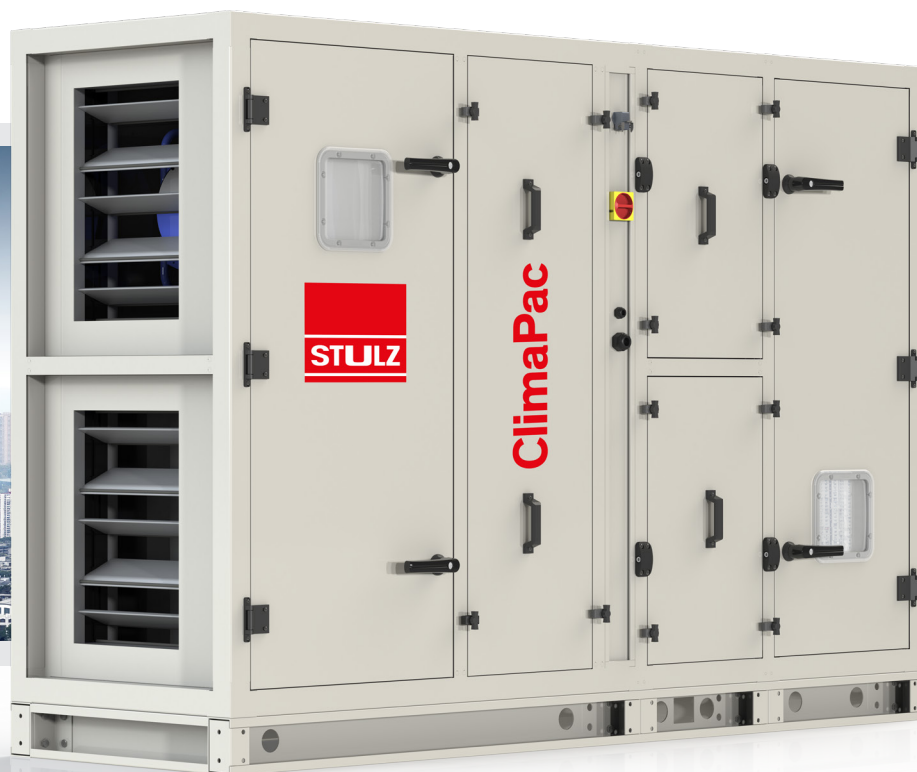


**STULZ**

CLIMATE. CUSTOMIZED.



AIR HANDLING UNITS

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# ClimaPac Compact

Small size, high performance

# Air Handling Excellence

## Engineering at your disposal

Today, STULZ has presence in more than 140 countries, with 21 subsidiaries and twelve production sites in Europe, India, China and North and South America.

We also have partner agreements with numerous sales and service partners on every continent. Our network of high qualified specialist is a reliable guarantee of the highest standards.



### More than 50 years endorse our HVAC experience

Personalized attention, customer approach, entrepreneurial spirit, comprehensive support and extensive experience in HVAC systems have laid the foundation for STULZ Tecnivel's growth for nearly 50 years.

To meet the market's most demanding requirements, our main competitive advantage is the technical ability to provide customized solutions with multiple configurations.

Flexibility and adaptability, fulfilling the particular specifications of your projects, lay the foundations for our progress, providing at the same time the best technical support and aftersales service.

### STULZ - quality makes the difference!

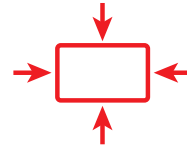
Since its foundation in 1971, our brand has been synonymous with high quality, innovation and continuous development, with special focus on comfort, air quality, energy efficiency, and a serious commitment to reduce the environmental impact.

With the goal of ensuring maximum reliability and quality—we select the best components on the market from the most qualified suppliers, using state-of-the-art production processes and the most stringent tests complying with the ISO 9001 and 14001 certifications granted by TÜV as well as the Eurovent certification.

## The complete HVAC range from one source

# ClimaPac

## Compact Configurations



### + Advantages

- ✓ Optimized sizes and design
- ✓ Reduced footprint
- ✓ Adaptability, quick response to market
- ✓ Energy Efficiency Technology
- ✓ Air quality, high filtration options
- ✓ Integrated control
- ✓ Plug & Play Solution
- ✓ Easy assembly and installation



## Reduced footprint, increased optimization

Air conditioning systems represent an important percentage of energy consumption in the whole installation. This is why STULZ applies its extensive market and engineering experience to develop energy-efficient HVAC solutions, thereby reducing the environmental impact and CO<sub>2</sub> emissions without compromising indoor air quality and comfort.

