










*Good climate,
better performance!*

AIR HANDLING UNITS

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Air handling unit

The air handling unit forms the heart of the overall air treatment system. They are available in many variations and sizes. Solid Air strives to provide a solution that is as energy-efficient as possible and which contributes to a comfortable indoor climate. This is done by offering air handling units that can take care of the entire climatization of buildings.

Specials

Whether you need a standard, hygienic or swimming pool. Solid Air always has a solution that meets with your specific wishes and situation. The fact that we have our own engineering department means that we are not tied to fixed dimensions. That way, we can always supply a unit that fits in the available space.

Legislation and regulations

Air handling units in non-residential projects and with mechanical supply and discharge have been required to meet the strict European ErP Regulation 1253/2014 for ventilation products since 1 January 2016. More, even stricter adjustments were made on 1 January 2018. The directives are to be tightened up even more in 2020. This affects installation companies, consultants, but also the architect, and this calls for consultations with the client. Solid Air's air handling units are engineered in such a way that they always at least meet with ErP 2018.

Eurovent certification

Solid Air's air handling units are Eurovent certified. This means that our systems meet the specified design and consumption specifications based on independent tests. With Solid Air's air handling units you are always assured of a pleasant and comfortable indoor climate, at any time of the year!

You can also find the certificate online at www.euroventcertification.com.

Integrated controls

The intelligent DDC control system makes Solid Air's air handling units very easy to operate. All you need to do is connect the power supply and you can put your air handling unit directly into operation as a standalone unit.

The unit can be integrated in a building management system through, among others, ModBus, BACnet, LON and KNX.

Design Software

We have an advanced design software especially for the extensive delivery programme. We can very quickly provide you with a design for an air handling unit that meets your specific requirements. Complete with a dimensional sketch in CAD, extensive sound specifications, information about energy consumption, hydraulic groups, automatic control and electrical installation.

Service

Solid Air is your knowledge partner when it comes to designing, delivering and installing the air handling system. We are pleased to offer you our years of experience and services to arrive at the right choice and the desired result. Apart from these services, we stand four-square behind our products and we provide a 2 year guarantee.

MODUL

For large and complex projects

Many different configuration options

Airflows up to 190.000 m³/h



Application

Large and complex projects call for flexibility of the air handling systems, both in application and operation.

For projects such as these, Solid Air has the bespoke Modul-series: an air handling unit with flow rates up to 190.000 m³/h. Modul has many different configuration options based on project-specific customisation and a range of accessories and options for efficient air handling. Modul can also be dimensioned to the millimetre and achieves optimum results when it comes to available space and other project-specific requirements.

Properties

- Airflows from 400 m³/h up to 190.000 m³/h
- Fully customised configuration
- Indoor or outdoor execution
- Horizontal, stacked for vertical version
- Panel thickness of 50 or 60 mm
- Low sound emission level
- Tax benefits may be available

Version

Internal and external powder coated in RAL7035 - RAL9010 - RAL9005 - RAL5018 (optional). Other RAL colors on request (extra charge).

Casing from aluminum profiles and double-walled insulated, coated and galvanized panels.

The Modul offers a very complete range of possibilities, with or without heat recovery and/or recirculation, but also as a supply or only return. In addition, these are available as horizontal, stacked or vertical air handling units and are available in standard, hygienic or swimming pool versions.

Humidification and integrated heat pump are also among the very extensive options.

Modul is a series of modular air handling units that can also be fitted with mounted field equipment and/or integrated control.

Optional

Expansion options such as:

suction/discharge section, filter section, DHW heater, E heater, KW cooler, DX cooler, DX cooler/heater (inverter), Change-over cooler/heater, integrated cooling, plate heat exchanger, heat wheel, twincoil, humidifier, silencers, mixing section, empty section etc.

With Modul you can also opt for:

- Direct driven AC plug fan including delivery and mounting of frequency converters for AC motors (IE3) or high efficiency EC plug fan (IE4/E5).
- Supply and assembly of field equipment and/or internal cabling.
- Optional fully integrated automatic Siemens DDC control, fully wired.

Classification/certification

Mechanical and thermal properties in compliance with EN1886.

| | |
|-----------------------|-----------|
| Mechanical strength: | class D1 |
| Air leakage: | class L1 |
| Filter bypass leakage | class F9 |
| Thermal transmittance | class T2 |
| Thermal bridging | class TB2 |

Energy class A+/A in accordance with Eurovent.

Complies with the EU Ecodesign regulation no. 1253/2014, ErP 2018.





