



AVACS multifunction ceiling sail
Solutions with a system

Kranz

Krantz AVACS Multifunction Ceiling Sail

Individual solutions for technical building equipment

Multifunctional ceiling sails offer the functions of cooling, heating, room ventilation, sound absorption and air disinfection in one system, all while meeting comfort criteria.

Multifunctional ceiling sails can be installed in a wide range of variants, e.g.

- single or multi-row
- with optional supply air, recirculated air, return air or without ventilation function
- with integration of third-party systems, e.g. sprinklers, lights, etc.
- various perforations possible for the ceiling sail
- polygonal design possible
- color of the ceiling sail according to RAL
- optional equipment
 - air sterilization via UV-C module
 - silencer with volume flow controller
 - complete sail can be revisable
 - Integrated inspection segment

AVACS multifunctional ceiling sails are used in offices and meeting rooms, foyers, social rooms, etc. to dissipate cooling and heating loads.



Contents

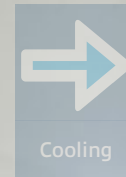
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Acoustic ceiling sail

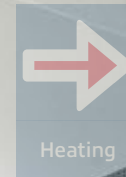
The Krantz solution that is versatile.



Sound absorption ceiling sail with acoustic fleece depending on the installation situation and equipment:
 $\alpha_w = 0.5$ to 0.9
optional sound absorber strips available



Cooling



Heating



Air distribution

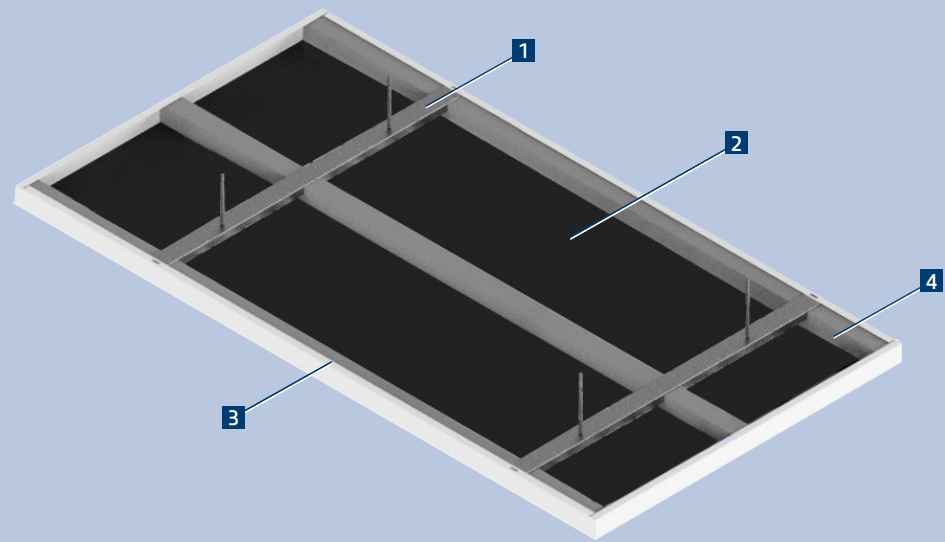


Sound absorption



UV-C Sterilization





Reduced to the essentials

The **acoustic sail** is a modern architectural alternative for open ceiling design. In combination with system components from Krantz, which have been specially developed for this type of installation, high performance multifunctional ceiling sail units are created for maximum thermal comfort.

Caption





- 1 Traverse for suspending the acoustic sail
- 2 Perforated acoustic ceiling with acoustic fleece
- 3 Edge finish (optional)
- 4 Sound absorber strips (optional)

Acoustic ceiling sail	
Standard nominal length	1 000 - 6 000 mm ¹⁾ (single or multi-panel) maximum single panel length up to 3 000 mm
Standard nominal width	800 - 1 350 mm ¹⁾
Nominal height	50 mm ¹⁾ , 90° upstand ¹⁾
Suspended height	min. 100 mm
Ceiling panel element	galvanized sheet steel, sheet thickness max. 0.6 - 0.8 mm, perforated, perforation ø 2.5 mm, perforated area approx. 16 %, powder-coated similar to RAL 9010, silk matt 20
Acoustic fleece	laminated on the back with acoustic fleece
Traverse	2.0 mm galvanized sheet steel
Sound absorption	$\alpha_w = 0.5$ to 0.9, depending on the installation situation and equipment
Weight	approx. 6 kg/m ² sail area depending on ceiling construction, fixtures, etc.

¹⁾ other designs on request

Multifunction ceiling sail as radiant cooling and heating sail

The Krantz solution that offers a lot.

-  **Cooling capacity based on DIN EN 14240**
cooling capacity on the water side up to 118 W/m² in relation to the sail area at $\Delta t_w = -10$ K
-  **Heating capacity based on DIN EN 14037**
heating capacity on the water side up to 169 W/m² in relation to the sail area at $\Delta t_w = +15$ K
-  **Can be combined with ceiling diffusers**
-  **Sound absorption ceiling sail in combination with a contact cooling system**
depending on the installation situation and equipment:
 $\alpha_w = 0.5$ to 0.9
optional sound absorber strips available



