



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~ | |
| Input power | 309 | W |
| Input power kW | 0.309 | kW |
| Input current | 1.35 | A |
| Impeller speed | 2,730 | rpm |
| Air flow | max 3,413 | m³/h |
| Air flow at max. efficiency | 2,290 | m³/h |
| Specific ratio | 1,000000 | |
| Capacitance of capacitor | 8 | µF |
| Temperature of transported air | max 50 | °C |
| Max temperature of transported air, when speed controlled | 50 | °C |

Protection/Classification

| | |
|------------------------|------|
| Enclosure class, motor | IP44 |
| Insulation class | B |

Data according to ErP

| | |
|---------------------------------|------------------------|
| ErP ready | Not ErP relevant |
| Measurement category | A |
| Efficiency grade | 40.2 η_{actual} |
| Efficiency, static | 30.4 η_{statA} |
| Target efficiency grade ErP2013 | 36 $\eta_{target2013}$ |
| Target efficiency grade ErP2015 | 40 $\eta_{target2015}$ |

Dimensions and weights

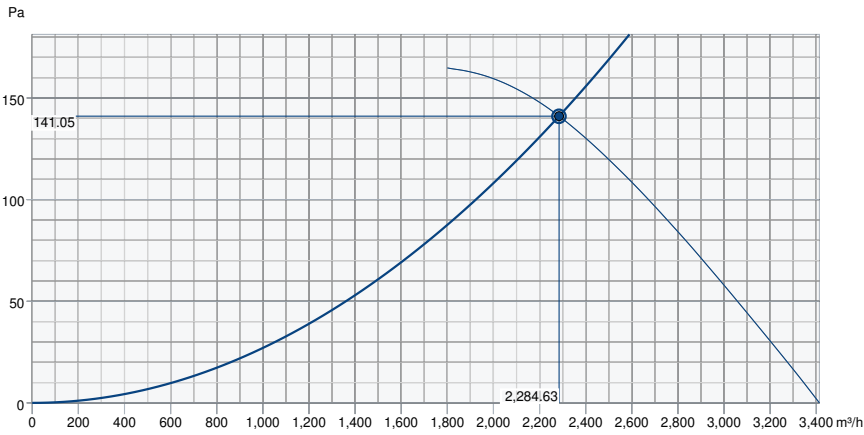
| | | |
|--------|-----|----|
| Weight | 6.2 | kg |
|--------|-----|----|

Others

| | |
|--------------------|-------|
| Color name, casing | Black |
| Motor type | AC |

Performance

Performance curve



Hydraulic data

| | |
|--------------------------|---------------|
| Required air flow | 2,284 m³/h |
| Required static pressure | 141 Pa |
| Working air flow | 2,285 m³/h |
| Working static pressure | 141 Pa |
| Air density | 1.204 kg/m³ |
| Power | 287.1 W |
| Fan control - RPM | 2,569 rpm |
| Current | 1.30 A |
| SFP | 0.452 kW/m³/s |
| Control voltage | 230.0 V |
| Supply voltage | 230 V |

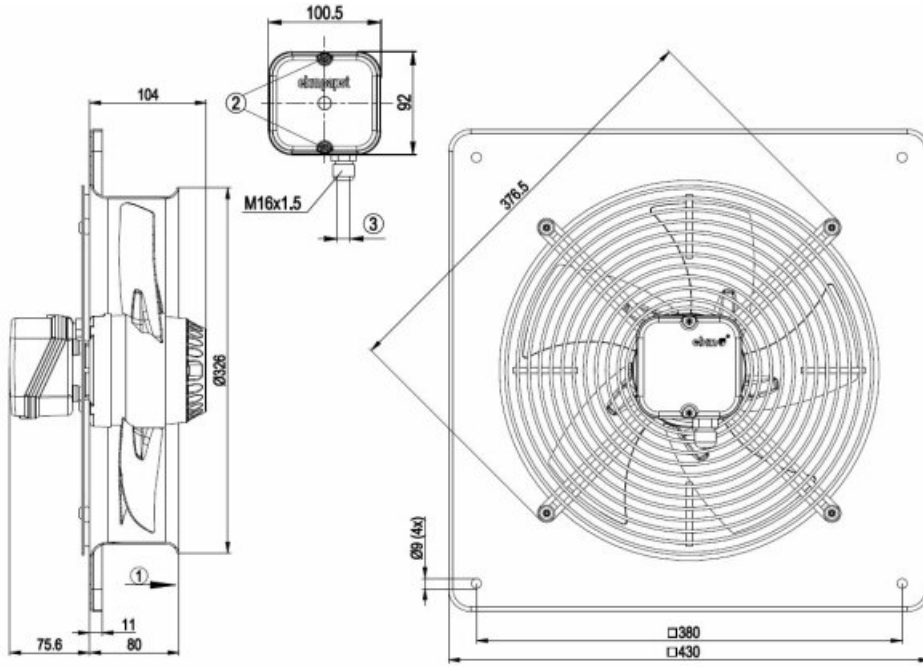
| Sound power level | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | Total |
|-------------------|-------|----|-----|-----|-----|----|----|----|----|-------|
| Inlet | dB(A) | 40 | 51 | 61 | 71 | 71 | 73 | 71 | 65 | 78 |

Ecodesign

Ecodesign 327

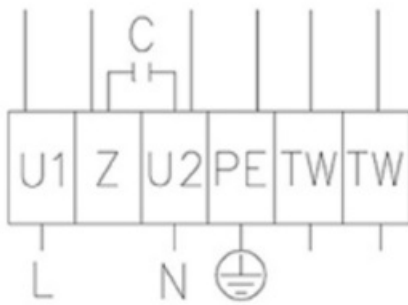
| | | | |
|-----------------------------|--|-------------------|--|
| Manufacturer | Systemair GmbH | | |
| Type | AW 300E2 | | |
| Year of manufacture | See name plate of the fan | | |
| Air flow qv | 2,290 | m ³ /h | |
| Efficiency category | static | | |
| Efficiency grade N | 40.2 | | |
| Efficiency grade target N | 40 | | |
| Speed (rpm) n | 2,570 | rpm | |
| Pressure increase total psf | 140 | Pa | |
| Power consumption Ped | 280 | W | |
| Overall efficiency | 30.4 | % | |
| Overall efficiency target | 30.2 | % | |
| 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



Wiring

Einphasen-Wechselstrommotor mit Betriebskondensator
 Singlephase AC motor with capacitor



U₁ =blau/blue
 Z =braun/brown
 U₂ =schwarz/black
 PE =grün/gelb
 green/yellow

Accessories

- Motor protect. switch S-ET 10 (161199)
- REU 1.5 Speed control (5004)
- RTRE 1,5 Speed control (5008)
- REE 2 Speed control (5316)
- REV-5POL/05-7,5kW R/Y (33979)
- VK-35 Louvre shutter (87689)

Documents

- MANUAL_AW__AR_EBM_EN_003-MIN.PDF
- DWG - 5801
- EU Declaration of Conformity_002
- installation variations_2_AR_AW.pdf