AEOLUS®

**Compact high efficiency, plug & play
heat recovery units in plate or wheel version
Airflows up to 38.000 m³/h**

Application

In addition to a variety of modular, bespoke, air handling units with or without on-board controls, there is a demand in the market for more compact and integrated solutions that take the available space into account. Solid Air has developed the Aeolus to meet this demand. The Aeolus range offers you a plug & play solution for a healthy and comfortable indoor climate.

AEOLUS® CPL

The compact high efficiency heat recovery unit and truly plug & play Aeolus has been developed on the basis of the latest technologies. The CPL model, with a counterflow plate heat exchanger and efficiencies > 90%, is available for airflow rates from 600 m³/h up to 22.000 m³/h.

AEOLUS® CRO

The CRO model is the compact unit from the Aeolus range with high efficiency heat wheel and efficiencies up to 83 %. This unit is available for flow rates from 1.000 m³/h up to 38.000 m³/h without detracting from its compact design. The heat wheel is available in a condensation, adsorption or enthalpy version. The version determines the amount of moisture recovery.

Properties

- High efficiency and high flexibility in use
- Low sound emission level
- High level finishing
- Easy to install and service
- Low TCO (Total Cost of Ownership)
- Tax benefits may be available

Version

Internal and external powder coated in RAL7035 - RAL9010 - RAL9005 - RAL5018 (optional).

Other RAL colors on request (extra charge).

Casing from aluminum profiles and double-walled insulated, coated and galvanized panels.

Equipped with field equipment and fully integrated automatic Siemens DDC control.

Indoor or outdoor setup.

Left or right version.

Monoblock or shared execution in modules.

Maintenance and inspection via well-closing doors.

Model CPL with HR counter flow plate heat exchanger: airflows from 600 m³/h up to 22.000 m³/h.

Model CRO with HR heat wheel:

Airflows from 900 m³/h up to 38,000 m³/h.

Heat wheel in condensation, adsorption or enthalpy version.

Optional

Expansion possibilities, such as:

WW heater, E heater, KW cooler, DX cooler, DX cooler/heater (inverter), change-over cooler/heater, integrated cooling, empty sections and/or silencers.

Classification/certification

Mechanical and thermal properties in compliance with EN1886.

Mechanical strength: class D1

Air leakage: class L1

Filter bypass leakage class F9

Thermal transmittance class T2

Thermal bridging class TB2

Energy class A+/A in accordance with Eurovent.

Complies with the EU Ecodesign regulation no. 1253/2014, ErP 2018.





AEOLUS® CPL-C

Ceiling unit

Compact high efficiency, plug & play heat recovery units in plate version

Airflows up to 2.100 m³/h

Application

In addition to a variety of modular, bespoke, air handling units with or without on-board controls, there is a demand in the market for more compact and integrated solutions that take the available space into account. Solid Air has developed the Aeolus to meet this demand. The Aeolus range offers you a plug & play solution for a healthy and comfortable indoor climate.

AEOLUS® CPL-C

The Aeolus CPL-C is a compact high efficiency heat recovery ceiling unit with efficiencies > 90%. This decentralised unit can be placed universally, both between and below the ceiling and is available with airflow rates up to 2.100 m³/h. The dimensions, the design and the very low sound level make this HRU ceiling unit ideal for schools, but also for day-care centres and offices with limited available height.

Properties

- Airflows from 600 m³/h up to 2.100 m³/h
- Complete and actually ready to plug in, plug & play
- Left-hand or right-hand version
- Can be extended with heater, cooler and attenuators
- Energy-efficiency label class A+/A in accordance with Eurovent and optimum SFP ratio
- Tax benefits may be available

Version

Internal and external powder coated in RAL7035 - RAL9010 - RAL9005 - RAL5018 (optional). Other RAL colors on request (extra charge).

Casing from aluminum profiles and double-walled insulated, coated and galvanized panels.

Equipped with field equipment and fully integrated automatic Siemens DDC control.

Left or right version.
Monoblock version.

Maintenance and inspection via well-closing removable panels with suspension.

Model CPL-C with HR counter flow plate heat exchanger: airflows from 600 m³/h up to 2,100 m³/h

Optional

Expansion possibilities, such as:
WW heater, E heater, KW cooler, DX cooler, DX cooler/heater (inverter), change-over cooler/heater, integrated cooling, empty sections and/or silencers.

Classification/certification

Mechanical and thermal properties in compliance with EN1886.

| | |
|-----------------------|-----------|
| Mechanical strength: | class D1 |
| Air leakage: | class L1 |
| Filter bypass leakage | class F9 |
| Thermal transmittance | class T2 |
| Thermal bridging | class TB2 |

Energy class A+/A in accordance with Eurovent.

Complies with the EU Ecodesign regulation no. 1253/2014, ErP 2018.