Cooling



Heating



Air
distribution

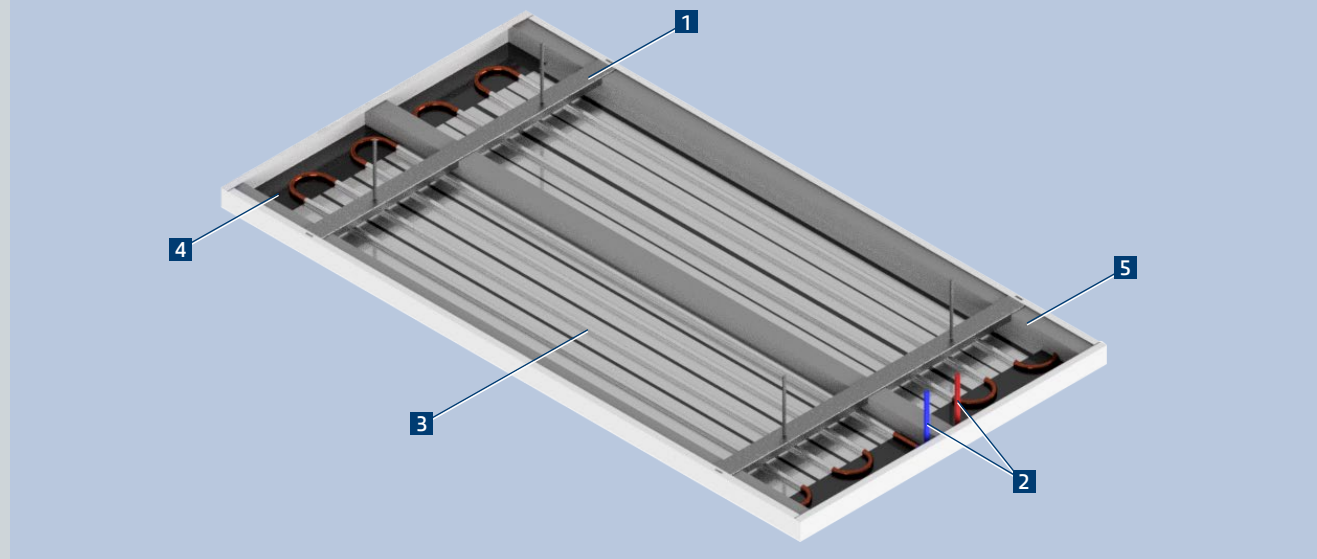


Sound
absorption



UV-C
Sterilization





Combined as a unit

The **Multifunction ceiling sail** is an ideal solution for open ceiling architecture. Here, ceiling sails are combined with the latest chilled ceiling technology to form a highly functional and flexible unit. The bottom view of the radiant sail consists of one or more perforated or non-perforated metal ceiling sails, which are suspended from the building structure via concealed mounting traverses. The result is a visually appealing ceiling sail with increased specific cooling and heating capacity and high thermal comfort.

Caption





- 1 Traverse for suspending the sail elements
- 2 Cooling water supply/return
- 3 Contact cooling elements
- 4 Perforated ceiling sail
- 5 Sound absorber strips (optional)

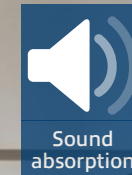
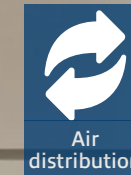
Multifunction ceiling sail as radiant cooling and heating sail	
Standard nominal length	1 000 - 6 000 mm ¹⁾ (single or multi-panel) maximum single panel length up to 3 000 mm
Standard nominal width	800 - 1 350 mm ¹⁾
Nominal height	50 mm ¹⁾ , 90° upstand ¹⁾
Suspended height	min. 100 mm
Acoustic fleece	laminated on the back with acoustic fleece
Pipe spacing	variable, optimally adapted to the sail dimensions in terms of performance
Ceiling panel element	galvanized sheet steel, sheet thickness max. 0.6 - 0.8 mm, perforated, perforation ø 2.5 mm, perforated area approx. 16 %, powder-coated similar to RAL 9010, silk matt 20
Thermal conduction profile	aluminium contactprofile, width = 78 mm, length adapted to the pipe meander pipe meander made of copper pipe ø 10 x 0.35 mm or ø 12 x 0.35 mm
Connection end	for ø 10 mm or ø 12 mm push-fit connections; shaped parts: bend 90° or bend 180°
Traverse	2.0 mm galvanized sheet steel
Sound absorption	$\alpha_w = 0.5$ to 0.9, depending on the installation situation and equipment
Allowable operating pressure	6 bar (up to 16 bar possible, depending on the hose connection)
Weight	approx. 8 kg/m ² sail area (incl. water content, depending on pipe spacing) depending on ceiling construction, fixtures, etc.

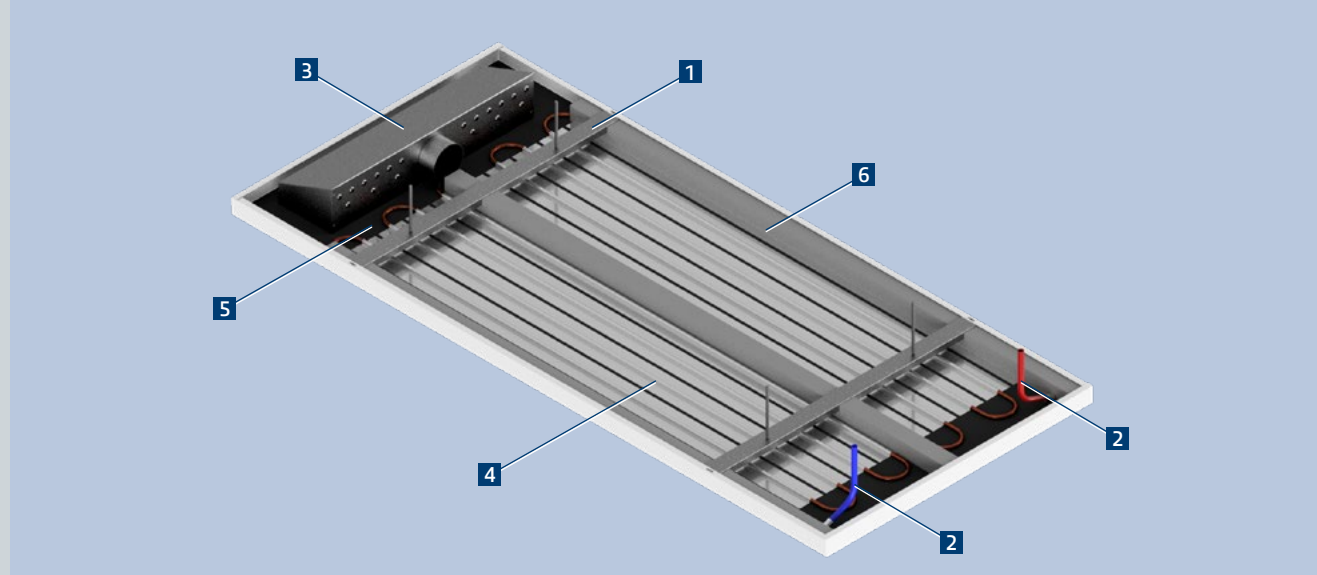
¹⁾ other designs on request

Multifunction ceiling sail AVACS supply air

The Krantz solution that cleverly combines.

-  **Cooling capacity based on DIN EN 14240**
cooling capacity on the water side up to 174 W/m² in relation to the sail area at $\Delta t_w = -10$ K and a supply air flow rate of 120 m³/h at -8 K below ambient temperature
-  **Heating capacity based on DIN EN 14037**
heating capacity on the water side up to 245 W/m² in relation to the sail area at $\Delta t_w = +15$ K and a supply air flow rate of 120 m³/h isothermal
-  **Primary air volume when using the AVACS air diffuser**
air volume flow rate of 30 - 120 m³/h at up to 35 dB(A)
-  **Sound absorption ceiling sail in combination with a contact cooling system**
depending on the installation situation and equipment:
 $\alpha_w = 0.5$ to 0.9
optional sound absorber strips available





Perfect for challenges

The **Multifunction ceiling sail AVACS supply air** is a further development of our radiant chilled ceiling sail. It combines the proven chilled ceiling technology with the AVACS air diffuser, which is invisible to users. The bottom view of the AVACS Multifunctional ceiling sail consists of one or more perforated metal ceiling sails, which are suspended from the building structure via concealed mounting traverses. The result is a visually appealing ceiling sail with high specific cooling and heating capacities and a high level of thermal comfort.

