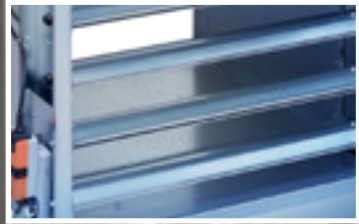


*Good climate,
better performance!*



Volume control units



*Good climate,
better performance!*

Solid Air Climate Solutions is an indoor climate and air technology specialist that contributes to creating an optimal indoor climate.

Solid Air can be of service in many ways, for the supply of components and for total projects.

The success story began with the development, manufacture and sale of high quality climate ceilings, after which the range of products was gradually extended by air diffusion and indoor climate products. Since 2000 Solid Air has developed a unique range of chilled beams that are among the very best in the Netherlands when it comes to quality and sales volume.

Solid Air has also specialised in air-handling units, and has integrated climate ceilings in its range of products and services.

Solid Air has grown to be a total supplier of climate solutions. Where necessary our products are certified in accordance with the strictest regulations and European standards.

Extensive selection software and BIM libraries are available. Since 1998 Solid Air International has entered the international market by opening establishments in Germany and France, and the scope has been further extended towards Europe and beyond via agents.

Solid Air has plenty of knowledge and experience at its disposal and is able if necessary to make use of the additional specialist knowledge of its sister companies in the Nijburg Industry Group. This includes product development, options for generating specials, production, engineering and delivery and assembly in complete projects, and so on.

Certification

Nijburg is NEN-EN-ISO 9001:2015 and VCA certified. All of our products bear the legally mandatory CE mark. Our products are also assessed and tested by TNO, Peutz, Efectis, TÜV (Eurovent) and WSP, which can also perform independent tests. Various Solid Air products are Eurovent certified (AHU range KEK under certificate No. 14.10.004 and Active and Passive Chilled Beams under certificate No. 09.11.431).



Good climate, better performance

We are one of the most pioneering producers of advanced and sustainable indoor climate solutions in the Netherlands.

Since 1986 our products have been used successfully in non-residential building, industry, housing, retail, education and healthcare. Innovating and delivering the best possible quality comes naturally to us.

We are a reliable partner for consultants and contractors and we like to consider the issues together with architects. With our knowledge, our comprehensive product range and attractive pricing, we contribute to a more comfortable and healthier indoor climate in living and working environments in the Netherlands and abroad.

SOLID AIR KNOWS NINE PRODUCT CATEGORIES:

- **Air handling units**
- **Climate ceilings**
- **Air diffusers**
- **Weather/penthouse louvres**
- **Volume control units**
- **Duct Heaters/Coolers**
- **Acoustics**
- **Fire protection systems**
- **Active and passive chilled beams**



TARGET GROUPS

Important target groups include non-residential building, industry, housing, retail, education and healthcare. At Solid Air, we know that a good indoor climate is essential to optimum performance. That explains our motto: Good climate, better performance!

SOLID AIR AS A KNOWLEDGE PARTNER

- From our nine product categories we supply a total solution for a comfortable indoor climate.
- Having our own design and production capacity makes us extremely flexible. Even when it comes to custom products.
- Our efficient production process, intelligent stock management and our excellent logistics department enable us to offer short lead times.



Volume control units

A central air-handling system in a building may call for a way of subsequently controlling the climate in each room or zone. This may be necessary because the load on the various rooms may differ as a result of orientation or internal pressure to such an extent that undesirable temperature differences occur. But also because users like to have the freedom to determine the temperature of the room. Other important factors include energy savings and optimising the air quality or for example the presence of people.

VOLUME CONTROL UNIT APPLICATIONS

Volume control units can be used to set the desired air volume in any part of the ventilation system, either at a constant or variable air volume. The air volume is factory-set to save you configuration time.

Volume control units have various applications. Their application as main control systems for air conditioning is found mainly in systems with a large variation in air volume.

