

Perforated front



Adjustable nozzle configuration



JetSplit air control blades



Water connection



Tested to VDI 6022



Chilled beam for ceiling installation DID614



Active chilled beam with four-way air discharge and horizontal heat exchanger, suitable for suspended ceiling systems

Active chilled beam for heating and cooling, with 2-pipe or 4-pipe heat exchanger, for integration with various ceiling systems.

- Preferably for room heights up to 4.20 m
- High heating and cooling capacity with a low conditioned primary air volume flow rate and low sound power level
- High comfort levels due to low airflow velocity in the occupied zone
- Five nozzle variants, including a variant with adjustable twin nozzles, to optimise induction
- Removable front, fixed with magnets

Optional equipment and accessories

Regulating equipment

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Description



DID614 / 593 × 593 / HP

Application

- Active chilled beams of Type DID614 for the integration into various ceiling systems, preferably for room heights up to 4,20 m
- Particularly suitable for suspende ceiling system
- 2-pipe or 4-pipe heat exchangers enable good comfort levels with a low conditioned primary air volume flow rate
- Energy-efficient solution since water is used as a medium for heating and cooling
- Adjustable JetSplit air control blades (optional) allow for the manual adjustment of the four-way air discharge
- Large volume flow rate range due to the adjustable twin nozzles (optional)
- Delivered with measuring outlet

Construction

- Powder-coated RAL 9003 gloss 30
- SL: Special finish

Nominal sizes

- 600, 1200 mm

Attachments

- Regulating equipment

Usefuls additions

- Valves, regulators and actuators
- Water connection: Tectite 12mm to 1/2" internal/ external thread

Special features

- Four-way air discharge
- Horizontal heat exchanger as 2-pipe or 4-pipe system
- Optional twin nozzles, adjustable, for a large volume flow rate range

Construction features

- Spigot is suitable for circular ducts to EN 1506 or EN 13180
- Removable front, fixed with magnets, secured with safety cables
- 4 suspension points for on-site installation
- Five nozzle variants to optimise induction

Materials and surfaces

- Casing, spigot, nozzle plate and front is made of galvanised sheet steel
- Heat exchanger with copper tubes and aluminium fins
- Exposed surfaces are powder-coated with RAL 9003 - gloss 30
- JetSplit air control blades made of polypropylene, UL 94, flame retardant (V0)

Installation and commissioning

- Preferably for rooms with a clear height up to 4.20 m
- Flush ceiling installation
- Side entry primary air spigot Lengths of 593, 598, or 1193, and 1198 mm, and widths of 593, and 598 mm
- Active chilled beam has 4 suspension points for on site installation
- Heat exchangers are fitted with water flow and water return connections at the narrow side, ø 12 x 1mm copper pipe
- The piping circuit in the battery is symmetrical, so flow/return is not determined

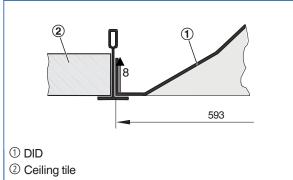
Maintenance

- No moving parts, hence low maintenance
- The heat exchanger can be vacuumed with an industrial vacuum cleaner if necesarry
- VDI 6022, Part 1 applies (Hygiene requirments on air handling units and systems)

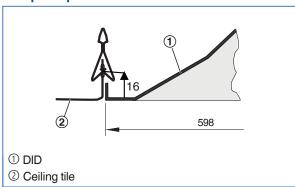
Dimensioning

- For dimensioning, the design program Easy Product Finder should be used, wich can be downloaded from our website. This will help you to select and dimension the correct chilled beam for your project.
- Contact our sales team.

