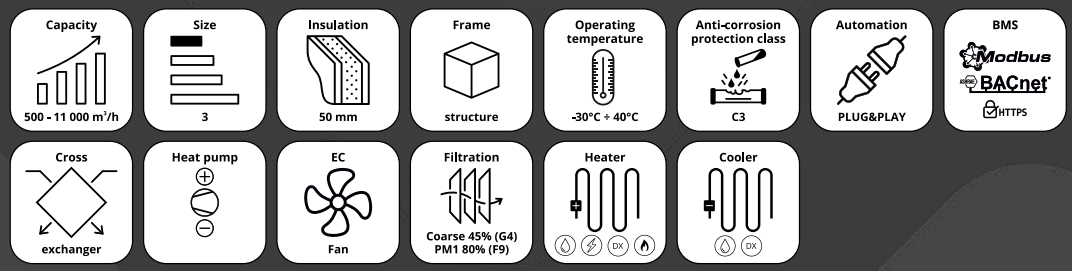
Ductless air handling unit for rooftop installation

- intended for ventilation, heating and cooling of large open space facilities (without partition walls)
- TOP air handling units are mounted directly in a rooftop opening on a previously prepared base



Intended use:

- production halls
- sports halls and facilities
- warehouses and logistics centres
- supermarkets and hypermarkets



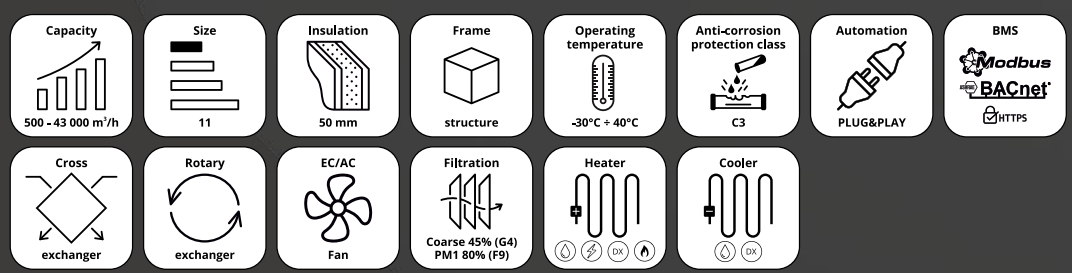
OPTIMA E

Standard air handling unit with reduced size

- available in the most popular configurations, with shorter manufacturing time
- intended for most facilities, providing proper ventilation and air-conditioning

Intended use:

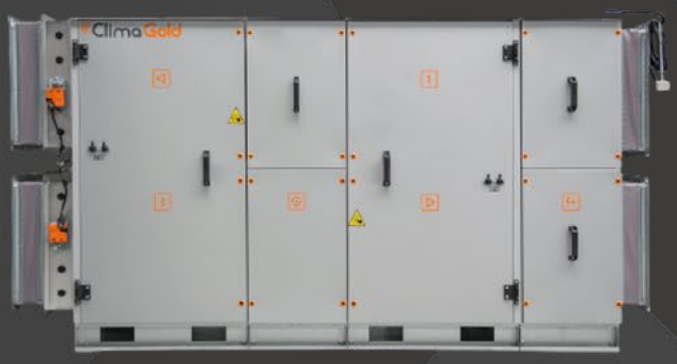
- public utility buildings
- service and office buildings, hotels
- commercial and service centres
- recreational and sports facilities



OPTIMA COMPACT

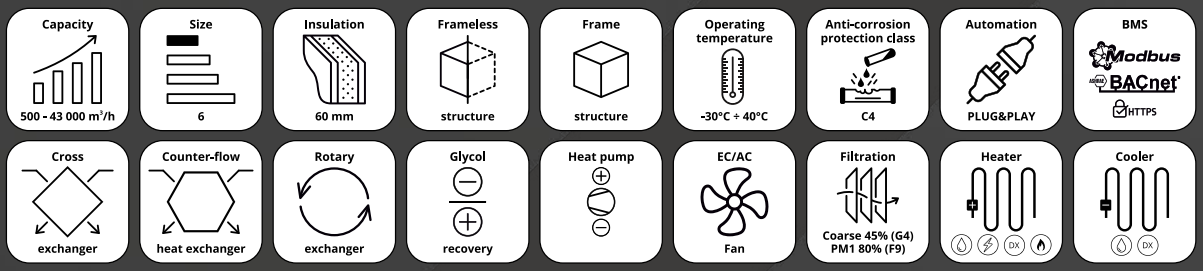
Compact sectional air handling unit

- minimum assembly time in the facility thanks to complete default wiring and the use of a system of sockets and plugs for connecting the functional modules
- the use of standard solutions provides the air control unit with a wide range of uses



