

## AW Axial Fans

### Low pressure axial wall fans up to 39.000 m<sup>3</sup>/h

- Available with AC and EC motors for 50 and 60Hz
- Installation in any position
- Noise and energy optimized impeller

[Find more details in our online catalogue](#)



### Flexible

The AW fans are **designed** for extracting air in **low pressure systems**. They can be installed in any position and way according to your demands.

This ensures that the fans can be used in a variety of **commercial** and **industrial** applications.

### Performance

The **noise optimized** axial impellers together with the **high efficient** external rotor motors are designed to ensure high-level performance to **minimize power consumption** and **maximize efficiency**.

## Certifications



Green Ventilation

## Features

### Construction

The square wall plate is made of galvanized steel with powder coating in RAL9005.

The range with **AC motors**, sizes **200-630** are provided **with inlet protection grid** and sizes **710-1000 without inlet protection grid**.

The **complete** range with **EC motors** is provided **with inlet protection grid**.

Depending on the type, the fans are equipped with an external **terminal box**, protection class **IP44, IP54 or IP55**.

### Impeller

The AW fans use **axial impellers**. These are made of **coated steel**, **composite** material or **aluminum**, are dynamically **balanced** and are paired with corresponding external rotor motors.

### Motor

Depending on type, AW fans are equipped with an **AC** or **EC external rotor motor**. The motors are suitable for **50Hz** and **60Hz**.

### Motor protection

Sizes **200-300** with **AC** motors are available with **integrated** thermal protection with manual (electrical) reset.

Sizes **200-1000** with **AC** motors are available with prewired integral **thermal contact** with leads to a **motor protection device**.

Models with **EC** motors have an **integrated** electronic, **thermal protection** including **locked-rotor protection** and **soft-start**.

### Control

**EC motors** can be controlled by an external **signal of 0-10V**.

**EC motors depending on size** are also equipped with **ModBus** communication or **alarm signal**.

**AC motors** can be controlled by **5-step**, **stepless** speed regulator or **frequency inverter**.

### Installation

The AW fans can be installed in **any position** on **wall** or **ceiling** in **indoor** environments.

## Technical parameters

### Nominal data

Voltage (nominal)	400	V
Frequency	50; 60	Hz
Phases	3~	
Input power	951	W
Input current	1.52	A
Impeller speed	1,362	rpm
Air flow	max 3.177	m³/s
Air flow at max. efficiency	2.1917	m³/s
Specific ratio	1,000000	
Temperature of transported air	max 60	°C
Max temperature of transported air, when speed controlled	60	°C

### Protection/Classification

Enclosure class, motor	IP54
Insulation class	B

### Data according to ErP

ErP ready	ErP 2018
Measurement category	A
Efficiency grade	49.4 $\eta_{actual}$
Efficiency, static	42.9 $\eta_{statA}$
Target efficiency grade ErP2013	36 $\eta_{target2013}$
Target efficiency grade ErP2015	40 $\eta_{target2015}$

### Dimensions and weights

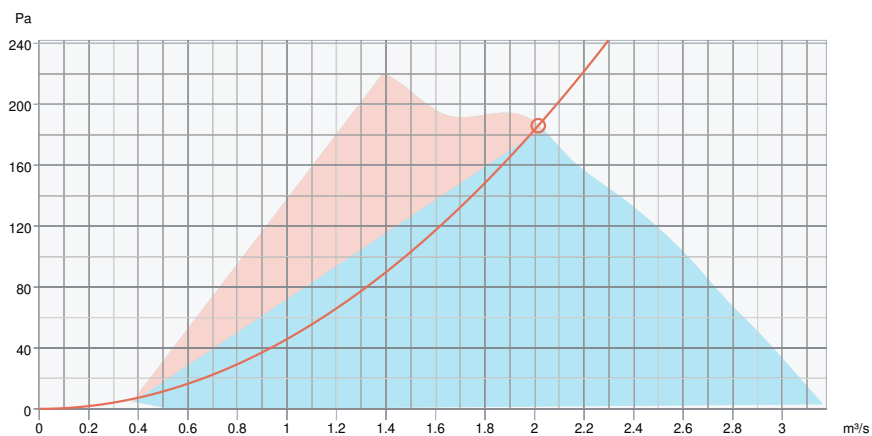
Weight	21.8	kg
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### Others

