

# The smart way to keep equipment cool and processes running

ClimaSys CU and CE ranges of cooling units, air-air exchangers, and air-water exchangers



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Electric™

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# It's a tough life for your equipment



In a highly competitive market, you can't afford downtime. You have to keep critical processes running and expensive control and switching equipment protected in increasingly challenging conditions:

- > Ambient temperatures are rising worldwide
- > Operating environments are getting harsher
- > Higher densities of motor speed drives, PLCs, solid state relays, switches, batteries, and other devices
- > Higher drive ratings

## How do you keep everything running cool, reliably, and economically?



Every 10°C of internal cabinet temperature rise above nominal reduces life expectancy of enclosed electronics by 50%.<sup>1</sup>



The last 10 years have been the warmest on record, worldwide.<sup>2</sup>

1. Uptime Institute

2. Intergovernmental Panel on Climate Change



# Introducing ClimaSys CU & CE: exceptionally cool

Now, an enhanced and expanded family of high-quality cooling units and heat exchangers at highly competitive pricing. The new ClimaSys™ CU and CE ranges deliver a wide breadth of materials and mounting choices, optimized designs that ensure easy and efficient operation, with extended ratings and protection. Along with extensive worldwide availability and support, ClimaSys is your best choice for thermal management of electrical switchboards and control panels. Applications can span most commercial or industrial environments, for any kind of installation or machine, and for any project worldwide.

A wider range to cool any control panel

# A wider range to cool any control panel

The ClimaSys ranges have been expanded to 155 references, giving you the options you need to adapt to any equipment and installation requirements. ClimaSys is especially well-suited for applications where high densities of power electronics are used, such as electrical switchboards and motor control panels.

## Cooling units for extremely hot environments

Choose cooling units for the harshest environments, where ambient temperatures can reach up to 55 °C. Efficient air-conditioning keeps enclosures cool, regardless of the outside air temperature, while preventing internal hot spots. The unit's integrated alarm system will signal you in the event of any operational anomaly.

> Climasys CU cooling unit



Glide over  
arrow to  
rotate product



Rotation not available on mobile devices

A wider range to cool any control panel

> ClimaSys CE air-air exchanger



> ClimaSys CE air-water exchanger



Rotation not available on mobile devices

### **Air-air exchangers for very harsh environments**

Choose air-air exchangers to take advantage of cooler ambient temperatures\*, such as in wastewater treatment or automotive plants. These exchangers will evacuate large amounts of heat while guaranteeing the independence of the internal and external air circuits.

### **Air-water exchangers that tackle highly-polluted environments**

Choose air-water exchangers for especially difficult, high-heat environments where there is no external air circuit, but a stable and temperature-controlled supply of water is available, such as paper mills, printing facilities, or chemical plants. These exchangers are also a good choice for low maintenance, as no filter is required.

\* Ambient temperature at least 5°C lower than the desired temperature inside enclosure.

A wider range to cool any control panel

> Side-mounted units

> Slim unit

> Roof-mounted units



### **Many mounting options give you the right fit**

Cooling units and air-water exchangers all offer roof and side mounting options. Cooling units also offer slim models for efficient and space-saving side or door mounting.

### **'Plug and play' compatibility**

ClimaSys gives you multiple material choices that mechanically and operationally match the full breadth of Schneider Electric switchboards and control panels, while providing optimal cooling for all our ranges of electrical protection and control devices.

A wider range to cool any control panel

> ClimaSys CU cooling unit, steel version



> ClimaSys CE air-water exchanger, stainless steel version



> ClimaSys CU cooling unit, heavy duty (outdoor) version



### New material options adapt to any application

ClimaSys cooling units offer new outdoor models, while both cooling units and air-water exchangers offer new stainless steel options, ideal for clean, hygienic environments such as food and beverage plants. All aesthetically updated air-water exchangers and cooling units can be provided in the same material as new equipment enclosures for homogeneous appearance and thermal performance.

### Extended ratings to meet any challenge

ClimaSys now offers one of the industry's highest power ratings for cooling units. Cooling units and air-water exchangers provide options for up to 15 kW of cooling power. And all ClimaSys ranges can withstand the most extreme environments, with the industry's widest operating temperature ratings from -20° to +55°

**15 kW**

Among the best cooling unit power ratings

**+55°C**

The industry's highest temperature range



Optimized design for time  
and cost savings

# Optimized design for time and cost savings

The renewed ClimaSys ranges deliver distinct advantages in cost and time savings, efficiency, and protection for people and equipment.

