

## 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**.

## 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	Hz
Phases	3~	
Motor circuit connection	D; Y	
Input power	1,950	W
Input current	3.4	A
Impeller speed	1,350	rpm
Air flow	max 4.424	m³/s
Air flow at max. efficiency	3.157	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	F

### Data according to ErP

ErP ready	ErP 2018
Measurement category	A
Efficiency grade	45.5 $\eta_{actual}$
Efficiency, static	40.7 $\eta_{statA}$
Target efficiency grade ErP2013	36 $\eta_{target2013}$
Target efficiency grade ErP2015	40 $\eta_{target2015}$

### Dimensions and weights

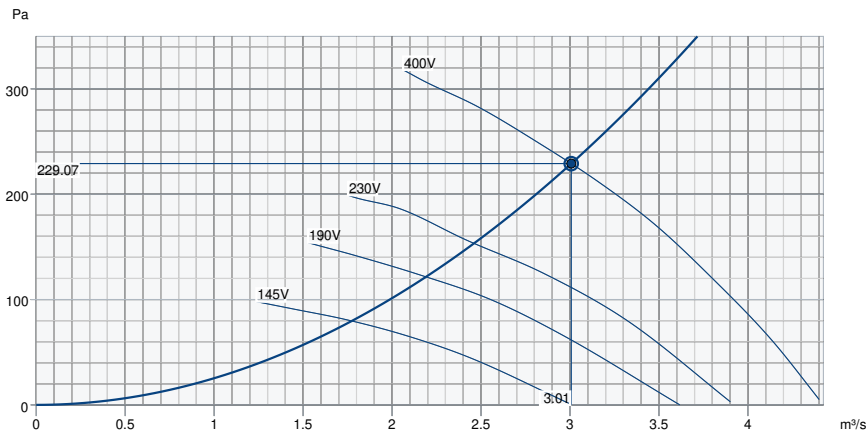
Weight	34.2	kg
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### Others

Motor type	AC
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## Performance

### Performance curve



#### Hydraulic data

Required air flow	3.01 m³/s
Required static pressure	229 Pa
Working air flow	3.01 m³/s
Working static pressure	229 Pa
Air density	1.204 kg/m³
Power	1,722.1 W
Fan control - RPM	1,373 rpm
Current	3.14 A
SFP	0.573 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	29	48	58	70	78	81	78	68	84
Outlet	dB(A)	29	49	60	70	78	80	77	67	84

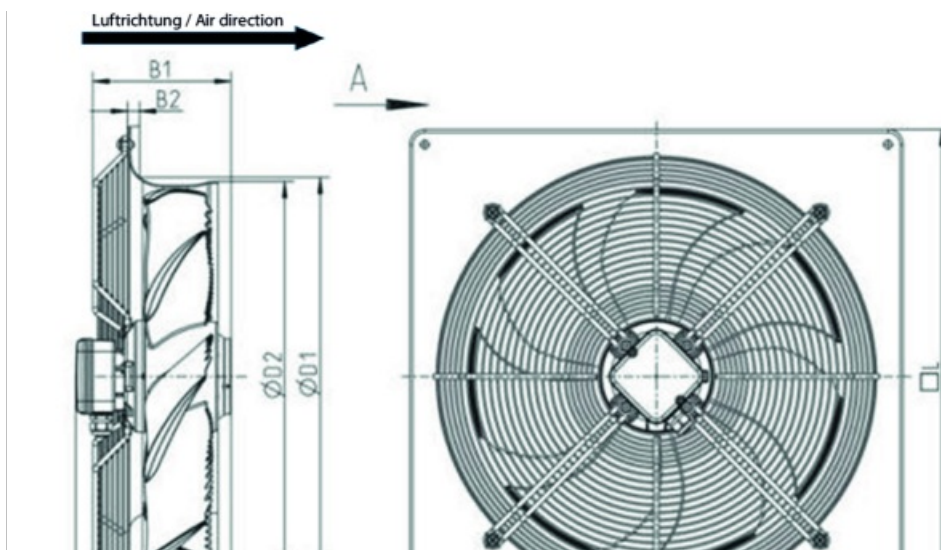
#### Accessories

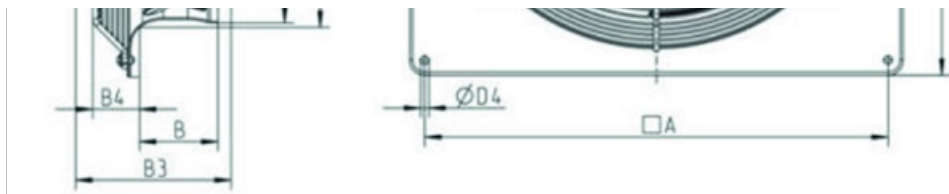
Ecodesign

Ecodesign 327

Manufacturer	Systemair GmbH
Type	AW 630DV
Year of manufacture	See name plate of the fan
Air flow $q_v$	3.1575 m <sup>3</sup> /s
Efficiency category	static
Efficiency grade N	45.5
Efficiency grade target N	40
Speed (rpm) n	1,377 rpm
Pressure increase total psf	212 Pa
Power consumption $P_{ed}$	1,770 W
Overall efficiency	40.7 %
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.

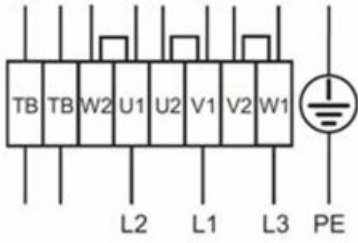
Dimension





	□A	B	B1	B2	B3	B4	ØD1	ØD2	ØD4	□L
AW 630	750	130	225	20	246	50	664	643	11	805

## Wiring

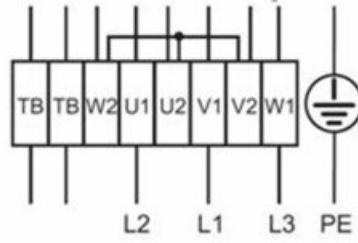


High speed

Low Speed

Δ-Connection

Y-Connection



## Accessories

- Frequency converter FRQ5S-4A (36233)
- Motor protect. switch S-DT 16E (161207)
- RTRD 4 Speed cont. Systemair (5942)
- SG AW-D BGr 065, RAL 9005 (30605)
- Frequency converter FRQS-4A (36231)
- REV-5POL/07-7,5kW R/Y (33980)
- RTRDU 4 Speed contr. Systemair (5946)
- Step switch S-DT2SKT, Y/D (2697)

## Documents

- L-BAL-001-SYSTEMAIR.PDF
- UKCA Declaration of Conformity\_002