Caption

- 1 Traverse for suspending the sail elements
- 2 Cooling water supply/return
- 3 AVACS supply air diffuser
- 4 Contact cooling elements
- 5 Perforated ceiling sail
- 6 Sound absorber strips (optional)

Multifunction ceiling sail AVACS supply air	
Standard nominal length	1 000 - 6 000 mm ¹⁾ (single or multi-panel) maximum single panel length up to 3 000 mm
Standard nominal width	800 - 1 350 mm ¹⁾
Nominal height	50 mm ¹⁾ , 90° upstand ¹⁾
Suspended height	min. 170 mm
Acoustic fleece	laminated on the back with acoustic fleece
Pipe spacing	variable, optimally adapted to the sail dimensions in terms of performance
Ceiling panel element	galvanized sheet steel, sheet thickness max. 0.6 - 0.8 mm, perforated, perforation ø 2.5 mm, perforated area approx. 16 %, powder-coated similar to RAL 9010, silk matt 20
Thermal conduction profile	Aluminium contact profile, Width = 78 mm, length adapted to the pipe meander Pipe meander made of copper pipe ø 10 x 0.35 mm or ø 12 x 0.35 mm
Connection end	for ø 10 mm or ø 12 mm push-fit connections; shaped parts: bend 90° or bend 180°
Traverse	2.0 mm galvanized sheet steel
Sound absorption	$\alpha_w = 0.5$ to 0.9, depending on the installation situation and equipment
Allowable operating pressure	6 bar (up to 16 bar possible, depending on the hose connection)
Weight	approx. 8 kg/m ² sail area (incl. water content, depending on pipe spacing) plus 3.4 kg AVACS supply air diffuser depending on ceiling construction, fixtures, etc.

¹⁾ other designs on request

Multifunction ceiling sail AVACS recircu- lated air

The Krantz solution that is invisible.



Cooling capacity based on DIN EN 14240

cooling capacity on the water side up to 187 W/m² in relation to the sail area at $\Delta t_w = -10$ K and a supply air flow rate of 120 m³/h isotherm



Heating capacity based on DIN EN 14037

heating capacity on the water side up to 245 W/m² in relation to the sail area at $\Delta t_w = +15$ K and a supply air flow rate of 120 m³/h isothermal



AVACS recirculated air variant

air volume flow rate of 30 - 120 m³/h at up to 35 dB(A)



Sound absorption ceiling sail in combination with a contact cooling system

depending on the installation situation and equipment:
 $\alpha_w = 0.5$ to 0.9
optional sound absorber strips available



Cooling



Heating



Air
distribution

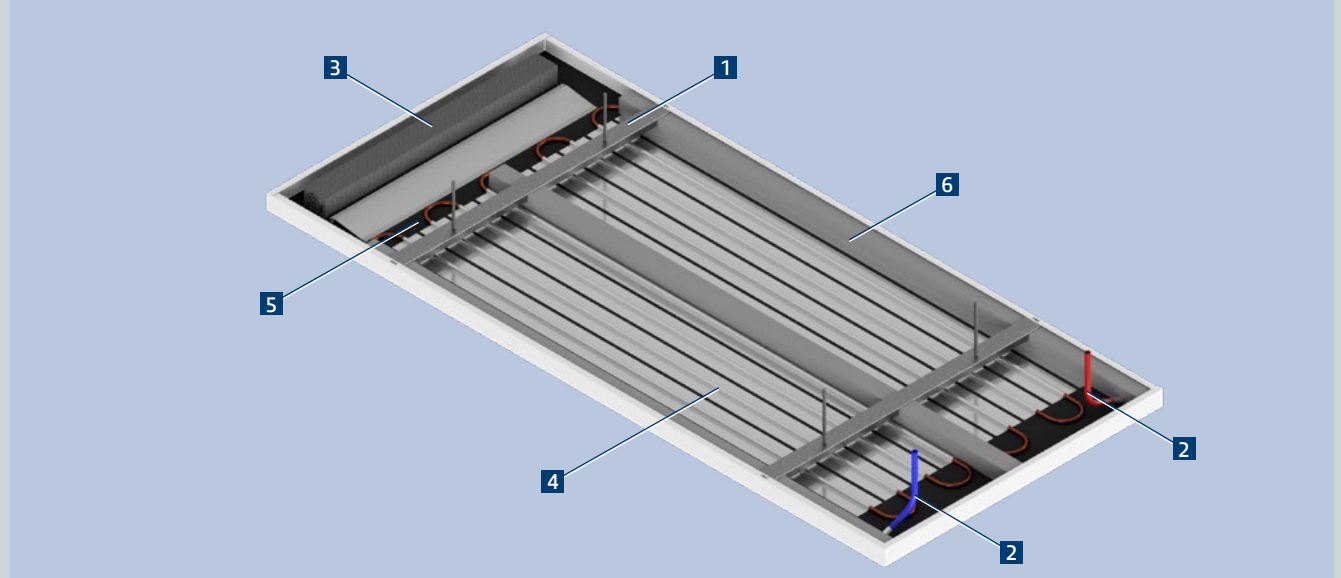
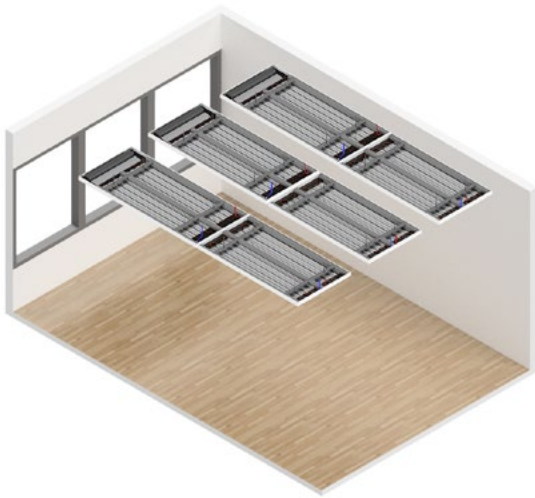


Sound
absorption



UV-C
Sterilization





Opens up opportunities

The **Multifunction ceiling sail AVACS recirculated air** is a variation of our AVACS supply air system. It combines the proven chilled ceiling technology with the AVACS recirculation fan, which is not visible to users. The bottom view of the AVACS Multifunction ceiling sail consists of one or more perforated metal ceiling sails, which are suspended from the building structure via concealed mounting traverses. The result is a visually appealing ceiling sail with high specific cooling and heating capacities and a high level of thermal comfort.