PROKPOOL

Unit for swimming pools that
dehumidifies, ventilates and controls
temperature

Airflows up to 3.500 m³/h

Application

In swimming pools, where the environment is characterised by high humidity, a traditional dehumidification system is not enough to create a comfortable indoor climate. For an optimum result during all seasons you need a system that dehumidifies, ventilates and controls the temperature. Solid Air's ProkPool is the solution!

The ProkPool does exactly what is expected: high dehumidification in winter, when condensation is often a problem, and cooling in the summer. Its compact design, plug & play concept and the fully integrated on-board control system, make ProkPool suitable for swimming pools, but also for smaller hotels, wellness centres and luxury residential buildings.

Properties

- Airflows from 1.000 m³/h up to 3.500 m³/h
- Suitable for all kinds of swimming pools
- Indoor execution
- 2 standard configurations
- Equipped with a reversible heat pump and, optionally, a pool water condenser
- Custom made bespoke variants and larger airflow rates on request

Version

Internal and external powder coated in RAL7035 - RAL9010 - RAL9005 - RAL5018 (optional). Other RAL colors on request (extra charge).

Casing from aluminum profiles and double-walled insulated, coated and galvanized panels.

The ProkPool offers a very complete and compact solution with heat recovery, heat pump and equipped with mounted field equipment and fully integrated automatic Siemens DDC control.

Left or right version.
Monoblock version.

Maintenance and inspection via well-closing doors.

Optional

Expansion possibilities with bath water condenser.

Classification/certification

Mechanical and thermal properties in compliance with EN1886.

| | |
|-----------------------|-----------|
| Mechanical strength: | class D1 |
| Air leakage: | class L1 |
| Filter bypass leakage | class F9 |
| Thermal transmittance | class T2 |
| Thermal bridging | class TB2 |

Energy class A+/A in accordance with Eurovent.

Complies with the EU Ecodesign regulation no. 1253/2014, ErP 2018.





PROKCOOL

**Energy-saving solution
through adiabatic cooling
Airflows up to 29.000 m³/h**

Application

Nowadays people spend more time in enclosed spaces, such as offices, shopping centres, hospitals and healthcare centres, sports and event halls, workshops, theatres and large restaurant and catering facilities. A properly operating air handling system is essential for the right climatization to prevent the distribution of humidity, dirt, odours and bacteria in the air. Solid Air offers advanced solutions such as the ProkPool, ProkCool, ProkFull and air handling units in hygienic design.

ProkCool performs on the basis of adiabatic cooling, or evaporation cooling. This cooling concept is based on cooling air by evaporating water. This operating principle saves energy, because the energy required for evaporation is extracted from the air.

Properties

- Airflows from 1.800 m³/h up to 29.000 m³/h
- Integrated reversible heat pump and automatic control
- Considerable savings in energy consumption compared to conventional cooling

Version

Internal and external powder coated in RAL7035 - RAL9010 - RAL9005 - RAL5018 of your choice). Other RAL colors on request (extra charge).

Casing from aluminum profiles and double-walled insulated, coated and galvanized panels.

The ProkCool offers a very complete range of possibilities.

In addition, these are available as a horizontal or stacked version.

Humidification and integrated heat pump are also among the very extensive possibilities.

ProkCool is equipped with mounted field equipment and fully integrated automatic Siemens DDC control.

Indoor or outdoor setup.

Left or right version.

Monoblock or shared execution in modules.

Maintenance and inspection via well-closing doors.

Optional

Expansion options such as:

suction/discharge section, filter section, WW heater, E heater, KW cooler, DX cooler, DX cooler/heater (inverter), Change-over cooler/heater, integrated cooling, humidifier, silencers, mixing section, empty section etc.

Classification/certification

Mechanical and thermal properties in compliance with EN1886.

| | |
|-----------------------|-----------|
| Mechanical strength: | class D1 |
| Air leakage: | class L1 |
| Filter bypass leakage | class F9 |
| Thermal transmittance | class T2 |
| Thermal bridging | class TB2 |

Energy class A+/A in accordance with Eurovent.

Complies with the EU Ecodesign regulation no. 1253/2014, ErP 2018.



PROKFULL

**High-end air handling unit
with regenerative heat recovery
Airflows up to 34.000 m³/h**

Application

Nowadays people spend more time in enclosed spaces, such as offices, shopping centres, hospitals and healthcare centres, sports and event halls, workshops, theatres and large restaurant and catering facilities. A properly operating air handling system is essential for the right climatization to prevent the distribution of humidity, dirt, odours and bacteria in the air. Solid Air offers advanced solutions such as the Prok-Pool, ProkCool, ProkFull and air handling units in hygienic design.