Ceiling installation with T-bars A-edge

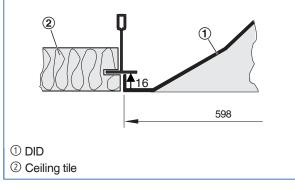


Ceiling installation with clamping profile Dampa Clip-in



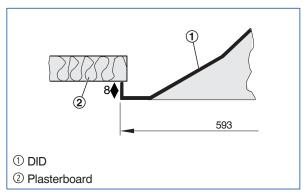
② Ceiling tile

DS-Edge

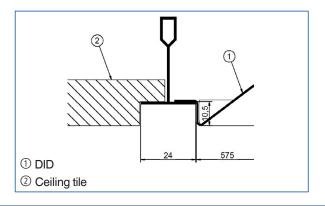


Ceiling installation with conceled T-bars

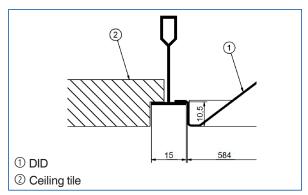
DID ceiling installation, plasterboard



Ceiling installation with E-edge T24



Ceiling installation with E-edge T15



Technical data

| Nominal length | 600, 1200 mm |
|-------------------------------------|----------------------------|
| Length | 593, 598, or 1193, 1198 mm |
| Height | 230/245/285 mm |
| Widht | 593, 598 mm |
| Primary air spigot, diameter | 125/160/200 mm |
| Max. operating pressure, water side | 10 bar |
| Max. operating temperature | 75 C |

Description

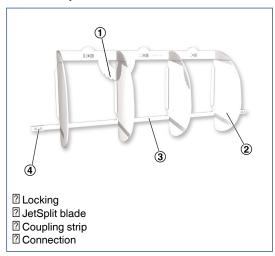
JetSplit air control blades

If a high cooling capacity is required in a very small space with active chilled beams, optional JetSplit air control blades allow for adjusting the air discharge direction such that the acceptable air velocity in the occupied zone is not exceeded. The airflow of each active chilled beam is spread and discharged according to the room geometry. if the use of a room changes, the air distribution can be optimised by adjusting the JetSplit air control blades accordingly.

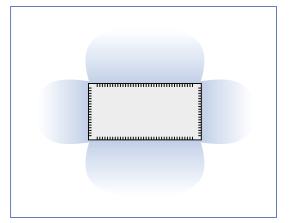
- It is possible to adjust several sets of JetSplit air control blades together
- For fine adjustment, the sets of JetSplit air control blades can be disconnected from each other
- To adjust a set of JetSplit air control blades, use both hands to move the two outer blades of the set as required
- Maximum possible adjustment is 45° to the right or left in steps of 15°
- The JetSplit air control blades are factory set to straight air discharge

If the air discharge is not straight, the water-side capacity will be slightly affected. JetSplit air control blades set at 45° may cause a loss of up to 5%.

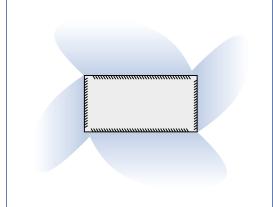
Set of JetSplit air control blades



Straight air discharge



Angled air discharge



Order code

 $DID614 - 0 - 4 - HE - R - A1 / \underline{593 \times 593} - 160 - \underline{SL - RAL\,9006} / \,KV24 / \,HV24$ 2 3 4 5 6 7 8 9 10 11

1 Type

DID614 Active cilled beam

2 Design variant

No entry: perforated front with circular holes, encased

3 Heat exchanger

2-pipe, cooling

4-pipe, heating/cooling

4 Nozzle variants

ΗE High Efficiency Standard, small S1 Standard, large S2 High performance HP Double adjustable nozzles DA

Factory setting: all nozzles are open

DA-F Double fixed nozzles

5 Position of water connection

R Right side Left side

6 Water connections

No entry: plain pipe tails, Ø12 x 1mm Tectite 12mm to 1/2" external thread**** Α1 Tectite 12mm to 1/2" internal thread**** **A2**

7 Overall dimensions [mm]

 $\overline{L} \times B$, nominal size 600×600

593 × 593 (A-edge/plasterboard)

598 × 598 (DS/DC)

575 × 575 (E-edge T24)

584 × 584 (E-edge T15)

 $L \times B$, nominal size 1200×600

1193 x 593 (A-edge/plasterboard)

1198 × 598 (DS/DC)

1175 × 575 (E-edge T24)

1184 × 584 (E-edge T15)