ClimaPac Air Handling Units Series offer flexible and modular configurable solutions, adapting to the needs of the most demanding projects with air flows up to 160.000 m<sup>3</sup>/h.

Taking into account that 80% of the units demanded by the market cover up to 15.000 m<sup>3</sup>/h, STULZ has optimized in the ClimaPac range new configurations and sizes to adapt to these requirements offering a quick response in the market.

Regardless the space limits of your installation, a commitment to indoor air quality holds safe and future benefits.

# Reliable and fully-equipped AHU

## Product Information Overview

### Roof

Made of coated galvanized steel and designed to ensure weather protection.

Louvers are included as standard in outdoor configuration.

### Frame

In extruded aluminum, with a thermal bridge breakage design that allows assembling panels without screws. Coated with RAL 7044 as standard or optionally available without coating.

### Corners

Made of nylon (polyamide) are used to join the main aluminum profiles and ensure thermal bridge breakage. Color RAL7044.

### Handles

Including a lock and a single handle per door with up to three closing positions that are accessible from inside. Made of nylon, class HB flame fire retardant according to UL94. Highly resistant to ensure sealing tightness.

### Insulation

45 mm rock wool insulation with 100 kg/m<sup>3</sup> density.

A1 heat insulation according to European class fire resistance rating.



### Casing

Equipped with a thermal bridge breakage structure consisting on aluminum profiles and doubleskinned panels (sandwich type), ensuring high classification according to EN1886.



## Mechanical performance

According to EN1886

Characteristics		Class					
Mechanical strength		D1					
Casing air leakage		L1					
Filter bypass leakage		F9					
Thermal transmittance		T2					
Thermal bridging factor		TB2					
Acoustic Insulation							
Hz	125	250	500	1k	2k	4k	8k
dB	16	12	13	23	28	38	43

### Operating temperatures

The usual range of operating temperatures for a so-called standard configuration is: -20/+40 °C \*

*\*The operating temperatures will depend of the final configuration, more specifically the components that will be included in the unit.*

*For additional information's please check the IOM Manual*

### Directives

ClimaPac range is in conformity with the following directives:

- EC Machinery directive 2006/42/EC
- EC Directive for low voltage 2014/35/EU
- EC EMC directive 2014/30/EU
- EC Ecodesign Directive 2009/125/EC (Commission Regulation No 1253/2014)

### ISO 9001 and 14001 Certifications

STULZ Tecnivel complies the Quality Management System certification ISO 9001 and follows the ISO 14001 best practices for an Environmental Management System.



### Eurovent Certification

ClimaPac range participates in the Eurovent Certified Performance programme for Air Handling Units (AHU).

Check on-going validity of certificate:

[www.eurovent-certification.com](http://www.eurovent-certification.com)



### Panels

Thick sandwich rockwool insulation panel.

Both sides of the panel are made with pre-coated sheets of painted galvanized steel RAL7044.

Class RC3 corrosion resistance (RC5 optionally available).



### Inspection Windows

Dual transparent polycarbonate glazed window, square shaped, without mounting elements on the inside to assure thermal bridge breakage.

Approved as microbiological inert material VDI 6022. Class HB flame resistance according to UL94.

# State-of-the art components

## Optimized energy efficiency

### Dampers



According to EN 1751:2003:

Tightness class 2 dampers 100% aluminum (anti-corrosion)

Other tightness classes available.

### Filters



High-efficiency with low pressure drop. Different types available according to the new ISO 16890:

Compact filters (ePM10 and ePM1)

Please inquire about other filtration options.