Color name, casing	Black
Motor type	EC

## Performance

### Performance curve



#### Hydraulic data

Required air flow	2.01 m³/s
Required static pressure	186 Pa
Air density	1.204 kg/m³

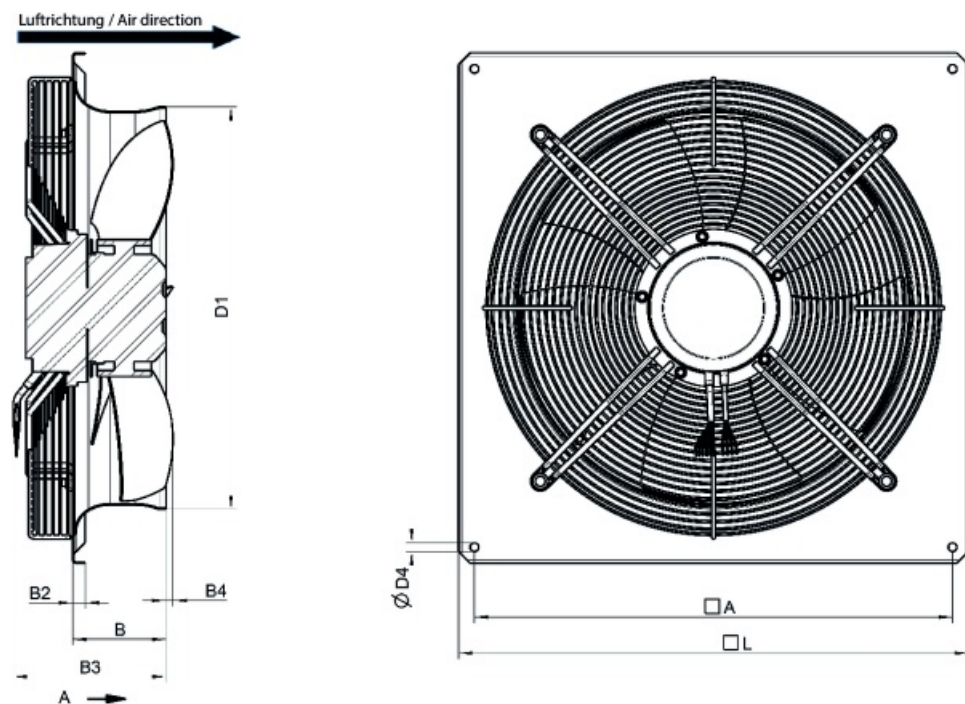
#### Accessories

Ecodesign

Ecodesign 327

Manufacturer	Systemair GmbH
Type	AW 560D EC
Year of manufacture	See name plate of the fan
Air flow qv	2.1917 m <sup>3</sup> /s
Efficiency category	static
Efficiency grade N	49.4
Efficiency grade target N	40
Speed (rpm) n	1,360 rpm
Pressure increase total psf	168 Pa
Power consumption Ped	930 W
Overall efficiency	42.9 %
Overall efficiency target	33.5 %
Variable speed drive	Yes
Additional components	Components used to calculate the energy efficiency that are not apparent from the measurement category are detailed in the CE declaration.
Maintenance	Information on installation, operation and maintenance is provided in the operating instructions.
Recycling / disposal	Information on recycling and disposal is provided in the operating instructions.