8 Primary spigot

125 125 mm* 160 mm** 160 200 mm*** 200

9 Exposed surface

No entry:powder coated RAL 9003 - gloss 30

SL-RAL Special finish SL-NCS Special finish

10 Cooling valve - actuator

No entry: none Cooling valve**** ΚV

KV 24 Cooling valve and actuator 24V on/off

with adjustable kV****

Cooling valve and actuator 230V on/off KV 230

with adjustable kV****

11 Heating valve - actuator

No entry: none Heating valve**** нν

Heating valve and actuator 24V on/off with adjustable kV**** **HV 24**

HV 230 Heating valve and actuator 230V on/off with adjustable kV****

* Only with nozzle variant HE, S1 og DA

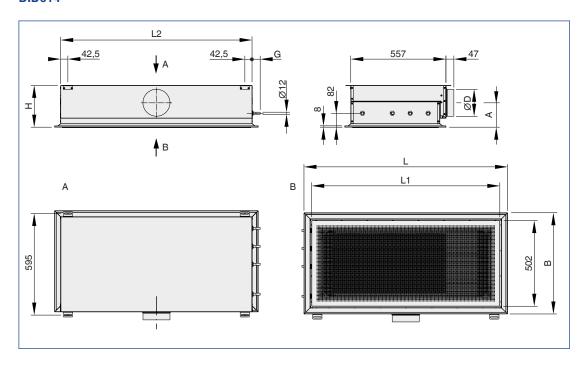
** Only with nozzle variant S2, HP, DA og DA-F

*** Only with nozzle variant S2 or HP, and standarddimension1200x600

****Supplied in loose parts

Dimensions

DID614



Dimensions [mm]

| Nominell | L | В | L1 | L2 | G |
|------------|------|-----|------|------|------|
| 600 x 600 | 593 | 593 | 502 | 523 | 47.5 |
| | 598 | 598 | 502 | 523 | 47.5 |
| | 1193 | 593 | 1102 | 1123 | 47.5 |
| 1200 x 600 | 1198 | 598 | 1102 | 1123 | 47.5 |

Dimensions [mm]

| D | Н | Α |
|-----|-----|-----|
| 123 | 230 | 125 |
| 158 | 245 | 143 |
| 198 | 285 | 163 |

Weight [kg]

| Nominal size | kg/piece | Contained water (max.) |
|--------------|----------|------------------------|
| 600 x 600 | 16 | 2 |
| 1200 x 600 | 30 | 3 |

Description

This spesification text describes the general properties of the product.

Active chilled beams of Type DID614, with fourway air discharge and high thermal output, for air-water systems.

For installation flush with the ceiling, preferably in rooms with a height up to 4.20 m.

The units consist of a casing with suspension points, a spigot, non-combustible nozzles, and a horizontal heat exchanger.

Five nozzle variants to optimise induction.

Special features

- Four-way air discharge
- Horizontal heat exchanger as 2-pipe or 4-pipe system
- Adjustable nozzle configuration for a large volume flow rate range

Materials and surfaces

- Casing, spigot, nozzle plate, and front is made of sheet steel
- Heat exchanger with copper tubes and aluminium fins
- Exposed surfaces are powder coated with RAL 9003 - gloss 30
- JetSplit air control blades made of polypropylene, UL 94, flame retardant (V0)

Construction

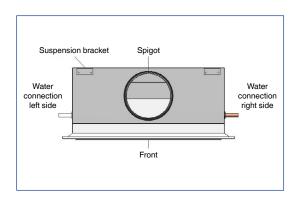
- Powder coated RAL 9003 gloss 30
- SL: Special finish

Technical data

- Nominal length: 600, 1200 mm
- Length: 593, 598 mm, or 1193, 1198 mm
- Height: 230/245/285 mm
- Widht: 593, 598 mm
- Primary air spigot, diameter: 125/160/200 mm
- Max. operating pressure: 10 bar
- Max. operating temperature: 75 °C

Water connection

 For placement of water connection, see figure below.



- The water valve is regulated by turning the disc, which is numbered 1-10, with the current value against the groove in the threads. KVS/KV can be found in the data sheet Trox TRV-2ways valve_KV-verdier, which can be found under Tilbehør kjølebaffel. KVS is the amount of water (here stated in l/h) that flows through the valve at a pressure drop of 1 bar and a fully open valve in the various positions. The KVS values apply without an actuator fitted. When the actuator is fitted, the values below KV (BP2).