Caption

- 1 Traverse for suspending the sail elements
- 2 Cooling water supply/return
- 3 Recirculation fan
- 4 Contact cooling elements
- 5 Perforated ceiling sail
- 6 Sound absorber strips (optional)

Multifunction ceiling sail AVACS recirculated air	
Standard nominal length	1 000 - 6 000 mm ¹⁾ (single or multi-panel) maximum single panel length up to 3 000 mm
Standard nominal width	800 - 1 350 mm ¹⁾
Nominal height	50 mm ¹⁾ , 90° upstand ¹⁾
Suspended height	min. 170 mm
Acoustic fleece	laminated on the back with acoustic fleece
Pipe spacing	variable, optimally adapted to the dimensions of the sail in terms of performance
Ceiling panel element	galvanized sheet steel, sheet thickness max. 0.6 - 0.8 mm, perforated, perforation ø 2.5 mm, perforated area approx. 16 %, powder-coated similar to RAL 9010, silk matt 20
Thermal conduction profile	aluminium contactprofile, width = 78 mm, length adapted to the pipe meander pipe meander made of copper pipe ø 10 x 0.35 mm or ø 12 x 0.35 mm
Connection end	for ø 10 mm or ø 12 mm push-fit connections; shaped parts: bend 90° or bend 180°
Traverse	2.0 mm galvanized sheet steel
Sound absorption	$\alpha_w = 0.5$ to 0.9, depending on the installation situation and equipment
Allowable operating pressure	6 bar (up to 16 bar possible, depending on the hose connection)
Weight	approx. 8 kg/m ² sail area (incl. water content, depending on pipe spacing) plus 3 kg recirculation fan depending on ceiling construction, fixtures, etc.

¹⁾ other designs on request

Multifunction ceiling sail AVACS Ventus

The Krantz solution that boosts performance.



Cooling capacity

water-side cooling capacity dependent on the primary air volume and the possible low temperature Δt_L



Heating capacity

water-side heating output dependent on the primary air volume and the possible temperature difference Δt_L



Primary air volume using the Ventus air diffuser

air volume flow rate of 130 - 330 m³/h with minimum installation heights of 200 mm and at up to 40 dB(A) (Larger air volume flow rates on request)



Sound absorption ceiling sail in combination with a contact cooling system

depending on the installation situation and equipment:
 $\alpha_w = 0.5$ to 0.9
optional sound absorber strips available



Cooling



Heating



Air distribution

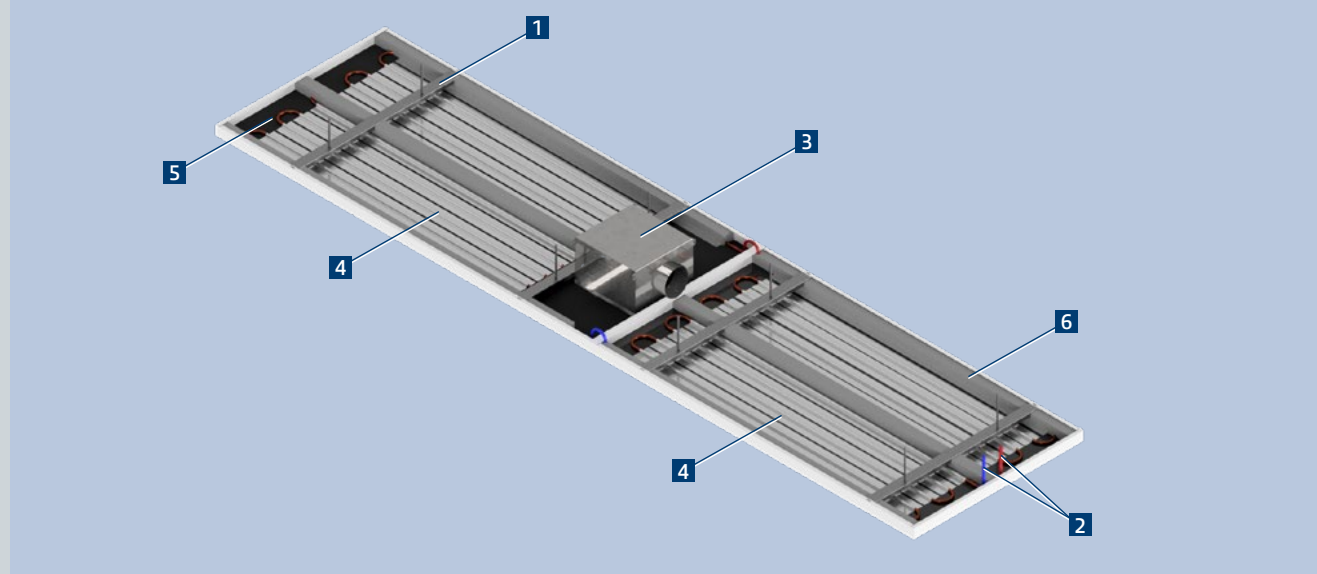


Sound absorption



UV-C Sterilization





Creates comfort

The **Multifunction ceiling sail AVACS Ventus** is a further development of our chilled ceiling sail. It combines the proven chilled ceiling technology with the Ventus air diffuser, which is not visible to users. The bottom view of the Multifunctional ceiling sail consists of one or more perforated metal ceiling sails, which are suspended from the building structure via concealed mounting traverses. The result is a visually appealing ceiling sail with high specific cooling and heating capacities and high thermal comfort.

Caption

- 1 Traverse for suspending the sail elements
- 2 Cooling water supply/return
- 3 Ventus diffuser
- 4 Contact cooling elements
- 5 Perforated ceiling sail
- 6 Sound absorber strips (optional)

Multifunction ceiling sail AVACS Ventus	
Standard nominal length	1 000 - 6 000 mm ¹⁾ (single or multi-panel) maximum single panel length up to 3 000 mm
Standard nominal width	800 - 1 350 mm ¹⁾
Nominal height	50 mm ¹⁾ , 90° upstand ¹⁾
Suspended height	min. 200 mm
Acoustic fleece	laminated on the back with acoustic fleece
Ventus diffuser	size 330: square base area 319 mm, height 207 mm, connection DN 125 size 400: square base 389 mm, height 242 mm, connection DN 160 (other sizes on request)
Pipe spacing	variable, optimally adapted to the sail dimensions in terms of performance
Ceiling panel element	galvanized sheet steel, sheet thickness max. 0.6 - 0.8 mm, perforated, perforation ø 2.5 mm, perforated area approx. 16 %, powder-coated similar to RAL 9010, silk matt 20
Thermal conduction profile	aluminium contactprofile, width = 78 mm, length adapted to the pipe meander pipe meander made of copper pipe ø 10 x 0.35 mm or ø 12 x 0.35 mm
Connection end	for ø 10 mm or ø 12 mm push-fit connections; shaped parts: bend 90° or bend 180°
Traverse	2.0 mm galvanized sheet steel
Sound absorption	$\alpha_w = 0.5$ to 0.9, depending on the installation situation and equipment
Allowable operating pressure	6 bar (up to 16 bar possible, depending on the hose connection)
Weight	approx. 8 kg/m ² sail area (incl. water content, depending on pipe spacing) plus 3.4 kg (size 330) resp. 5 kg (size 400) AVACS Ventus diffuser depending on ceiling construction, fixtures, etc.