### Heat Recovery Exchangers

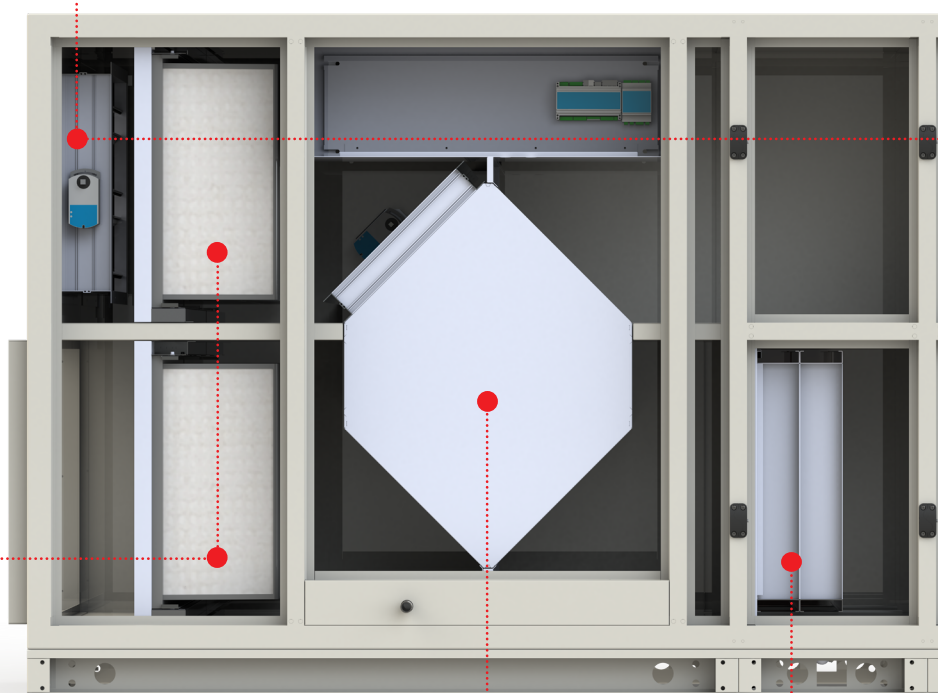


According to UNE-EN 16798-3:2017

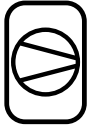
There are different types of energy exchange solutions that deliver high efficiency for different applications:



- Counter-flow plate heat exchangers (different geometries and also available in epoxy).
- Rotary heat exchanger: Enthalpy, Absorption, condensation and epoxy.



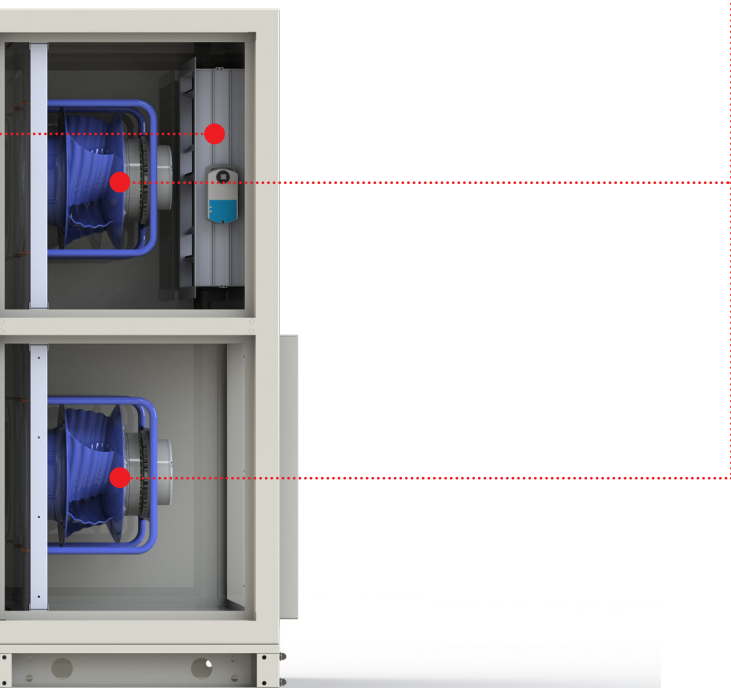
## Fans



Plug fan EC motor IE4.

Wide selection of fan layouts:  
Fan array configuration to  
achieve high airflow volumes.

Please ask about other fan  
and finish options.



## Coils



Standard construction with copper tubes and  
aluminum fins. The following are available for  
selection:

- Chilled water, hot water, glycol heat  
exchanger coil.
- Evaporation coils (DX systems)
- Condensation coils (DX systems)








Tubes, fins and frame available in different  
thicknesses and finishing materials (epoxy,  
Cu-Cu...).








