



AT-A/825×225

## AT

### VENTILATION GRILLES, MADE OF ALUMINIUM, WITH INDIVIDUALLY ADJUSTABLE, HORIZONTAL BLADES

Ventilation grille with droplet shaped blades

- Nominal sizes 225 × 125 - 1225 × 525 mm
- Volume flow rate range 23 - 2000 l/s or 83 - 7200 m<sup>3</sup> /h
- Grille face made of aluminium with anodised finish
- Front border, 23 mm or 27 mm wide
- Concealed screw fixing

Optional equipment and accessories

- Grille face in RAL CLASSIC colours
- Installation subframe
- Installation subframe for fitting filter media
- Attachments for volume flow rate balancing and air direction control
- Spring clip fixing

## General information

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Application

- Ventilation grille of Type AT as supply air or extract air variant for comfort zones and industrial zones
- Directed supply air discharge for mixed flow ventilation
- Blades are adjustable to meet different local requirements
- For variable and constant volume flows
- For supply air to room air temperature differences from -12 to +4 K
- For installation in walls, sills and rectangular ducts

Special characteristics

- Individually adjustable blades
- Front border in two widths
- Concealed screw fixing, spring clip fixing or countersunk holes
- Optional installation subframe and casing for the fitting of filter media

Nominal sizes

- Nominal length: 225, 325, 425, 525, 625, 825, 1025, 1225 mm
- Nominal height: 125, 225, 325, 425, 525 mm

Other dimensions upon request

Variants

#### Front border

- 27 mm wide
- G11: 23 mm wide

#### Fixing

- Concealed screw fixing
- G11: Concealed screw fixing (23 mm)
- A11: Countersunk holes (only 27 mm)
- B11: Spring clip fixing (27 mm)
- H11: Spring clip fixing (23 mm)

#### Parts and characteristics

- Sloped border with chamfered inside edge
- Individually adjustable, horizontal blades
- Factory fitted perimeter seal
- Vertical centre mullion for nominal lengths over 625 mm

#### Attachments

- AG, AS, D, DG: For volume flow rate balancing and for air direction control

#### Accessories

- Installation subframe: For the fast and simple installation of ventilation grilles
- Filter casing: Frame with filter element and spring clip fixing (only with 27 mm wide front border)

#### Technical data

- Nominal sizes: 225 × 125 to 1225 × 525 mm
- Minimum volume flow rate (supply air): 23 – 685 l/s or 83 – 2466 m<sup>3</sup> /h
- Maximum volume flow rate (supply air), at L<sub>WA</sub> max. 40 dB(A) without attachments: 115 – 2000 l/s or 414 – 7200 m<sup>3</sup> /h
- Supply air to room air temperature difference: -12 to +4 K

#### Construction features

- Asymmetrically supported blades

#### Materials and surfaces

- Border and blades made of aluminium
- Border and blades anodised, E6-C-0, natural colour
- P1: Border and blades 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

## TECHNICAL INFORMATION

Function, Technical data, Specification text, Order code



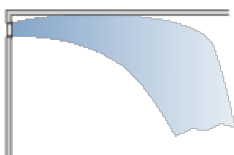
### Functional description

Ventilation grilles are air terminal devices for the supply air and extract air of ventilation and air conditioning systems. They direct the supply air into the room. Ventilation grilles with adjustable blades allow for adapting the discharge direction to the local conditions. The result is a mixed flow ventilation in comfort zones and industrial zones, with good overall room ventilation.

Induction slows the airflow down, i.e. the airflow velocity decreases as the distance from the grille increases. The distance at which the airflow velocity reaches a certain defined value, e.g. 0.2 m/s, is called throw distance. The supply air jet from wall grilles that are installed near the ceiling achieves a larger throw distance than a free jet (from a grille that is not installed near the ceiling). Single grilles, groups of grilles and continuous horizontal runs all achieve different throw distances.

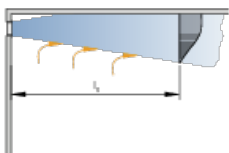
In cooling mode it is necessary to take account of the jet deviation towards the occupied zone, which increases as the supply air to room air temperature difference increases and the discharge velocity decreases. In heating mode the supply air jet deviates towards the ceiling. This has no negative effect on the airflow velocity in the occupied zone, but it may affect the complete ventilation of the room.