¹⁾ other designs on request

Multifunction ceiling sail AVACS Plus

The Krantz solution that moves a lot.



Cooling capacity

water-side cooling capacity dependent on the primary air volume and the possible low temperature Δt_L



Heating capacity

water-side heating output dependent on the primary air volume and the possible temperature difference Δt_L



Primary air volume using the Ventus air diffuser

air volume flow rate of 130 - 330 m³/h with minimum installation heights of 250 mm and at up to 40 dB(A) (larger air volume flow rates on request)



Sound absorption ceiling sail in combination with a contact cooling system

depending on the installation situation and equipment:
 $\alpha_w = 0.5$ to 0.9

optional sound absorber strips available



Cooling



Heating



Air distribution

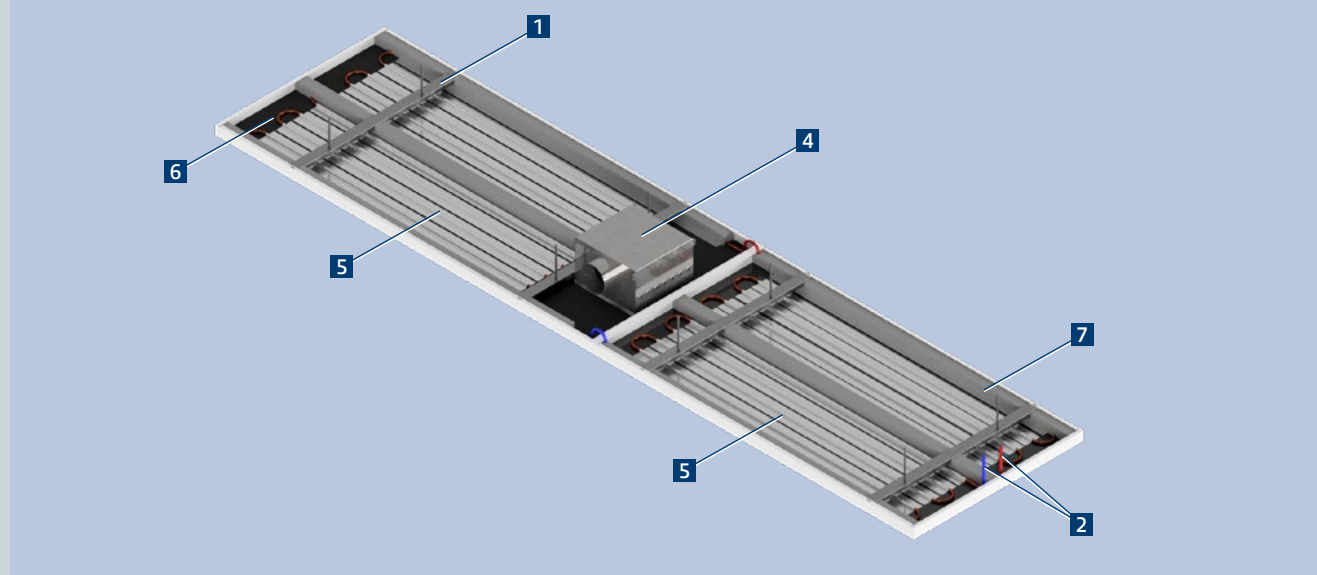


Sound-absorption



UV-C Sterilization





Impresses with its adaptability

The **Multifunction ceiling sail AVACS Plus** is a variant of the AVACS Ventus. Here, the Ventus air diffuser is extended with air nozzles in the plenum box. The Plus air diffuser is located on the top of the ceiling sail and is barely visible from the room due to its flat design. The bottom view of the ceiling sail consists of one or more perforated metal ceiling sails, which are suspended from the building structure via concealed mounting traverses. The result is a visually appealing multifunctional ceiling sail. This arrangement enables very high specific cooling and heating capacities with a thermally comfortable room climate.

Caption

- 1 Traverse for suspending the sail elements
- 2 Cooling water supply/return
- 3 Plus diffuser
- 4 Contact cooling elements
- 5 Perforated ceiling sail
- 6 Sound absorber strips (optional)

Multifunction ceiling sail AVACS Plus	
Standard nominal length	1 000 - 6 000 mm ¹⁾ (single or multi-panel) maximum single panel length up to 3 000 mm
Standard nominal width	800 - 1 350 mm ¹⁾
Nominal height	50 mm ¹⁾ , 90° upstand ¹⁾
Suspended height	min. 250 mm
Acoustic fleece	laminated on the back with acoustic fleece
Ventus diffuser	size 330: square base area 319 mm, height 207 mm, connection DN 125 size 400: square base area 389 mm, height 242 mm, connection DN 160 (other sizes on request)
Pipe spacing	variable, optimally adapted to the sail dimensions in terms of performance
Ceiling panel element	galvanized sheet steel, sheet thickness max. 0.6 - 0.8 mm, perforated, perforation ø 2.5 mm, perforated area approx. 16 %, powder-coated similar to RAL 9010, silk matt 20
Thermal conduction profile	aluminium contactprofile, width = 78 mm, length adapted to the pipe meander pipe meander made of copper pipe ø 10 x 0.35 mm or ø 12 x 0.35 mm
Connection end	for ø 10 mm or ø 12 mm push-fit connections; shaped parts: bend 90° or bend 180°
Traverse	2.0 mm galvanized sheet steel
Sound absorption	$\alpha_w = 0.5$ to 0.9, depending on the installation situation and equipment
Allowable operating pressure	6 bar (up to 16 bar possible, depending on the hose connection)
Weight	approx. 8 kg/m ² sail area (incl. water content, depending on pipe spacing) plus 3.4 kg (size 330) resp. 5 kg (size 400) AVACS Plus diffuser depending on ceiling construction, fixtures, etc.

¹⁾ other designs on request

Multifunction ceiling sail KrantzCool

The Krantz solution that fulfills expectations.