Please consult us about other options.



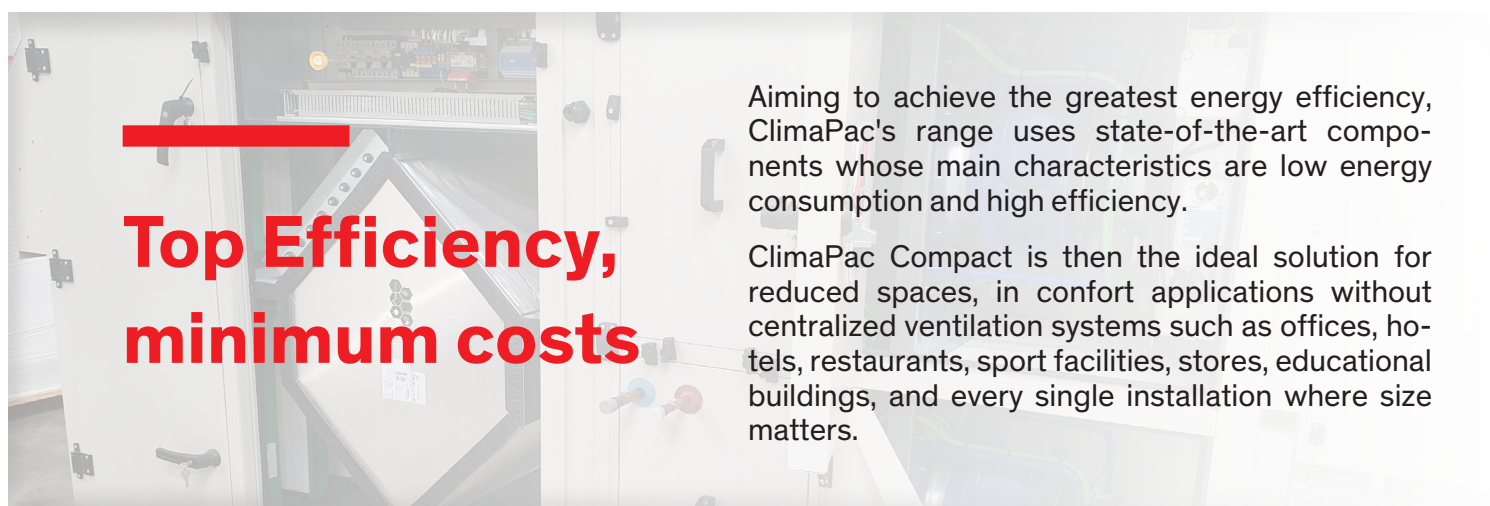
# Quick Selection Guide: Standard sizes

Size	Dimensions <sup>1</sup>	Filters		Airflow (m <sup>3</sup> /h)				
	W x H (mm)	Matrix*	Qty		Face Air Velocity (m/s)			
			1	1/2	1,5	2	2,5	3
10.10 R	730×1600		1	0	2.216	2.955	3.693	4.432
15.10 R	1030×1600		1	1	3.292	4.389	5.486	6.583
20.10 R	1340×1600		2	0	4.403	5.871	7.339	8.806
25.15 R	1640×2210		2	3	7.995	10.661	13.326	15.991
30.15 R	1950×2210		3	3	9.618	12.823	16.029	19.235

<sup>1</sup>External dimensions, applied for modules 1 and 2

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15.10 C	1030×1600		1	1	3.292	4.389	5.486	6.583
20.10 C	1340×1600		2	0	4.400	5.880	7.350	8.810
25.15 C	1640×1600		2	3	5.470	7.300	9.130	10.960
30.10 C	1950×1600		3	0	6.580	8.800	11.000	13.180
35.10 C	2250×1600		3	1	7.680	10.200	12.760	15.340
40.10 C	2560×1600		4	0	8.800	11.700	14.600	17.550

\*  1 Filter  1/2 Filter



## Top Efficiency, minimum costs

Aiming to achieve the greatest energy efficiency, ClimaPac's range uses state-of-the-art components whose main characteristics are low energy consumption and high efficiency.

