



COMPACT AIR HANDLING UNITS



OPTIMAX

CROSS • ROTO • RGS

The **OPTIMAX** series consists of advanced, compact air handling units designed to deliver high energy efficiency and reliable operation. All units in the range are based on a common casing design and construction concept, ensuring long service life and reduced operating costs.

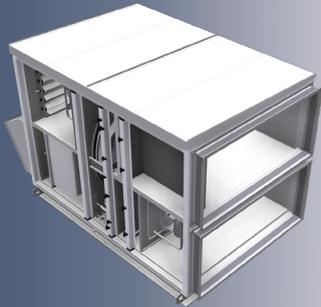
☑ Choose the solution tailored to your specific project requirements:

AHU Model

Heat Exchanger Type

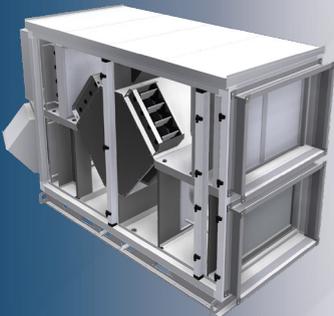
Technical Characteristics

ROTO



Rotary Heat Exchanger

CROSS



Counterflow Heat Exchanger

RGS



Counterflow Heat Exchanger

equipped with EC fan motors



heat recovery efficiency up to 90%



available in standard, hygienic and swimming pool versions



heat exchangers made of aluminium or epoxy-coated aluminium



certified: TUV, PZH, ISO



casing with horizontal or vertical duct connections



fully pre-wired with a built-in, pre-configured control panel

OPTIMAX air handling units are designed to meet increasing market expectations in terms of:



energy efficiency



lower operating costs



compact design



easy installation and maintenance

Air Handling Functions



heating



cooling



heat recovery



air filtration

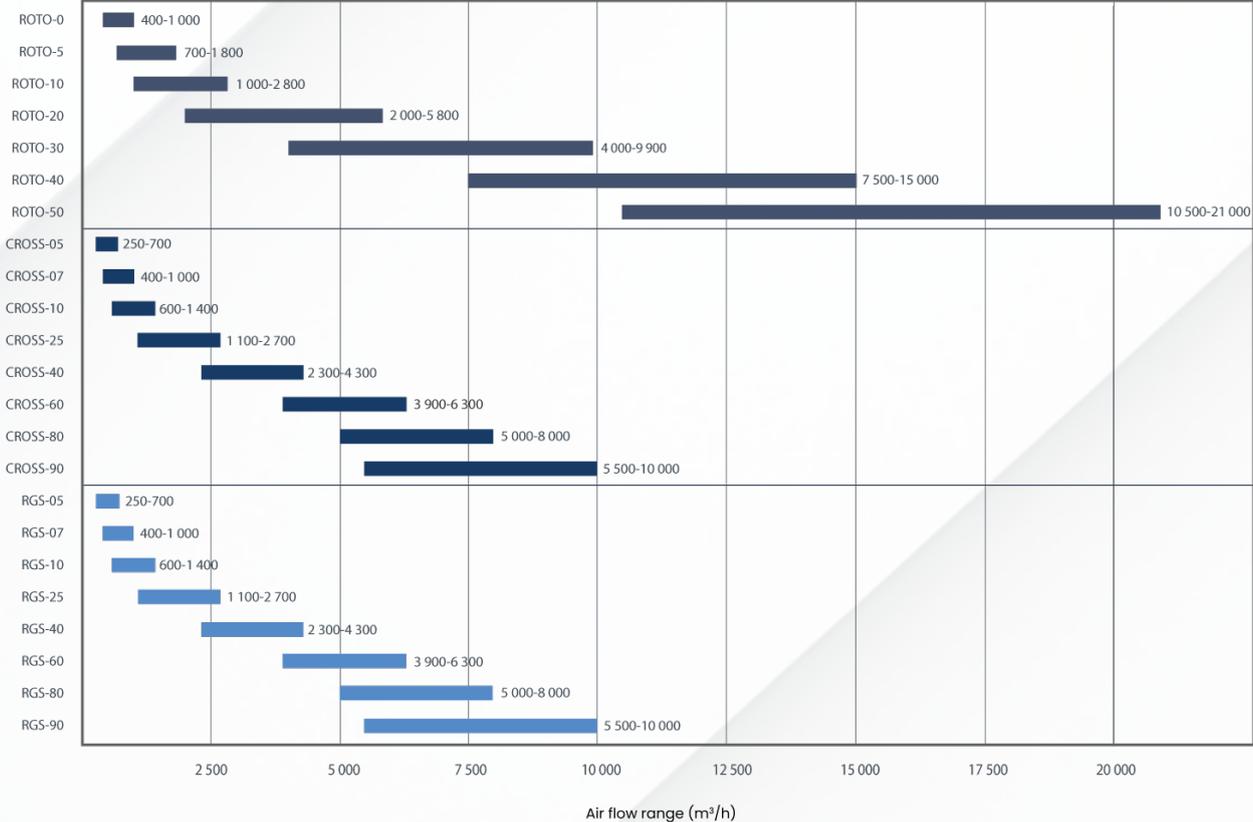


air movement



Plug & Play

Air Flow Range and Unit Sizes



Applications



industrial facilities



shopping centres



warehouses



educational facilities



swimming pools



cinemas



hospitals



sports facilities



fitness centres



catering facilities

OPTIMAX Unit Construction

All OPTIMAX air handling units are built on a modular design concept. This allows for a wide range of configurations while maintaining consistent standards of quality, materials and workmanship.