Cooling capacity based on DIN EN 15116

cooling capacity on the water side up to 550 W/m in relation to the device length at $\Delta t_w = -10\text{ K}$



Heating capacity based on DIN EN 15116

heat capacity on the water side up to 330 W/m in relation to the device length at $\Delta t_w = +15\text{ K}$



Primary air volumes when using the KrantzCool

air volume flow rate from 30 - 280 m³/h (depending on device length and nozzle size)



Sound absorption ceiling sail with acoustic fleece

depending on the installation situation and equipment:
 $\alpha_w = 0.5$ to 0.9
optional sound absorber strips available



Cooling



Heating



Air distribution

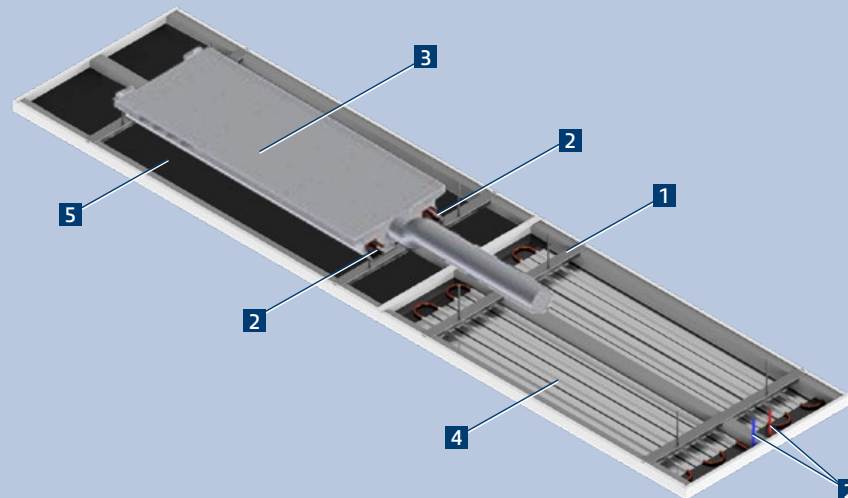


Sound-absorption



UV-C Sterilization





Inspires through versatility

The **Multifunction ceiling sail KrantzCool** offers a high specific cooling and heating capacity. The ultra-compact housing of the KrantzCool allows the induction unit to be mounted above a ceiling sail with an overall installation height of 200 mm. Alternatively, the KrantzCool can also be installed without a ceiling sail. Thanks to the proximity to the bare ceiling, the Coanda effect can be used when blowing out the supply air. This creates a horizontal air flow under the bare ceiling, which helps to ensure low air velocities in the occupied zone.

Caption

- 1 Traverse for suspending the sail elements
- 2 Cooling water supply/return
- 3 KrantzCool
- 4 Contact cooling elements (optional)
- 5 Perforated ceiling sail
- 6 Sound absorber strips (optional)

Multifunction ceiling sail KrantzCool	
Standard nominal length	1 000 - 6 000 mm ¹⁾ (single or multi-panel) maximum single panel length up to 3 000 mm
Standard nominal width	800 - 1 350 mm ¹⁾
Nominal height	50 mm ¹⁾ , 90° upstand ¹⁾
Suspended height	200 mm
Acoustic fleece	laminated on the back with acoustic fleece
KrantzCool	nominal lengths: 1 800, 2 100, 2 400, 2 700 or 3 000 mm width: 560 mm height: 150 mm
Ceiling panel element	galvanized sheet steel, sheet thickness max. 0.6 - 0.8 mm, perforated, perforation ø 2.5 mm, perforated area approx. 16 %, powder-coated similar to RAL 9010, silk matt 20
Primary air connection	DN 125
Water supply KrantzCool	2 to 4 connections DN 15 mm, one-sided
Traverse	2.0 mm galvanized sheet steel
Allowable operating pressure	6 bar (up to 16 bar possible, depending on the hose connection)
Weight	approx. 8 kg/m ² sail area (incl. water content, depending on pipe spacing) plus 16 kg/m KrantzCool depending on ceiling construction, fixtures, etc.

¹⁾ other designs on request

Multifunction ceiling sail AVACS supply air with UV-C module

The Krantz solution that protects.

➡ **Cooling capacity**
corresponds to the combined variant: AVACS supply air
or AVACS recirculated air.

➡ **Heating capacity**
corresponds to the combined variant: AVACS supply air
or AVACS recirculated air.

↻ **Primary air volume when using the AVACS supply air
diffuser or AVACS recirculation fan**
air volume flow rate of 30 - 120 m³/h at up to 35 dB(A)

🔊 **Sound absorption ceiling sail in combination
with a contact cooling system**
depending on the installation situation and equipment:
 $\alpha_w = 0.5$ to 0.9
optional sound absorber strips available

🛡️ **UV-C air sterilization**
proven effectiveness: log level 3 after 40 minutes
(99.9% of all pathogens deactivated)
ozone-free operation
approved UV-C protection in accordance with
DIN EN ISO 15858
suitable for new installations or retrofitting



Cooling



Heating



Air
distribution



Sound-
absorption



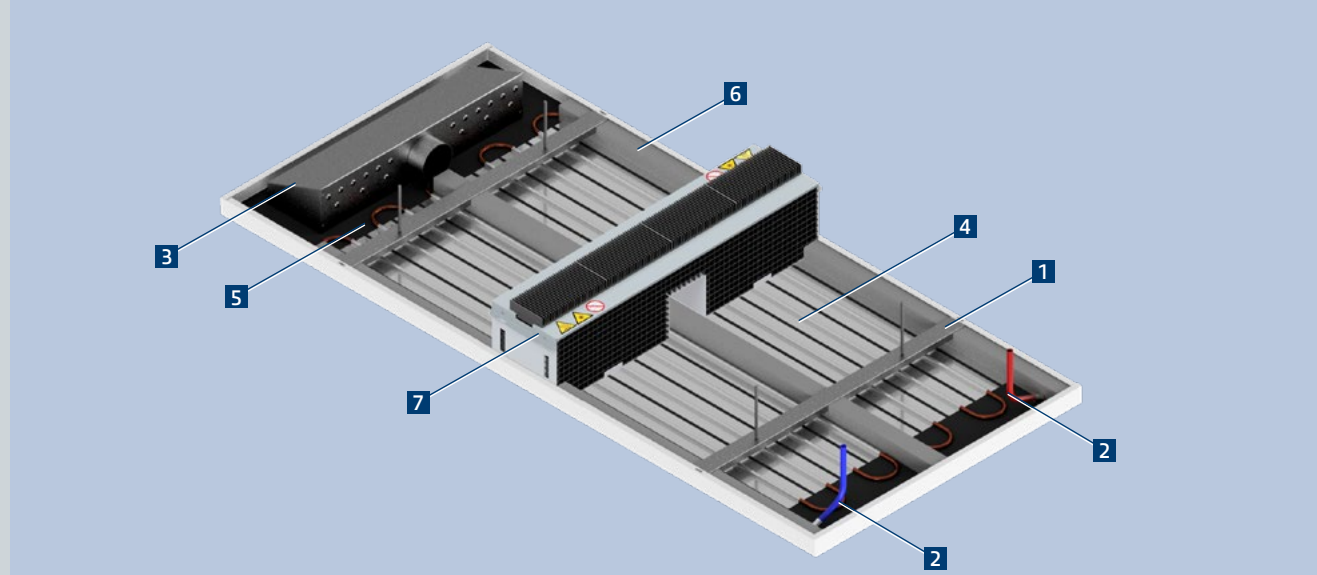
UV-C
Sterilization



UV-C radiation



Sterilization



Ideal for your air hygiene

In combination with the **Multifunction ceiling sail AVACS supply air or recirculated air**, the **UV-C module** can effectively prevent indirect infection by airborne aerosols.