ClimaPac Compact is then the ideal solution for reduced spaces, in confort applications without centralized ventilation systems such as offices, hotels, restaurants, sport facilities, stores, educational buildings, and every single installation where size matters.

# Configurations: Standard modules



## Module 1

- **Outdoor/Supply Air Side:**  
Damper, compact filter, Heat Ex.
- **Return/Exhaust Air Side:**  
Heat Exchanger, EC fan, damper

## Module 3 (Optional)

- **Outdoor/Supply Air Side:**  
Coils

## Module 2

- **Outdoor/Supply Air Side:**  
EC Fans
- **Return/Exhaust Air Side:**  
Compact Filter

# Optionals: ready to satisfy demanding needs



## Outdoor Configuration

Designed to meet high weatherability, additional outdoor protection of the unit and its components.

The unit will be delivered with roof, louvers and bird grid protection.



## Extension Frame for condenser integration

Looking forward to offer comprehensive solutions:

- Minimizing refrigerant piping circuits
- Reducing global footprint (AHU + Condenser)



# AHU Configuration Software



## Simplifying your daily work

Our selection software is in continuous development and improvement.

With a user friendly interface, this powerful selection tool can easily and quickly design Air Handling Units, allowing the user to quickly calculate various projects.

- Intuitive tool
- Fast selection
- User friendly interface
- Multilingual
- List of control signal points and field equipment
- Drawings with real dimensions



## Reports and drawings

**TIP allows you to create and download the following documentation:**

- ✓ Detailed technical specification sheets.
- ✓ 2D drawings with real dimensions.
- ✓ Technical specification texts.
- ✓ Quotations.



# Integrated Control

## Costs savings and enhanced energy efficiency



The ClimaPac range offer preconfigured plug&play regulation for its Compact sizes.

The cutting edge controller with attractive user interface is capable to effectively control the different Compact configurations available.

The integrated control solutions and configured ex works enhance the energy efficiency, saving at the same time installation costs.

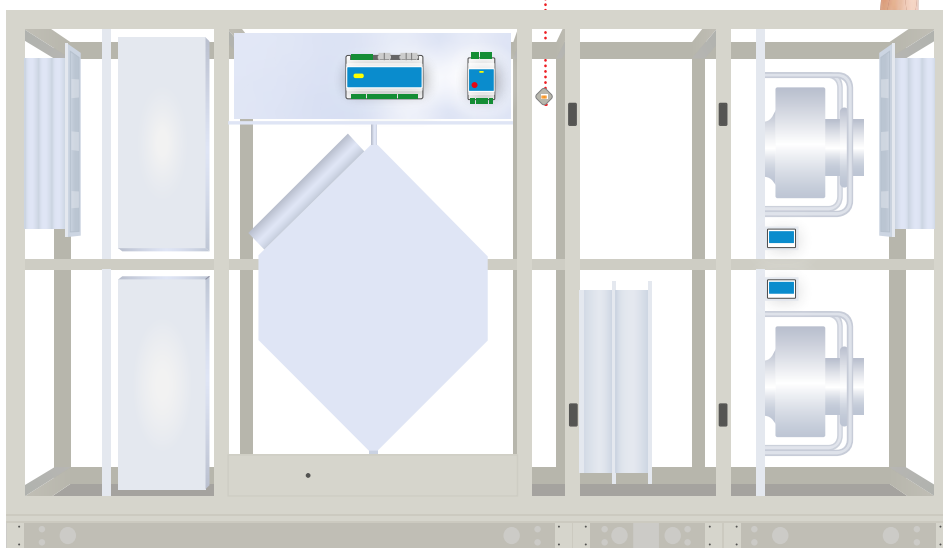
### Intuitive and effective operation

Multilanguage complete solution including field equipment such as sensors, switches, valves and actuators.

Cloud-based SCADA system for AHU and ventilation control. Users have full access to the same, fully updated data, making remote support, diagnostics and troubleshooting easier than ever.

AHU control designed for simple connectivity:

- Modbus TCP/IP
- Modbus RTU
- BacNet TCP-IP



Complete, flexible solution



Touch screen



Fan Control



Cloud Interface



Connectivity



Temperature control



Energy Optimization

# Everywhere..

## From a single source



Comprehensive  
Support



Flexibility  
Adaptability



Energy  
Efficiency




Skilled  
Service



Proven  
Quality

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