Examples include schools (classrooms), canteens, theatres and shopping centres. The key principle is that the conditioning is provided with heated or cooled air, depending on the need.

Another application is only to subsequently control the air volume with temperature controls based on water-side systems such as active chilled beams, climate ceilings, thermally activated concrete or post-heating for hot water systems.



“Energy savings and optimising air quality play an important role.”

TESTS

The volume control units are tested at our factory for mechanical operation and for the correct air volume settings in the minimum and maximum situations. The units are also labelled for the correct handling during transport and the logistics at the building site.





Variable air volume units (VAV)

The volume control unit is available in both a round and a rectangular model, and with single or double walled with insulation. The device can be configured as a CAV unit if required.

VIEW ALL OF OUR VAV VOLUME CONTROL UNITS:

The device can be configured as a CAV unit if required.

The volume control unit is available in both a round and a rectangular model, and with single or double walled with insulation.



TYPE VVO

Round, single-walled VAV unit



TYPE VVO

Round, double-walled VAV unit



TYPE VRV

Rectangular, single-walled VAV unit



TYPE VRV

Rectangular, double-walled VAV unit

PROPERTIES:

- **Low internal resistance**
- **Maintenance-free**
- **Not sensitive to dirt**

A modern office bathroom with a long white countertop featuring multiple sinks and chrome faucets. Large mirrors are mounted on the wall above the sinks, reflecting the interior. The walls are a mix of light grey and dark wood paneling. A wooden door is visible in the background. The ceiling has recessed lighting and a ventilation grille. A semi-transparent white banner is overlaid at the bottom of the image, containing the title and text.

Constant air volume units (CAV)

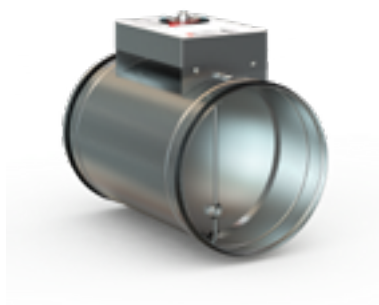
For certain rooms it is necessary to constantly control the air volume. Solid Air's CAV units can maintain the desired air volume in any part of the ventilation system, regardless of the prevailing pressure and without any external power supply being required. A CAV unit can be set to a predetermined value. CAV units are frequently used in buildings with chilled beams with a constant air supply.

VIEW ALL OF OUR CAV UNITS:



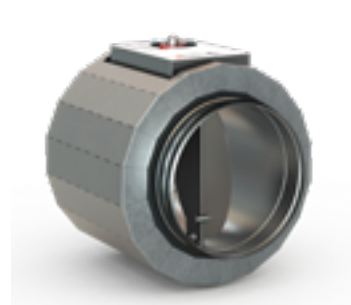
TYPE VCIR

Round, mechanical CAV unit



TYPE VCMH

Round, single-walled CAV unit



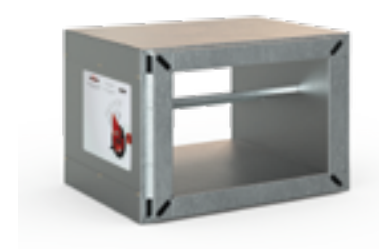
TYPE VCMH

Round, double-walled CAV unit



TYPE VCMR

Rectangular, single-walled CAV unit



TYPE VCMR

Rectangular, double-walled CAV unit

PROPERTIES:

- Low internal resistance
- Maintenance-free
- Not sensitive to dirt

3-IN-1 SOLUTION

Solid Air's 3-in-1 solution is a combination of a volume control unit, a duct heater and/or cooler and a attenuator. These solutions are used mainly for post-control in rooms.

The most common standard solutions can be operated with the VVR type. The VVR is a compact solution in which a VAV unit is combined with a duct heater and an internally fitted attenuator.