- Aluminium profile framework
- Double-skin panels insulated with mineral wool
- Outer skin in Magnelis®, corrosion resistance class C4
- Hinged inspection panels with lever handles and wing screws
- Base frame made of steel profiles
- Outdoor version with roof (optional weatherproof cowls)
- Factory-configured Plug & Play control system
- Fully pre-wired with integrated electrical control panel

OPTIMAX-ROTO

OPTIMAX-ROTO air handling units are designed for applications where high heat recovery efficiency is essential. **High-efficiency rotary heat exchangers** provide heat recovery efficiency of up to **90%**, significantly reducing heating and cooling energy demand.

Available Rotary Heat Exchanger Types:

- | | |
|-------------------------------|-----------------|
| P – Condensation | E – Hygroscopic |
| K – Epoxy-Coated Condensation | N – Sorption |



Application-Specific Versions

OPTIMAX air handling units are available in three versions to suit different application requirements:

Standard Version

Designed for most typical ventilation system applications.

Hygienic Version HS

Intended for facilities with enhanced hygiene requirements, including food processing and pharmaceutical applications.

Swimming Pool Version

Designed primarily for swimming pool ventilation systems.



⊕ Fans and Energy Efficiency

OPTIMAX air handling units are available with **EC** or **AC** motor fans, ensuring:

- High efficiency
- Stepless airflow control (with EC motors)
- Reduced electrical power consumption
- Quiet and stable operation



OPTIMAX-CROSS

OPTIMAX-CROSS air handling units are equipped with **counterflow plate heat exchangers** that ensure complete **separation of supply and exhaust air streams**. This prevents the transfer of odours, moisture and contaminants between the two airflows.

Available Heat Exchanger Versions:

- Standard
- Epoxy-Coated

OPTIMAX-RGS

OPTIMAX-RGS air handling units offer similar functionality to OPTIMAX-CROSS units but feature a space-saving design. This makes them suitable for installation in confined areas such as technical recesses and narrow plant rooms.

Available Heat Exchanger Versions:

- Standard
- Epoxy-Coated

⚙️ Configuration Options Additional Sections

OPTIMAX-CROSS and OPTIMAX-ROTO units can be equipped with additional functional sections, including **water cooling coils**, **reversible DX coils**, **sound attenuators** and **fine filters**. The OPTIMAX-RGS model can be configured with a **water cooling coil** or a **reversible DX cooling coil section**.

Control System

OPTIMAX compact air handling units are equipped with a **factory-integrated Plug & Play control system**, enabling full control of the ventilation and air conditioning system operation. Each unit is **fully pre-wired** and includes a built-in electrical control panel, eliminating the need for additional on-site wiring. This solution reduces installation and commissioning time, minimises the risk of installation errors, and simplifies system design and future maintenance.

The factory-configured **Plug & Play control system** ensures:

- User comfort within the building
- Monitoring of operating parameters
- Effective management of operating costs
- Remote monitoring and maintenance of AHUs
- Proper protection of the system and its operational components