## Simplicity streamlines specification

Our ProClima™ thermal calculation software makes specification simple and fast. Updated with information on all new ClimaSys CU and CE models, the application also provides an expanded database of dissipation values for indoor and new outdoor enclosures. Use the new thermal solutions module to combine calculations for cooling and control devices, maximizing the energy efficiency of your system.

Download  
ProClima software



## up to 20%

Energy savings possible when using ProClima software to optimize the cooling power of your thermal solution

Optimized design for time  
and cost savings



### Faster installation

- > A number of design improvements reduce installation time.
- > Mounting requires single cutouts and a minimum of screws.
- > Slim models provide a choice of three mounting positions.
- > Wiring is accomplished with smart interconnects.

### Higher efficiency

With an updated external grill design, and by positioning cooling closer to critical equipment, such as speed drives, ClimaSys now provides better flow, better cooling, and higher energy efficiency. A new internal grill design helps to protect components and personnel during operation. Grilles and filters are now both easier to clean and maintain.

> Efficient cooling flow

Optimized design for time and cost savings



### Accurate thermal control

To keep motor drives and controls running within appropriate thermal boundaries, all ClimaSys cooling units offer a precise electronic thermostat control\*.

### Fast access to settings and status

A new HMI screen enables quick viewing of all real-time sensor readings and alarm status, as well as access to alarm reset and configuration of compressor operating and stand-by times. Your cooling unit can then use this same configuration to optionally control a remote 'slave' device.

### Quick scan for specifications

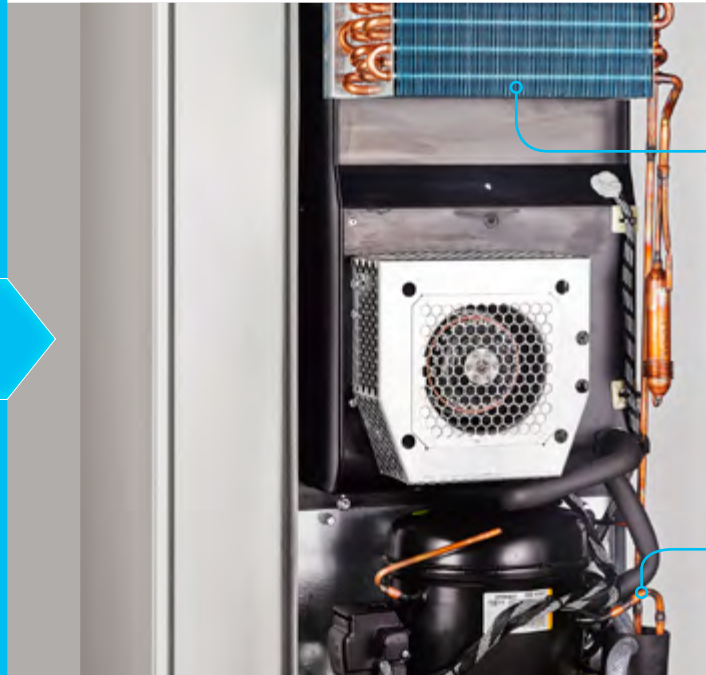
Use your smartphone to scan the QR code on any ClimaSys product to quickly access the online product data sheet.

**+/-1.5°C**

High cooling precision ensures equipment is protected.

*\* Not applicable to outdoor models.*

Quality, protection and peace  
of mind



> Film protection on condenser



> Integrated evaporation system

# Quality, protection, and peace of mind

By choosing ClimaSys thermal management products, you'll have the peace of mind that your control equipment will run more reliably, thanks to cooling components with the best-in-class quality and environmental compliance.

Quality, protection and peace  
of mind



> IP 55 - compliant sealing gasket

### **Protection you can see**

A ClimaSys cooling unit or heat exchanger installed on an electrical enclosure provides a seal compliant with the IP 55 / 54 rating, helping protect from water and dust. A film on each condenser helps to reinforce the protection against dust and corrosion. Side-mount models also offer an integrated, anti-condensation water evaporation system that will generate an alarm if the threshold is exceeded.