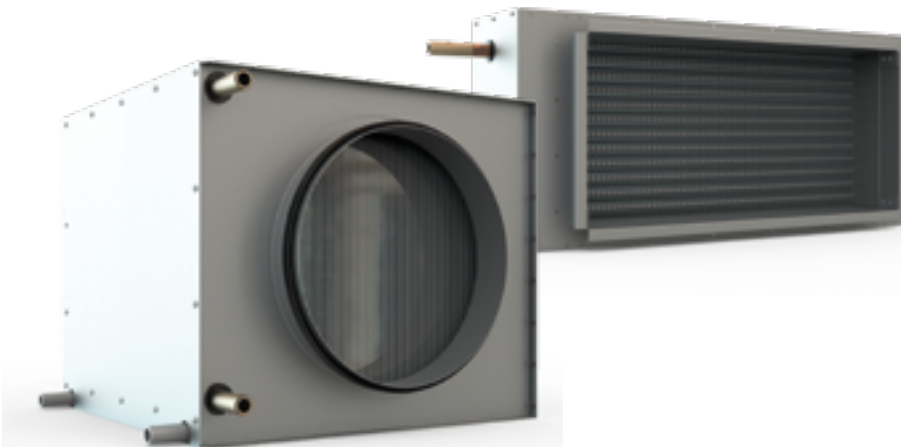
Combining several air components provides a customer-specific solution for virtually any requirement.



DUCT HEATERS AND DUCT COOLERS

Duct heaters and duct coolers are used in buildings in cases where the centrally generated fresh air – which has only one temperature – needs to be subsequently controlled.

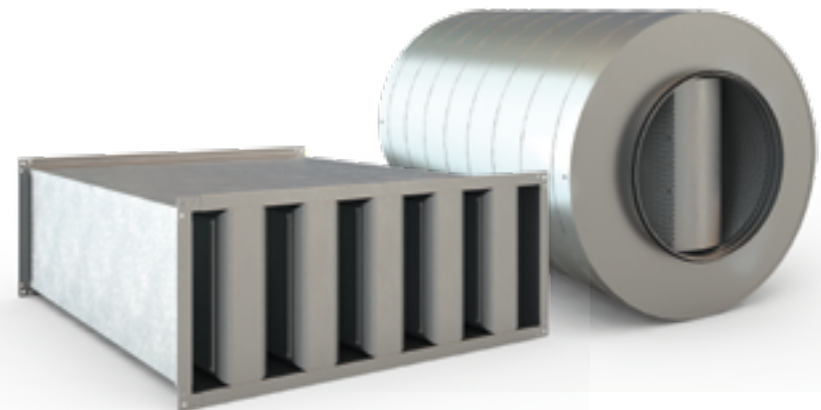
The post-control can be operated per floor, zone or room. Solid Air supplies a broad range of duct heaters and duct coolers that are suitable for high and low temperature systems.



ACOUSTICS

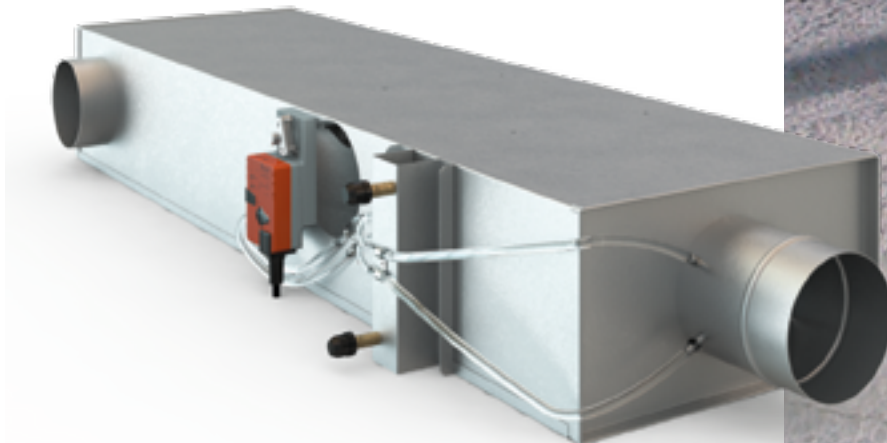
Ventilation systems contain components that may cause noise, such as fans. The use of an attenuator can reduce this noise nuisance.