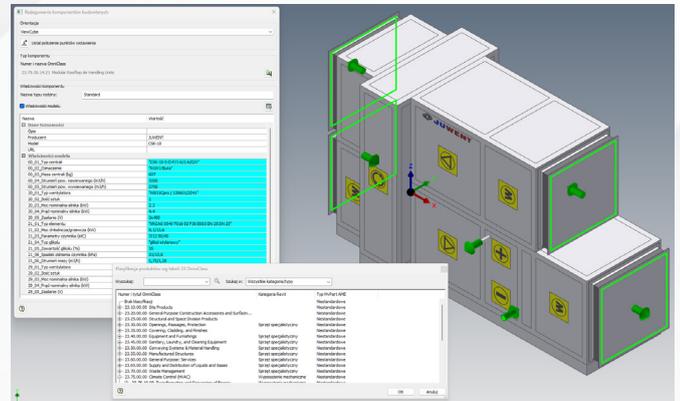


Plug & Play



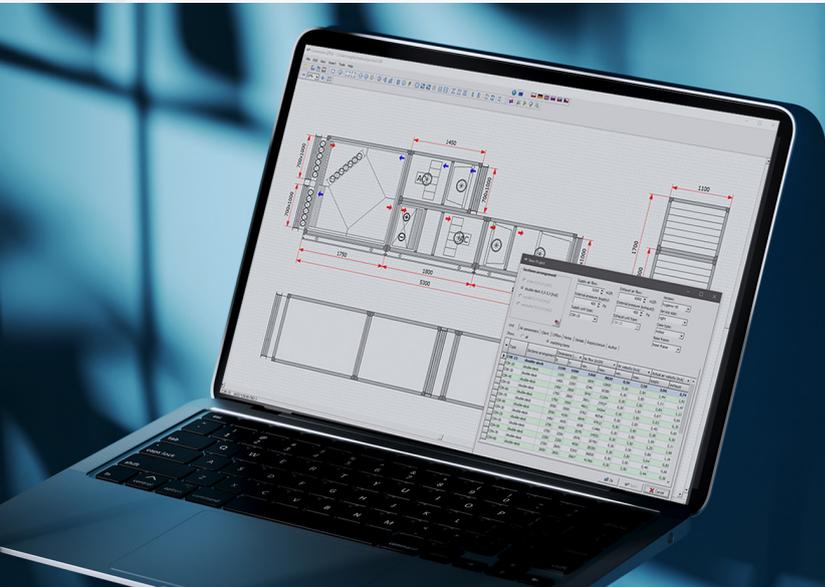
Selection Software

The online Product Selection Software enables precise sizing and configuration of air handling units based on key technical input parameters. The tool supports the design of ventilation and air conditioning systems by ensuring accurate product selection, clearly presenting all essential performance data, and generating comprehensive summary reports for easy review and printing. This solution significantly streamlines the design process, ensures documentation consistency, and saves valuable time.



Design Support and BIM

All our air handling units are available as 3D BIM models, developed to meet the needs of architects, engineers, MEP designers and HVAC specialists. The models facilitate project coordination, improve interdisciplinary collaboration, and support efficient documentation preparation. They comply with the latest design standards and industry requirements.



The **OPTIMAX** unit selection software is available online at www.juwent.com.pl

Discover the JUWENT Air Handling Unit Portfolio

In addition to the presented compact unit series, our portfolio includes ceiling-mounted units (CP, CPW, CPO), floor-mounted indoor and outdoor modular units (CSK, CSN, CM), as well as ductless OPTIMAX-TOP units, offering flexible configuration options to meet diverse building requirements.



Ceiling-Mounted Air Handling Units CP, CPW, CPO

- CP-5 sizes ▪ CPW-3 sizes ▪ CPO-3 sizes
- Airflow range from 250 to 8,500 m³/h
- Supply and exhaust units with counterflow or rotary heat exchanger
- Available in a compact, fully pre-wired version with integrated controls

Modular Air Handling Units CSK

- 17 sizes
- Airflow range from 1,000 to 85,200 m³/h
- Customised configuration of air treatment sections
- Available in double-stacked, side-by-side or in-line arrangements
- Complete control system with optional pre-wiring



Modular Air Handling Units CSN

Low-height version of the CSK series, designed for installations with limited vertical space

- 8 sizes
- Airflow range from 3,250 to 50,500 m³/h



Modular Air Handling Units CM

High air flow capacity air handling units

- 4 sizes
- Airflow range from 42,000 to 151,000 m³/h
- Available in in-line or side-by-side arrangements
- Customised configuration of air treatment sections



Ductless Air Handling Units OPTIMAX-TOP

- 5 model ranges
- Airflow range from 1,000 to 12,000 m³/h
- Fresh Air Treatment Versions:
 - TOP-O-heat recovery unit
 - TOP-NW-supply and exhaust unit
 - TOP-N-supply unit
- Recirculation Versions: TOP-R, TOP-RH



 **JUWENT Szymański, Nowakowski Sp. j.**

 31 Lubelska str., 08-500 Ryki, POLAND

 phone +48 81 883 56 00

 info@juwent.com.pl

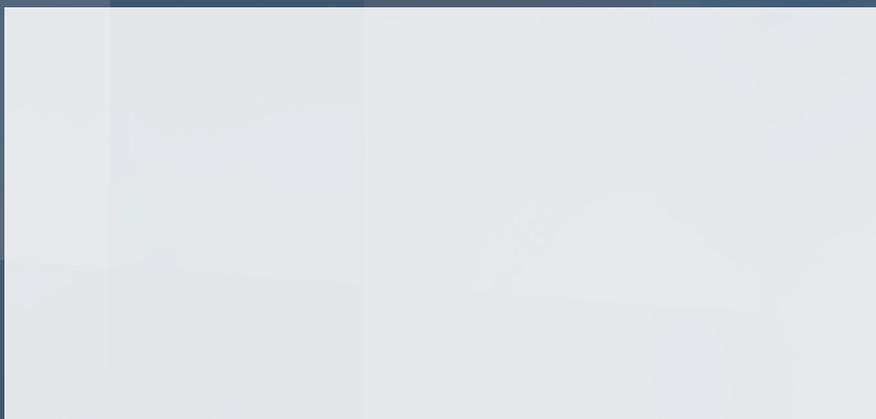
 www.juwent.com.pl

Export Department

mob.+48 502 087 841

mob.+48 664 465 243

export@juwent.com.pl



TÜV®
Produkt Sprawdzony
No: 0000095996
certyfikat.tuv-nord.pl



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2103/12/2025/J/R



AC 137
QMS

The air handling units are manufactured in accordance with the European standards EN 1886 and EN 13053.