ProkFull contains two heat accumulating packages with an extremely sensitive accumulation mass, through which fresh outdoor air and return airflows alternately. Due to these alternating airflows, the energy of the return air is almost fully transferred to the supply air. A large part of the humidity in the return air is also regenerated in the supply air. The accumulation mass features exceptional heat-transfer capacity. The high efficiency of the heat recovery ensures that no additional heating is required during the winter period, whilst energy savings are achieved during the summer period by reusing the cold air.

Properties

- Airflows from 2.700 m³/h up to 34.000 m³/h
- Heat recovery efficiency > 90% and moisture recovery > 70%
- Integrated automatic control

Version

Internal and external powder coated in RAL7035 - RAL9010 - RAL9005 - RAL5018 (optional).

Other RAL colors on request (extra charge).

Casing from aluminum profiles and double-walled insulated, coated and galvanized panels.

The ProkFull offers a very complete range of possibilities.

In addition, these are available as a horizontal or stacked version.

An integrated heat pump is also one of the very extensive options. A humidifier is not necessary due to the high moisture recovery effect.

ProkFull is equipped with mounted field equipment and fully integrated automatic Siemens DDC control.

Indoor or outdoor setup.

Left or right version.

Monoblock or shared execution in modules.

Maintenance and inspection via well-closing doors.

Optional

Expansion options such as:

suction/discharge section, filter section, DHW heater, E heater, KW cooler, DX cooler, DX cooler/heater (inverter), Change-over cooler/heater, integrated cooling, humidifier, silencers, empty section etc.

Classification/certification

Mechanical and thermal properties in compliance with EN1886.

| | |
|-----------------------|-----------|
| Mechanical strength: | class D1 |
| Air leakage: | class L1 |
| Filter bypass leakage | class F9 |
| Thermal transmittance | class T2 |
| Thermal bridging | class TB2 |

Energy class A+/A in accordance with Eurovent.

Complies with the EU Ecodesign regulation no. 1253/2014, ErP 2018.



HYGIENIC UNIT

Fully cleanable, easy to disinfect

All materials are antibacterial

Airflows up to 60.000 m³/h

Application

A reliable and hygienic air handling unit is essential when even the smallest climate change can affect people's health. Examples include operating theatres, hospitals, cleanrooms, laboratories and the IT industry, where good hygiene and a dust-free environment is extremely important to the indoor climate and the quality of the service and/or production.

These air handling units are in conformity with DIN 1946, VDI 6022, VDI 3803 and designed in such a way that the air handling units can be easily and completely cleaned, well disinfected and have better visual inspection options. All materials are antibacterial.

Properties

- Airflows from 800 m³/h up to 60.000 m³/h
- Both indoor and outdoor execution
- With or without heat recovery

Version

Internal and external powder coated in RAL7035 - RAL9010 - RAL9005 - RAL5018 (optional). Other RAL colors on request (extra charge).

Casing from aluminum profiles and double-walled insulated, coated and galvanized panels.

The hygienic version of Modul offers a very complete range of possibilities, with or without heat recovery and/or recirculation, but also as a supply or only return.

In addition, these are available as horizontal, stacked or vertical air handling units.

Humidification and integrated heat pump are also among the very extensive possibilities.

The hygienic design of Modul is a series of modular air handling units that can also be fitted with mounted field devices and fully integrated automatic Siemens DDC control.

Indoor or outdoor setup.
Left or right version.

Monoblock or shared execution in modules.
Maintenance and inspection via well-closing doors.

Optional

Expansion options such as:
suction/discharge section, filter section, WW heater, E heater, KW cooler, DX cooler, DX cooler/heater (inverter), Change-over cooler/heater, integrated cooling, plate heat exchanger, heat wheel, twincoil, humidifier, silencers, mixing section, empty section etc.

With the hygienic design of Modul you can also opt for:

- Direct driven AC plug fan including delivery and mounting of frequency converters for AC motors (IE3) or high efficiency EC plug fan (IE4/IE5).
- Supply and assembly of field equipment and/or internal cabling.
- Optional fully integrated automatic Siemens DDC control, fully wired.

Classification/certification

Mechanical and thermal properties in compliance with EN1886.

| | |
|-----------------------|-----------|
| Mechanical strength: | class D1 |
| Air leakage: | class L1 |
| Filter bypass leakage | class F9 |
| Thermal transmittance | class T2 |
| Thermal bridging | class TB2 |

Energy class A+/A in accordance with Eurovent.

Complies with the EU Ecodesign regulation no. 1253/2014, ErP 2018.

Certified in compliance with:
EN 1886:2003
EN 13053:2004
VDI 3803
VDI 6022