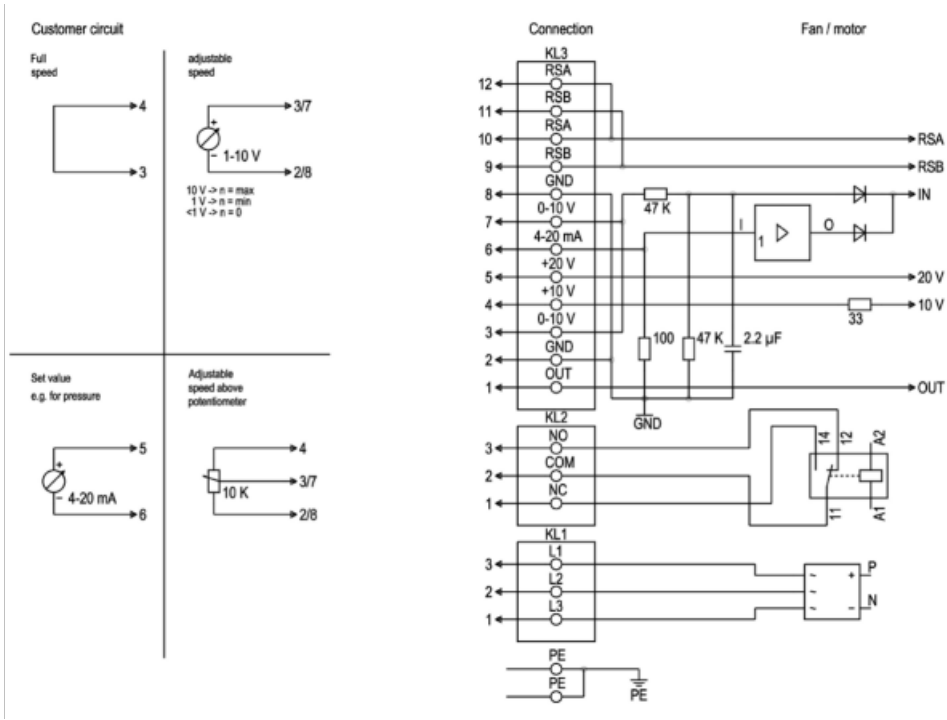
## Dimension



	□A	B	B2	B3	B4	ØD1	ØD4	□L
AW 560D EC sileo	675	135	16	208	6	576	11	725

## Wiring

No.	Pin	Signal	Function / assignment
PE	-	PE	Protective earth connection
KL1	1, 2, 3	L1, L2, L3	Supply voltage, 50/60 Hz
KL2	1	NC	Floating status message contact, break for failure
KL2	2	COM	Floating status message contact, changeover contact, common connection (2 A, max. 250 VAC, min. 10 mA, AC1)
KL2	3	NO	Floating status message contact, normally open, make for failure
KL3	1	OUT	Analogue output, 0-10 VDC, max. 3 mA, SELV, Output of the current motor level control coefficient: 1 V corresponds to 10% level control coefficient, 10 V correspond to 100% level control coefficient.
KL3	2, 8	GND	Reference mass for control interface, SELV
KL3	3, 7	0-10 V	Use control / actual value input 0-10 VDC, impedance 100 kΩ only as alternative to 4-20 mA input, SELV
KL3	4	+10 V	Voltage output 10 VDC (+/- 3%), max. 10 mA, Supply voltage for ext. devices (e.g. potentiometer), SELV
KL3	5	+20 V	Voltage output 20 VDC (+25%/-10%), max. 50 mA, Supply voltage for ext. devices (e.g. sensors), SELV
KL3	6	4-20 mA	Use control / actual value input 4-20 mA, impedance 100 Ω, only as alternative to 0-10 V input, SELV
KL3	9, 11	RSB	RS485 interface for MODBUS, RSB
KL3	10, 12	RSA	RS485 interface for MODBUS, RSA





## Accessories

- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Vent control board (3115)
- MTP 10, 10K, Speed control (32731)
- Potentiometer MTP 20, 0-10V (310220)
- Step switch S-5EC, 0-10V (76738)
- AW 560D EC Axial fan (448441)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent Room Unit (3018)
- MTV-1/010 Controller 0..10V+ (30650)
- REV-5POL/05-7,5kW R/Y (35757)
- Step switch S-5EC-2, 0-10V (449084)
- BMS Trickle & Boost Switch (120363)

## Documents

- MANUAL\_AW\_\_AR\_EBM\_EN\_003-MIN.PDF
- DWG - 35867
- UKCA Declaration of Conformity\_001
- installation variations\_2\_AR\_AW.pdf