### Air pattern in cooling mode, with ceiling effect, sectional view



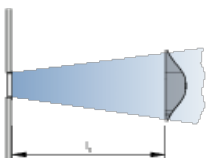
Distance from ceiling  $\leq 0.3$  m

### Air pattern with ceiling effect, sectional view



Distance from ceiling  $\leq 0.3$  m

### Air pattern with ceiling effect, top view



Nominal sizes	225 × 125 to 1225 × 525 mm
Minimum volume flow rate	23 – 685 l/s or 83 – 2466 m <sup>3</sup> /h
Maximum volume flow rate, with L <sub>WA</sub> max. 40 dB(A) without attachments	115 – 2000 l/s or 414 – 7200 m <sup>3</sup> /h
Supply air to room air temperature difference	-12 to +4 K

Ventilation grilles, rectangular, made of aluminium, for supply and extract air. Aesthetic sloped border with chamfered inside edge Preferably for wall and sill installation but also suitable for rectangular ducts.

Ready-to-install component which consists of a border and individually adjustable, horizontal blades.

Concealed screw fixing, spring clip fixing or countersunk holes, for installation into an installation subframe or fixing onto an installation surface.

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

#### Special characteristics

- Individually adjustable blades
- Front border in two widths
- Concealed screw fixing, spring clip fixing or countersunk holes
- Optional installation subframe and casing for the fitting of filter media

#### Materials and surfaces

- Border and blades made of aluminium
- Border and blades anodised, E6-C-0, natural colour
- P1: Border and blades powder-coated, RAL CLASSIC colour

#### Technical data

- Nominal sizes: 225 × 125 to 1225 × 525 mm
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- Supply air to room air temperature difference: -12 to +4 K

#### Sizing data

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- $q_v$  \_\_\_\_\_ [m<sup>3</sup> /h]
- $\Delta p_t$  \_\_\_\_\_ [Pa]

#### Air-regenerated noise

- L<sub>WA</sub> \_\_\_\_\_ [dB(A)]

AT    -    AG    /    825 × 225    /    A1    /    B11    /    P1 - RAL ...  
|        |        |        |        |        |        |  
1        2        3        4        5        6

#### 1 Type

AT Single grille

#### 2 Attachments

A Without (grille face only)

AG Damper unit, opposed action blades

AS Hit and miss damper

D Air direction control, blades installed at 90° to the front blades, independently adjustable

DG D combined with AG

3 Nominal size [mm]  
L × H

4 Installation subframe  
No entry: none

A1 For front border width F = 27 mm

B1 For front border width F = 23 mm

5 FixingNo entry: concealed screw fixing, F = 27 mm  
G11 Concealed screw fixing, F = 23 mm

A11 Countersunk holes, F = 27 mm

B11 Spring clip fixing, F = 27 mm

H11 Spring clip fixing, F = 23 mm

6 Exposed surface

No entry: anodised, E6-C-0, natural colour

P1 Powder-coated, specify

RAL CLASSIC colour Gloss level  
RAL 9010 50 %

RAL 9006 30 %

All other RAL colours 70 %

Order example: AT-AG/825×225/B1/G11

Attachments	Damper unit, opposed action blades
Nominal size	825 × 225 mm
Installation subframe	With installation subframe for 27 mm wide front border
Installation	Concealed screw fixing
Exposed surface	Anodised, E6-C-0, natural colour

<b>AT</b>	-	<b>EF</b>	-	<b>AS</b>	/	<b>825 × 225</b>	/	<b>P1 - RAL ...</b>
<b> </b>		<b> </b>		<b> </b>		<b> </b>		<b> </b>
<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>

## 1 Type

AT Single grille, 27 mm wide front border

## 2 Construction

EF Installation subframe with filter element (ISO Coarse 60 %, Medium C11 (DIN EN ISO 16890)) and spring clip fixing

3 AttachmentsA Without

AS Hit and miss damper

4 Nominal size [mm]  
L × H

5 Exposed surfaceNo entry: anodised, E6-C-0, natural colour

P1 Powder-coated, specify

RAL CLASSIC colour Gloss level

RAL 9010 50 %

RAL 9006 30 %  
All other RAL colours 70 %

E-EF  
|  
1

/

825 x 225  
|  
2

Order key maintenance see E-EF replacement filter media -> OC (ID 1199121)

## Product details

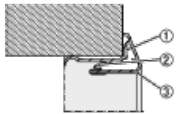


### Installation and commissioning

- Installation preferably in walls, sills and rectangular ducts
- Installation with installation subframe is recommended
- If no installation subframe is used, the border should be fixed with screws

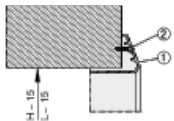
These are only schematic diagrams to illustrate installation details.

### Ventilation grille with spring clip fixing



- ① Installation subframe
- ② Spring clip
- ③ Ventilation grille

### Ventilation grille with screw fixing



- ① Ventilation grille
- ② Fixing screw (by others)