Intended use:

- public utility buildings
- service and office buildings, hotels
- commercial and service centres
- recreational and sports facilities



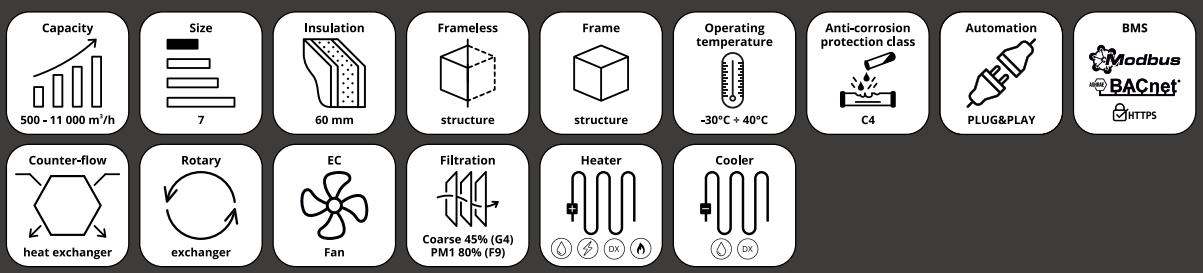
OPTIMA COMPACT MONOBLOCK

Compact air handling unit

- the main module (heat recovery device, filters, fans, control system) constitutes one section
- minimum assembly time in the facility thanks to complete default wiring and the use of a system of sockets and plugs for connecting the functional modules

Intended use:

- public utility buildings
- service and office buildings, hotels
- commercial and service centres
- recreational and sports facilities



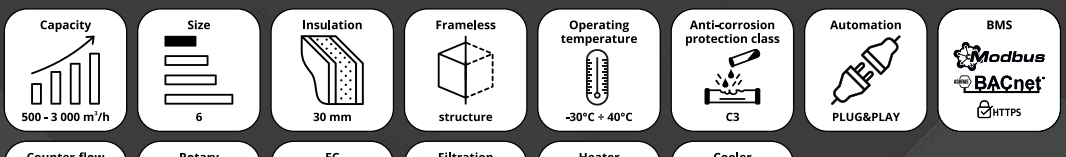
OPAL COMPACT PP, WO

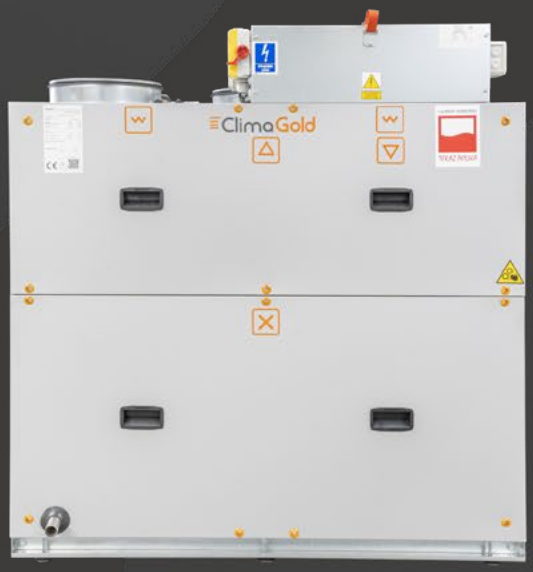
Air handling unit with frameless structure

- low-height device for indoor installation
- device versions: suspended, standing with top controls or vertical to be positioned against a wall.
- the suspended air handling units feature a system of sliding inspection covers

Intended use:

- residential and office buildings
- public utility buildings
- schools, preschools
- gyms
- restaurants, cafes





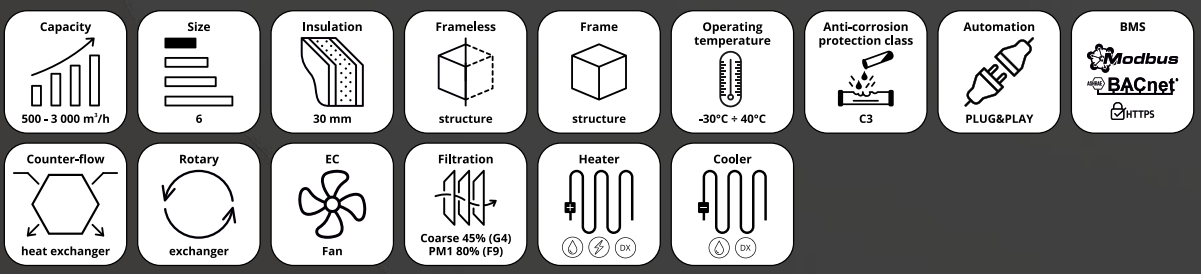
OPAL COMPACT UP

Frameless air handling unit with top ventilation duct connection

- designed for installation in tight spaces with a top ventilation duct connection
- intended for typical ventilation applications