Viruses and bacteria can be deactivated with proven safety through UV-C exposure. For this purpose, primary air with induced room air is passed through the UV-C module for sterilization. The induced room air volume is a multiple of the primary air volume, so that the air sterilization rate amounts to a multiple of the room volume.

The UV-C module is mounted independently of the sail and can be retrofitted to existing AVACS ceiling sails.

Caption

- 1 Traverse for suspending the sail elements
- 2 Cooling water supply/return
- 3 AVACS supply air diffuser
- 4 Contact cooling elements
- 5 Perforated ceiling sail
- 6 Sound absorber strips (optional)
- 7 UV-C sterilization module

Multifunction ceiling sail AVACS supply air with UV-C module	
Standard nominal length	1 000 - 6 000 mm ¹⁾ (single or multi-panel) maximum single panel length up to 3 000 mm
Standard nominal width	800 - 1 350 mm ¹⁾
Nominal height	50 mm ¹⁾ , 90° upstand ¹⁾
Suspended height	min. 170 mm
Acoustic fleece	laminated on the back with acoustic fleece
Pipe spacing	variable, optimally adapted to the sail dimensions in terms of performance
Ceiling panel element	galvanized sheet steel, sheet thickness max. 0.6 - 0.8 mm, perforated, perforation ø 2.5 mm, perforated area approx. 16 %, powder-coated similar to RAL 9010, silk matt 20
Thermal conduction profile	aluminium contactprofile, width = 78 mm, length adapted to the pipe meander pipe meander made of copper pipe ø 10 x 0.35 mm or ø 12 x 0.35 mm
Connection end	for ø 10 mm or ø 12 mm push-fit connections; shaped parts: bend 90° or bend 180°
UV-C module	aluminium bridge with light grid and UV-C light unit length: 850 mm, width: 200 mm, height: 210 mm
Traverse	2.0 mm galvanized sheet steel
Sound absorption	$\alpha_w = 0.5$ to 0.9, depending on the installation situation and equipment
Allowable operating pressure	6 bar (up to 16 bar possible, depending on the hose connection)
Weight	approx. 8 kg/m ² sail area (incl. water content, depending on pipe spacing) plus 3.4 kg AVACS supply air diffuser or 3 kg AVACS recirculation fan and 8 kg UV-C module, depending on ceiling construction, fixtures, etc.

¹⁾ other designs on request

Multifunction ceiling sail AVACS supply air with volume flow controller and silencer

The Krantz solution that is discrete.



Cooling capacity based on DIN EN 14240

cooling capacity on the water side up to 174 W/m² in relation to the sail area at $\Delta t_w = -10$ K and a supply air flow rate of 120 m³/h at -8 K below ambient temperature



Heating capacity based on DIN EN 14037

heating capacity on the water side up to 245 W/m² in relation to the sail area at $\Delta t_w = +15$ K and a supply air flow rate of 120 m³/h isothermal



Primary air volume flow rate when using the AVACS air diffuser

air volume flow of 30 - 120 m³/h at up to 35 dB(A)



Sound absorption ceiling sail in combination with a contact cooling system

depending on the installation situation and equipment:
 $\alpha_w = 0.5$ to 0.9

optional sound absorber strips available

Sound absorption telephony silencer (TS) with constant volume flow controller (CAV) in combination with ceiling sail

reduced sound emissions from the air duct network and room telephony

improved discretion between rooms

planning reliability of the sound power level for the overall system consisting of air diffuser, TS and CAV
CAV adjustable in 11 stages



