





EXTENDED BORDER



PROTECTIVE CAGE



VERTICAL AIR DISCHARGE



HORIZONTAL SWIRLING AIR DISCHARGE

VD

FOR HIGH ROOMS, WITH ADJUSTABLE AIR CONTROL BLADES

Square ceiling swirl diffusers, with manual or motorised adjustment of the air pattern to ensure draught-free ventilation of the occupied zone both in heating and cooling modes

- Nominal sizes 425, 600, 775, 1050
- Volume flow rate range 95 1490 l/s or 342 5364 m<sup>3</sup>/h Diffuser face made of aluminium with anodised finish .
- .
- For supply air .
- For variable and constant volume flows
- High induction results in a rapid reduction of the temperature . difference and airflow velocity
- Discharge direction can be adjusted manually or with an actuator
- Ideal for high rooms

Optional equipment and accessories

- Exposed diffuser face available in RAL CLASSIC colours
- Horizontal or vertical duct connection
- . An extended border improves the horizontal air discharge in cooling mode
- Protective cage for use in gymnasiums
- Actuators for adjusting the air discharge direction

# Application

## Application

- Type VD ceiling swirl diffusers are used as supply air diffusers for high rooms in comfort and industrial zones
- . For production halls, gymnasiums, theatres and conference rooms as well as for large internal spaces in airports, railway stations and shopping centres
- For mixed flow ventilation with different air patterns in heating and cooling modes
- Horizontal swirling supply air discharge in cooling mode
- The efficient swirl creates high induction levels, thereby rapidly reducing the temperature difference and airflow velocity
- Angled or vertical air discharge in heating mode .
- For variable and constant volume flows .
- For supply air to room air temperature differences from -12 to +15 K  $\,$ .
- For room heights exceeding 3.8 m
- With freely suspended installation, an extended border supports the horizontal air discharge in cooling mode

## **Special characteristics**

- With adjustable air control blades for high rooms .
- . The air pattern can be adjusted manually or with an actuator
- . Horizontal or vertical duct connection

#### Nominal sizes

• 425, 600, 775, 1050

# Description

#### Variants

• Diffuser face only

#### Connection

- H: Horizontal duct connection
- V: Vertical duct connection

#### **Parts and characteristics**

- Square diffuser face with four sections of blades
- Diffuser face with blades that can be adjusted simultaneously, for air discharge from horizontal (0°) to vertical (90°) •
- Plenum box for horizontal or vertical duct connection

### Accessories

- Electric actuators for adjusting the air discharge direction
- Extended border and protective cage

## **Useful additions**

• TDC temperature difference control module

## **Construction features**

• Spigot suitable for circular ducts to EN 1506 or EN 13180

### Materials and surfaces

- Diffuser face made of extruded aluminium sections
- Plenum box, cross bar and extended border made of galvanised sheet steel .
- Protective cage made of steel mesh
- Diffuser face with anodised finish, E6-C-0, natural colour
- Protective cage powder-coated RAL 9010, pure white
- Extended border powder-coated RAL 9006, white aluminium
- P1: Powder-coated, RAL CLASSIC colour

## Standards and guidelines

• Sound power level of the air-regenerated noise measured according to EN ISO 5135

## Maintenance

- Maintenance-free as construction and materials are not subject to wear
  Inspection and cleaning to VDI 6022