Intended use:

- residential and office buildings
- public utility buildings
- schools, preschools
- gyms
- restaurants, cafes



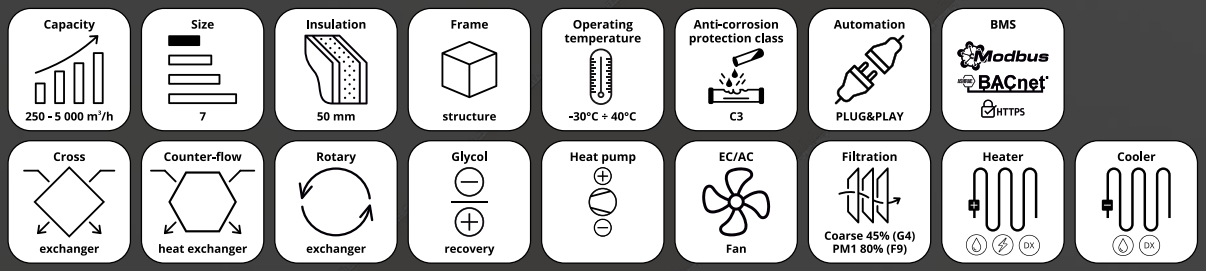
OPAL

Suspended air handling unit with frame structure

- designed for installation under the ceiling or under the floor
- the OPAL air handling units feature a special system for either horizontal or vertical installation

Intended use:

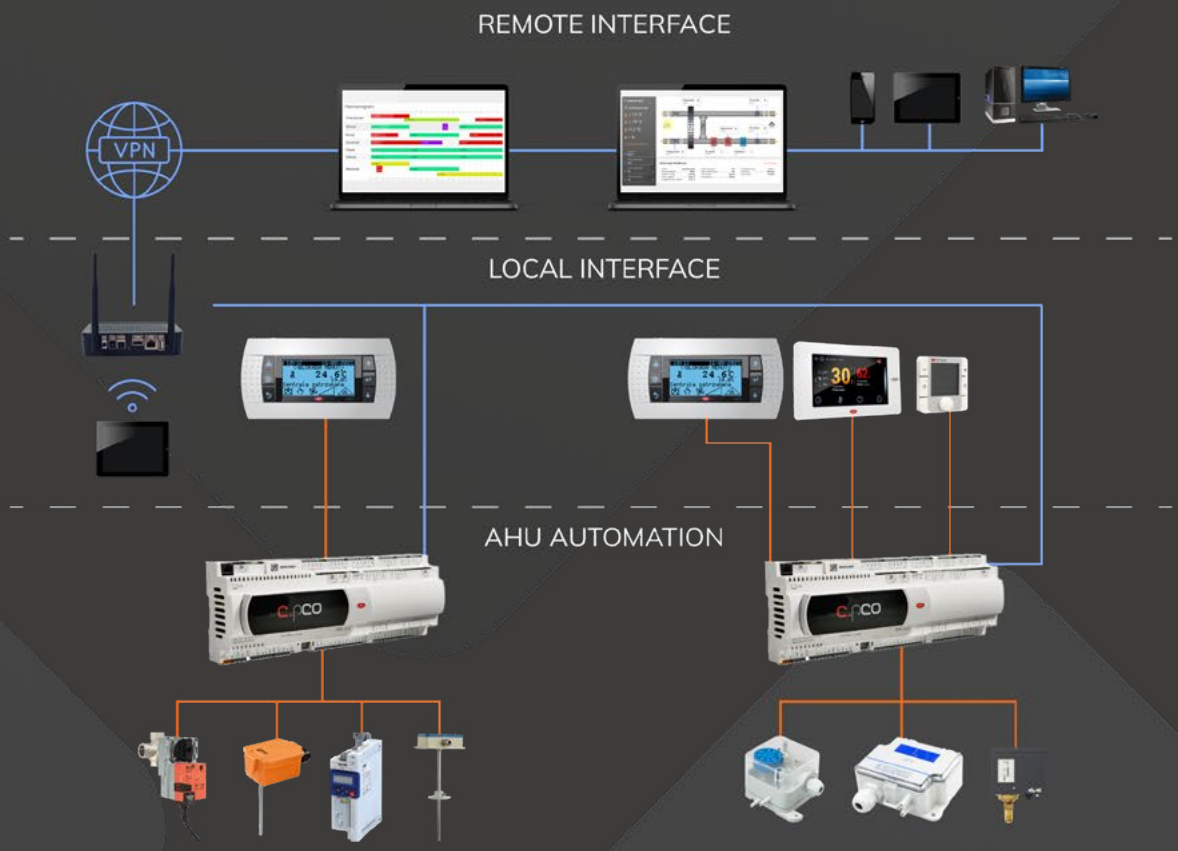
- service and office buildings, hotels
- public utility buildings
- shops, cinemas
- restaurants, cafes, pubs
- garages