Cooling



Heating



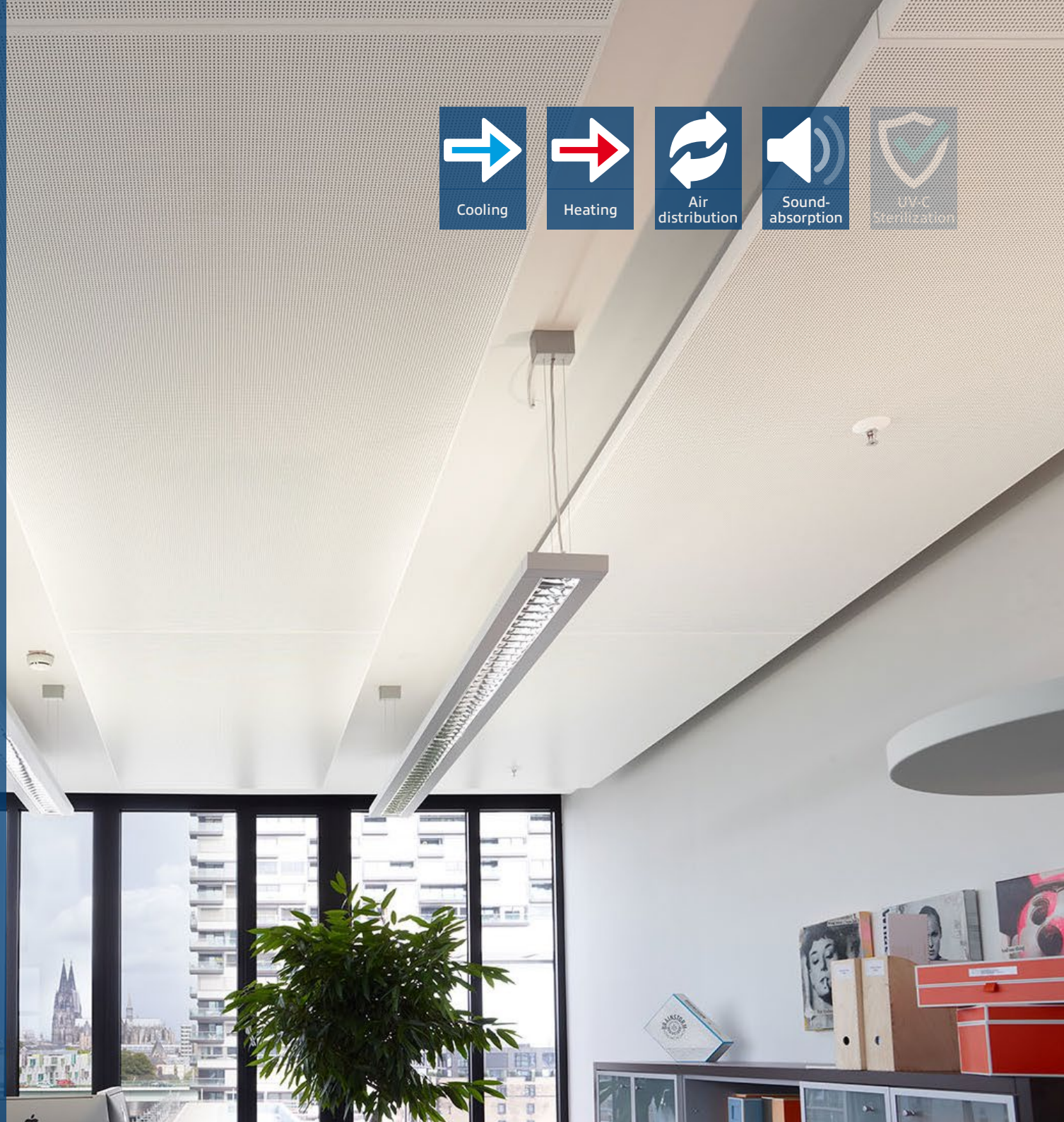
Air distribution

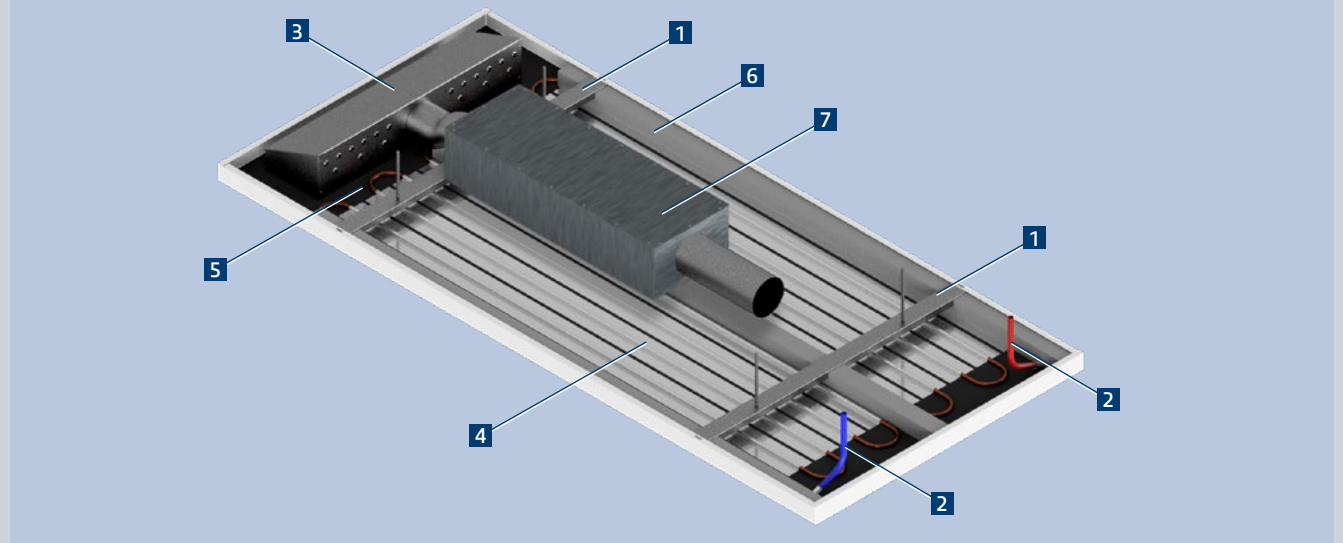
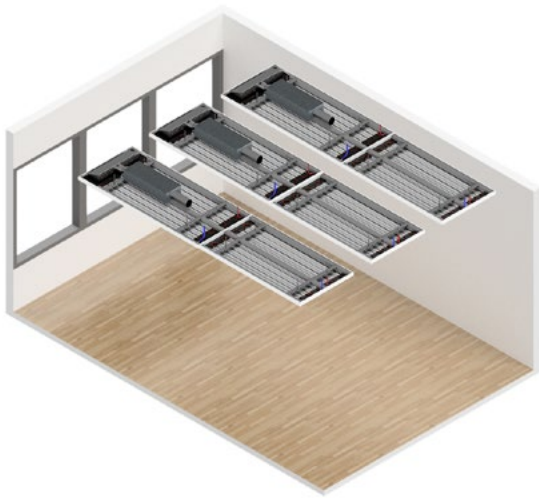


Sound-absorption



UV-C Sterilization





Convinces with discretion

The **AVACS telephony silencer (TS)** with **constant volume flow controller (CAV)** reduces noise emissions from the air duct network and increases discretion between rooms.

The TS is optimally designed for use with the CAV. The combination of ceiling sail, TS and CAV is ideally matched to each other and forms a compact unit that only slightly raises the suspended height of the ceiling sail.

As an option, the TS is also available without the CAV.

Caption

- 1 Traverse for suspending the sail elements
- 2 Cooling water supply/return
- 3 AVACS supply air diffuser
- 4 Contact cooling elements
- 5 Perforated ceiling sail
- 6 Sound absorber strips (optional)
- 7 Telephony silencer (TS) with constant volume flow controller (CAV)

AVACS telephony silencer (TS) with constant volume flow controller (CAV)	
Standard nominal length	1 000 - 6 000 mm ¹⁾ (single or multi-panel) maximum single panel length up to 3 000 mm
Standard nominal width	800 - 1 350 mm ¹⁾
Nominal height	50 mm ¹⁾ , 90° upstand ¹⁾
Suspended height	min. 200 mm
Acoustic fleece	laminated on the back with acoustic fleece
Pipe spacing	variable, optimally adapted to the dimensions of the sail in terms of performance
Ceiling panel element	galvanized sheet steel, sheet thickness max. 0.6 - 0.8 mm, perforated, perforation ø 2.5 mm, perforated area approx. 16 %, powder-coated similar to RAL 9010, silk matt 20
Thermal conduction profile	aluminium contactprofile, width = 78 mm, length adapted to the pipe meander pipe meander made of copper pipe ø 10 x 0.35 mm or ø 12 x 0.35 mm
Connection end	for ø 10 mm or ø 12 mm push-fit connections; shaped parts: bend 90° or bend 180°
Telephony silencer	length 700 mm, width 250 mm, height 150 mm with a pipe connection DN 100
Traverse	2.0 mm galvanized sheet steel
Sound absorption	$\alpha_w = 0.5$ to 0.9 , depending on the installation situation and equipment
Allowable operating pressure	6 bar (up to 16 bar possible, depending on the hose connection)
Weight	approx. 8 kg/m ² sail area (incl. water content, depending on pipe spacing) plus 3.4 kg AVACS supply air diffuser and 5.4 kg TS and CVFC depending on ceiling construction, fixtures, etc.

¹⁾ other designs on request

**Multifunctional
ceiling sail AVACS
with a large product
family and a wealth
of variants**

**The Krantz solution
that offers variety!**





Beyond the standard

The AVACS product family comprises many variants with numerous options. Nevertheless, individual projects occasionally require a special solution that is not included in the standard scope of the AVACS product family.

Even in such cases, the AVACS remains customizable and can be configured outside of the standard. In addition to varying the shape and color of the ceiling sails, installations such as lamps or sprinklers can also be integrated into the AVACS ceiling sails.

Have we inspired your creativity or are you still looking for a suitable solution? Contact us, we will be happy to advise you!





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