Attenuators can be installed as required in various parts of the ventilation system. Solid Air supplies complete attenuators as well as standalone attenuating splitters.



VAV INDUCTION UNIT

The VAV induction unit is suitable for individual climate control in rooms. The induction system achieves a greater control reach compared to a standard VAV unit. This is because the share of mixed warm room air is kept constant when the fresh air volume is reduced. This results in a higher temperature being supplied to the grid.



CONTROL SYSTEMS

The volume units are driven by high quality control systems. They can be based on temperature, air quality or pressure systems. We can meet the requirements of various manufacturers and communication protocols.

ACTUATORS AND CONTROLLERS

The VAV units are always operated by actuators that are configured for a specific situation. Model size, air-volume range, maximum and minimum position are set in our factory. The variation in air volume or pressure can be adjusted as required.

SENSORS

Solid Air supplies a programme of sensors of various suppliers. The programme includes sensors that can measure temperature and CO² levels. A combination of the two is also possible.



“Solid Air supplies high quality control systems!”

WHY IS SOLID AIR THE BEST PARTNER FOR YOU?

Solid Air is a reliable partner for consultants and fitters. We like to consider the issues together with architects. With our knowledge, our comprehensive product range and attractive pricing, we contribute to a more comfortable and healthier indoor climate in living and working environments in the Netherlands and abroad.

CUSTOMISED SOLUTIONS

With our own R&D, production facilities and our own test area, we are able to provide a standard programme and to consider the issues with our clients and supply customised solutions. This applies to new-build projects, but to renovation projects in particular. These days old, existing buildings are often renovated to modern standards, with high requirements in terms of indoor climate and fire safety. That is all about our professional expertise.

INNOVATION: STAY ALERT WITH A VIEW TO THE FUTURE

Without innovation you simply don't count as a business. Our R&D Department is thoroughly aware of that and responds to changing market needs. By developing new products and taking a critical look at our existing products and improving them where possible, Solid Air takes the leading position in the Netherlands as the specialist in indoor climate solutions. We strive to expand this position towards the rest of the EU.

WHAT MAKES SOLID AIR A STRONG PARTNER?

- **Being able to respond quickly to client requirements during the advice and design stage, with the option for customer-specification**
- **Flexible and quick manufacture and supply of standard and customised products**
- **Strong research and development, own product development and own test facilities**
- **A broad and well-known product package with competitive price and quality levels**
- **Our selection tool enable you to select your products quickly, conveniently and reliably and to manage your specific projects**

YOU WILL FIND OUR PRODUCTS IN

**Offices / Schools / Industry / Healthcare institutions
and Hospitals / Retail and Hospitality companies /
Residential building**



NIJBURG INDUSTRY GROUP

*Good climate,
better performance!*

About Nijburg Industry Group:

Nijburg Industry Group comprises the Business Units Solid Air Climate Solutions, Solid Air International, Solid Air Klimaatplafonds, Velu Klimaattechnische Groothandel and Nijburg Klimaattechniek and its own factory. The strong synergy between the various companies, each with their own specialism, makes Nijburg Industry Group a reliable, strong partner in the field of air and climate technology.

Both for newbuild and renovation projects. Nationally and internationally.

The synergy between the business units, each with their own specialism, makes the Nijburg Industry Group a much sought-after partner for installers, housing corporations, industrial customers and shipbuilders.

**Nijburg Industry
Group**

Innovative in air and
climate technology

*Good climate,
better performance!*



We believe that people perform better if there is a comfortable and sustainable indoor climate. Our mission is to help organisations to achieve this.

We do this by offering a complete package of products and services in the field of climate and air distribution technology.

www.solid-air.com



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