PUMP CONTROL UNITS

- CPR pump groups are complete and reliable systems enabling precise water heat exchanger operation control in a very wide range. They can heat a medium flow volume of up to 8.5 m3/h
- The assemblies are available in three versions: standard, for indoor assembly; with factory housing, for outdoor installation; and embedded in the air handling unit section, with factory-made connection to a heater

CONTROL SYSTEM



AHU Control System

Functions performed by the Conrol system:

- supply or exhaust temperature control (room)
- relative/absolute humidity control with humidity reduction in the supply duct
- air quality control: CO2, VOC, undesired gas detection, e.g.. CO, LPG, ammonia
- control of constant airflow volume using a Venturi tube, constant pressure in the supply/exhaust duct or pressure in a room using a transducer with autozero function
- cooperation with CAV, VAV duct controllers
- filter contamination check with filter rupture detection
- heat recovery device operation control
- electrical heater protection against overheating, conditioning of operation, fan coasting
- water heater protection against overcooling and freezing, hot start function
- protection against prolonged supply of too-cool air
- wiring testing function
- real-time emulation of controller inlet and outlet
- alarm registration, including the time of alarm start and end
- monitoring the periods of power loss
- registration of main process values (temperature, control)
- calculation and registration of heat recovery efficiency, momentary SFP
- controller acceleration and deceleration, change of heating/cooling sequence
- programming reaction to generator frosting signal: manipulating the airflow volume, fresh air amount, heating sequence
- executing the function of controlling several generators and rotation management
- execution of operation according to internal calendar (7 days x 3 independent zones) and annual calendar (holidays)
- venting function: 10 time zones for each day with activation for a dozen/several dozen minutes

Local interface

Operating panel (PGD1, PGDx)

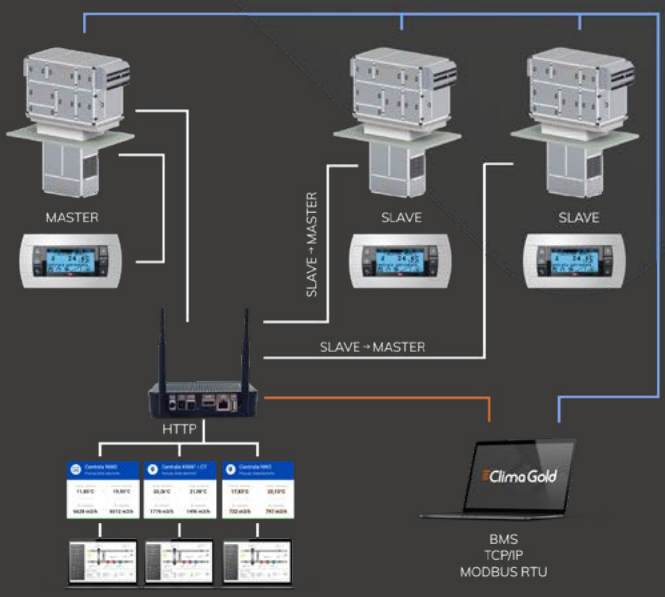
- surface mounting
- connection using F/UTP cable (up to 100 m) or flat 6-wire phone cable (up to 50 m)
- clear graphic and text menu
- panel lock after a period of idleness, 4-digit password protection
- 4 login levels for users with different levels of competence
- alarm signalling by button illumination

Visualisation

- access to visualisation using the controller's WiFi network or plugging the controller into a local LAN network
- collective window displaying all devices connected to local network
- ability to edit the device number and name in the collective window
- responsive viewing on all devices with an internet browser with no need to install an application
- access to service settings and virtual operator panel after logging in with a password
- menu divided into groups: Main window, Alarms, Schedule, History, Service, PGD

MainBrain

- system dedicated to the management of a group of air handling units that supply and remove air from a single room
- the system consists of one Master controller and multiple Slave controllers
- the task of the system is to optimise the room climate control through uniform operation of all AHUs
- the required architecture is identical to the collective visualisation – the controllers must be connected to a single LAN network
- access to the Master AHU operator panel is enough to activate the system and apply settings
- the Master controller analyses the measurements from all AHUs and uses them to transfer settings to individual devices
- programmed operation in the case of network failure