### **A tight seal, made easy**

Your ClimaSys product comes complete with an installation package that includes an instruction sheet and sealing gasket. This makes it simple and fast to help ensure an IP 55/ IP 54 - compliant seal when mounted to an enclosure.

Quality, protection and peace  
of mind

## Certified

ClimaSys thermal management ranges ensure the global certifications you need, for use wherever you are, or wherever you are exporting to.



## Green Premium simplifies your life and helps save the planet

The Schneider Electric Green Premium eco-mark guarantees support for your environmental policies, helping you:

- > Calculate your carbon footprint
- > Anticipate and ensure full regulation compliance
- > Make the eco-design of solutions easier by giving you simple one-click product environmental information
- > Reduce the end of life cost of installation by optimizing recyclability.

All ClimaSys products comply with our Green Premium certification, and are ROHS, REACH, and PEP compliant.



Expertise and support from  
a global leader



# The expertise and support of a global leader

Schneider Electric is a global leader in energy management, power distribution, enclosure systems, and thermal solutions. We are the architects of efficiency, working closely with you to solve your biggest challenges.

Download Customer Care Centre app for smartphone



Expertise and support from  
a global leader



### **Extensive after sales support**

We have global reach while delivering local service. Our worldwide presence ensures global product and spare parts availability, supported by a best-in-class supply chain service. Highly trained, expert service is delivered from local customer service centres.

### **Complete and useful documentation**

We provide you with technical data, CAD drawings, and all relevant maintenance and application guides.



Expertise and support from  
a global leader



### **The complete solution provider**

Schneider Electric can deliver a completely integrated enclosure and cooling system solution. Our Spacial™ and Thalassa™ enclosures are among the world's most durable, reliable, and customizable. We provide complete technical and project support, and we guarantee compatibility by supplying all universal enclosures, protection and control devices, and thermal management components. We can provide standardized units, or you can work with our engineering team to create highly customized solutions, tightly integrating appropriate cooling and application requirements.

Learn more about our  
Engineering Services

# ClimaSys CU & CE range and model overview

Range and model comparison

## Air-air exchangers

The CE range of air-air exchangers includes side-mounted designs only.

4 models:

- > Specific power options ranging from 14 W/°K to 80 W/°K
- > Input voltage for all models is 1 x 230 V / 50-60 Hz
- > Material is steel
- > CE declaration available

## Air-water exchangers

The CE range of air-water exchangers includes side-mounted, roof-mounted, and floor standing designs.

35 models:

- > Cooling power options ranging from 1000 W to 15000 W
- > Input voltage is 1 x 230 V / 50-60 Hz or 2 x 400-440 V / 50-60Hz, depending on model
- > Material choices include steel and stainless steel, depending on model
- > UL certification and CE declaration available

Find full specifications in the  
Universal Enclosures general catalogue

## Cooling units

The CU range of cooling units includes side-mounted, roof-mounted, floor standing, and slim designs.

Side mounted, 68 models:

- > Cooling power options ranging from 300 W to 15150 W
- > Input voltage is 1 x 230 V / 50-60 Hz, 2 x 400-440 V / 50-60 Hz, 3 x 400 V / 50-60 Hz, or 3 x 460 V / 60 Hz, depending on model
- > Material choices include zinc-coated steel, stainless steel, and heavy duty (outdoor), depending on model
- > UL certification and CE declaration available

Top mounted, 23 models:

- > Cooling power options ranging from 300 W to 15150 W
- > Input voltage is 1 x 230 V / 50-60 Hz, 2 x 400-440 V / 50-60 Hz, 2 x 400-460 V / 50-60 Hz, 3 x 400 V / 50-60 Hz, 3 x 400 V / 50 Hz, or 3 x 460 V / 60 Hz, depending on model
- > Material choices include zinc-coated steel, stainless steel, depending on model
- > UL certification and CE declaration available

Slim, 25 models:

- > Cooling power options ranging from 1100 to 3200 W
- > Input voltage for UL-certified versions is 1 x 230 V 60 Hz, 1 x 230 V / 60 Hz, 2 x 460 V / 60 Hz, or 3 x 460 V / 60 Hz, depending on model
- > Input voltage for non-UL versions is 1 x 230 V / 50-60 Hz, 2 x 400-460 V / 50-60 Hz, 3 x 460 V / 60 Hz, or 3 x 400 V, depending on model
- > Material is zinc-coated steel

# Learn more about ClimaSys CU and ClimaSys CE offers

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