

AW Axial Fans

Low pressure axial wall fans up to 39.000 m³/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**.

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)	230	V
Frequency	50	Hz
Phases	1~	
Motor circuit connection	D	
Input power	720	W
Input power kW	0.72	kW
Input current	3.2	A
Impeller speed	1,240	rpm
Air flow	max 8,878	m³/h
Air flow at max. efficiency	5,735	m³/h
Specific ratio	1,000000	
Capacitance of capacitor	16	µF
Temperature of transported air	max 70	°C
Max temperature of transported air, when speed controlled	70	°C

Protection/Classification

Enclosure class, motor	IP54
Insulation class	F

Data according to ErP

ErP ready	ErP 2018
Measurement category	A
Efficiency grade	40.3 η_{actual}
Efficiency, static	32.9 η_{statA}
Target efficiency grade ErP2013	36 $\eta_{target2013}$
Target efficiency grade ErP2015	40 $\eta_{target2015}$

Dimensions and weights

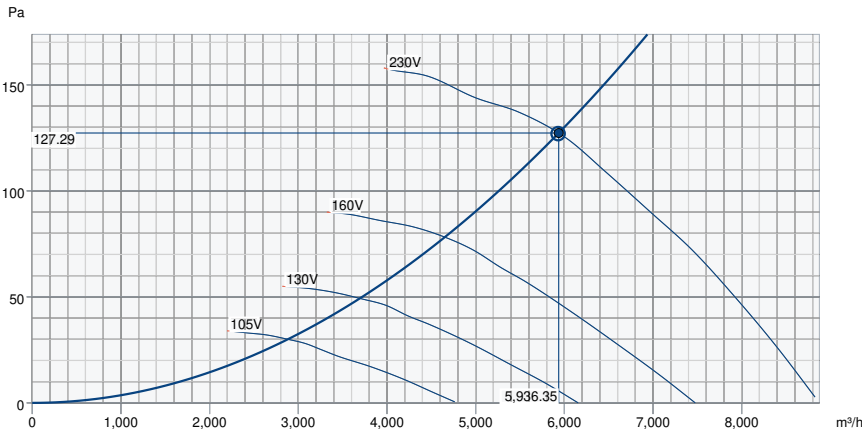
Weight	20 kg
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Others

Color name, casing	Black
Motor type	AC

Performance

Performance curve



Hydraulic data

Required air flow	5,929 m³/h
Required static pressure	127 Pa
Working air flow	5,936 m³/h
Working static pressure	127 Pa
Air density	1.204 kg/m³
Power	694.1 W
Fan control - RPM	1,258 rpm
Current	3.11 A
SFP	0.421 kW/m³/s
Control voltage	230.0 V
Supply voltage	230 V

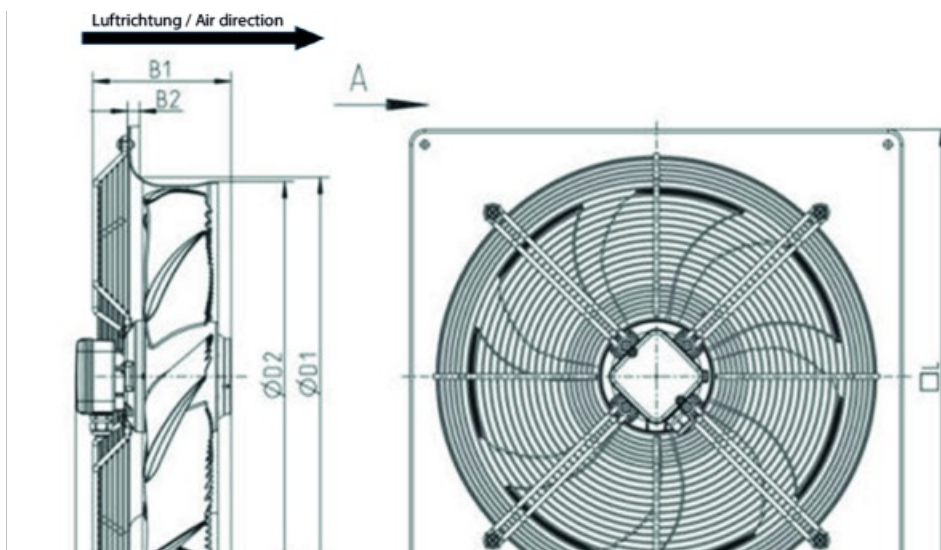
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	26	42	52	61	68	68	63	54	72
Outlet	dB(A)	25	44	54	61	67	67	62	55	71

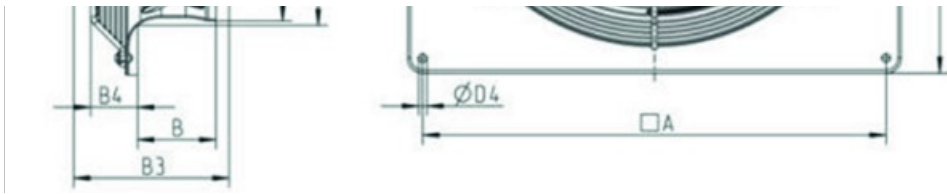
Ecodesign

Ecodesign 327

Manufacturer	Systemair GmbH
Type	AW 500E4
Year of manufacture	See name plate of the fan
Air flow q_v	5,735 m ³ /h
Efficiency category	static
Efficiency grade N	40.3
Efficiency grade target N	40
Speed (rpm) n	1,253 rpm
Pressure increase total psf	134 Pa
Power consumption P_{ed}	700 W
Overall efficiency	32.9 %
Variable speed drive	No
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.

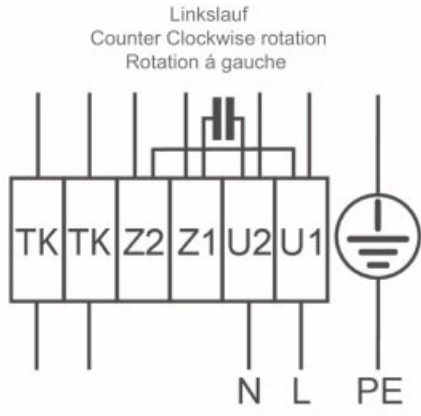
Dimension





	□A	B	B1	B2	B3	B4	ØD1	ØD2	ØD4	□L
AW 500	615	104	204	16	226	62	531	517	11	655

Wiring



Accessories

- Motor protect. switch S-ET 10 (161199)
- REU 5 Speed control (5006)
- RTRE 5 Speed control (5010)
- VK-56 Louvre shutter (87714)
- REE 4 Speed control (5317)
- REV-5POL/05-7,5kW R/Y (33979)
- SG AW-D BGr 050, RAL 9005 (30603)

Documents

- L-BAL-001-SYSTEMAIR.PDF
- EU Declaration of Conformity_002
- installation variations_1_AR_AW.pdf