

SMART BEAM



MULTI-SERVICE ACTIVE CHILLED BEAM WITH TWO-WAY AIR DISCHARGE AND HORIZONTAL HEAT EXCHANGER

Active chilled beam for heating and cooling, with 2-pipe or 4-pipe heat exchanger, for freely suspended installation; additional functions or services (e.g. lighting, loudspeakers, sprinklers, smoke detectors, or PIR sensors) can be integrated

- Preferably for room heights up to 4.00 m
- High heating and cooling capacity with a low conditioned primary air volume flow rate and low sound power level
- High comfort levels as a result of low airflow velocities in the occupied zone
- Unit consists of three parts: wall end, active section, and front end
- Four nozzle variants to optimise induction based on demand

Optional equipment and accessories

- Control system
- 3 different front ends
- Various services, e.g. lighting, sprinklers, smoke detectors, PIR sensors, and loudspeakers
- Powder coating in many different colours, e.g. RAL CLASSIC



Application

- Active chilled beams of Type DID-SB (SMART BEAM) for freely suspended installation, preferably for room heights up to 4.00 m
- Project-specific integration of functions or services such as lighting, loudspeakers, sprinklers, smoke detectors, or PIR sensors
- Integral strip light fittings use innovative microprism optics to provide uniform illumination of rooms
- Each section can be individually designed
- 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 for heating and cooling

Special characteristics

- Freely suspended active chilled beam with choice of different face plate perforations
- Heat exchanger as 2-pipe or 4-pipe system
- Wide range of additional services such as lighting, sprinklers, loudspeakers and sensors (accessories)
- Water connections at the narrow side, Ø12 mm Cu pipe, with plain tails or with G½" external thread, or with a G½" union nut; with flat seal

Wall end

- Cover for air and water connections at the end facing the wall
- Connection of project-specific services

Active section

- Air discharge and heat exchanger
- Integration of different functions, e.g. acoustic fleece, lighting or sensors

Front end

- Available in three designs
- Integration of project-specific functions, e.g. loudspeakers

Nominal sizes

- 3000 mm

Variants

- Induced air grille with various perforation patterns

Heat exchanger

- 2: 2-pipe systems

- 4: 4-pipe systems

Nozzle variants

- K: Small
- Z: Small plus
- M: Medium
- G: Large

Front end

- Circular
- Straight
- Slanted

Construction

- Powder-coated RAL 9010, pure white, gloss level 50 %
- P1: Powder-coated in any other RAL colour, gloss level 70 %
- P1: Powder-coated RAL 9006, white aluminium, gloss level 30 %

Attachments

- Water connection A1: G $\frac{1}{2}$ " external thread and flat seal
- Water connection A2: G $\frac{1}{2}$ " union nut and flat seal

Accessories

- Sprinkler
- Smoke detector
- PIR sensor
- Loudspeaker
- Indirect and/or direct lighting
- Volume flow controller

Useful additions

- Connecting hoses
- Control equipment consisting of a control panel including a controller with integral room temperature sensor; valves and valve actuators; and lockshields (no lighting control)
- X-AIRCONTROL control system

Construction features

- Spigot is suitable for circular ducts to EN 1506 or EN 13180
- Unit consists of three parts: wall end, active section, and front end
- Four suspension points for on-site installation (by others)
- Four nozzle variants to optimise induction based on demand
- Perforated front plate (choice of different designs) with acoustic fleece at the rear

Materials and surfaces

- Wall end as well as active section with front plate and cross bars are made of galvanised sheet steel
- Front end made of aluminium or galvanised sheet steel
- Heat exchanger with copper tubes and aluminium fins
- Exposed surfaces at the front are powder-coated pure white (RAL 9010) or in any other RAL colour
- Exposed surfaces at the rear, including nozzle box, in RAL 9006, white aluminium
- Heat exchanger also available in RAL 9006, white aluminium
- Nozzle plate made of sheet steel

Standards and guidelines

- Products are certified by Eurovent (no. 09.12.432) and listed on the Eurovent website
- Declaration of hygiene conformity to VDI 6022

Maintenance

- No moving parts, hence low maintenance
- Heat exchanger is easily accessible for cleaning
- The heat exchanger can be vacuumed with an industrial vacuum cleaner if necessary
- VDI 6022, Part 1, applies (Hygiene requirements for ventilation and air-conditioning systems and units)

TECHNICAL INFORMATION

Function, Technical data, Quick sizing, Specification text, Order code, Related products 

Dimensions and weight 

Installation examples, Installation details, Basic information and nomenclature 

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