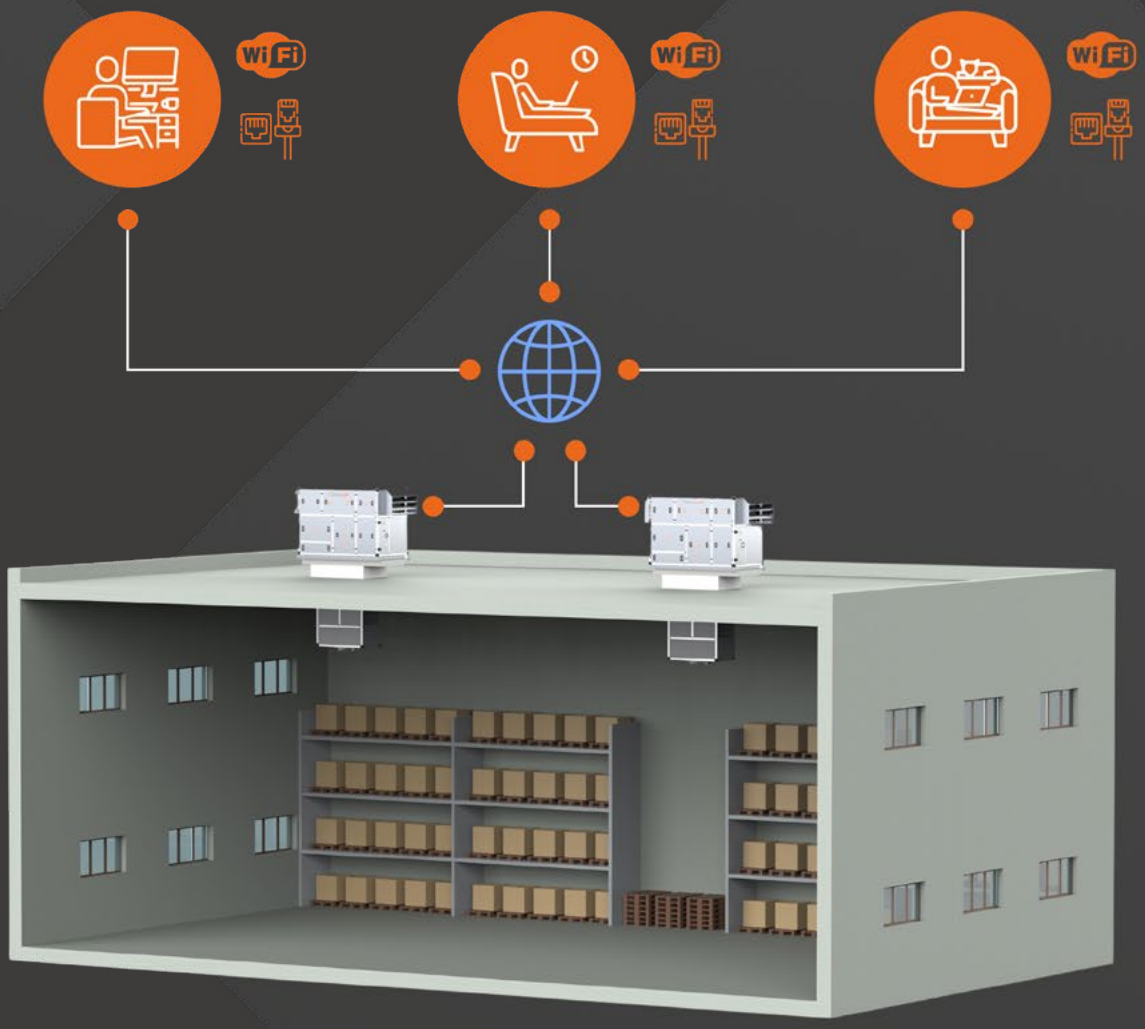
BMS

- access to variables through TCP/IP, BACNet IP, MODBUS RTU
- master system presence control (heartbeat)

Modbus BACnet HTTPS

climavisa.pl

- ClimaVisa is an online platform for giving the user remote access to the visualisation available locally in the air handling unit controller
- ClimaVisa does not require the installation of any application and is accessible from any computer or mobile device. The user only needs an internet browser and internet access
- ClimaVisa gives access to the visualisation of air handling unit operation using the public domain climavisa.pl
- After logging into your account on the ClimaVisa platform, the user can see all the available locations (routers) in the form of a tree formed by online devices
- The assigned names and locations may be edited by the system administrator



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