



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

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.

Sizes **200-300** with **AC motors** except AW 300E2 are available with **integrated thermostat switch**.

Sizes **315-1000** with **AC motors** and AW **300E2** are available with pre-wired integrated **thermal contact** with leads for a **motor protection device**.

The models with **EC motors** have **integrated** electronic **motor protection**.

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	
Input power	190	W
Input power kW	0.19	kW
Input current	0.4	A
Impeller speed	1390	rpm
Air flow	3500 to 3500	m ³ /h
Specific ratio	1,000000	
Temperature of transported air	70 to 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 2016
Efficiency grade	40.3 η_{actual}
Efficiency, static	29.3 η_{statA}
Target efficiency grade ErP2013	36 $\eta_{\text{target2013}}$
Target efficiency grade ErP2015	40 $\eta_{\text{target2015}}$

Dimensions and weights

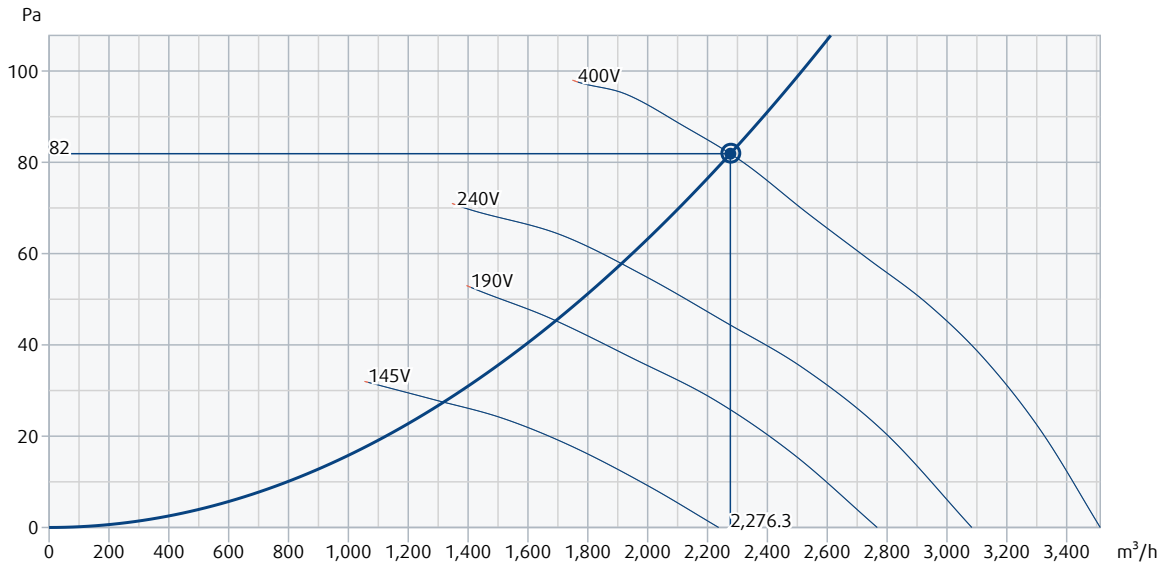
Weight	7.6	kg
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Others

Color name, casing	Black
Motor type	AC

Performance

Performance curve



Hydraulic data

Required air flow	2,278 m³/h
Required static pressure	82 Pa
Working air flow	2,276 m³/h
Working static pressure	82 Pa
Air density	1.204 kg/m³
Power	180.4 W
Fan control - RPM	1,396 rpm
Current	0.39 A
SFP	0.285 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

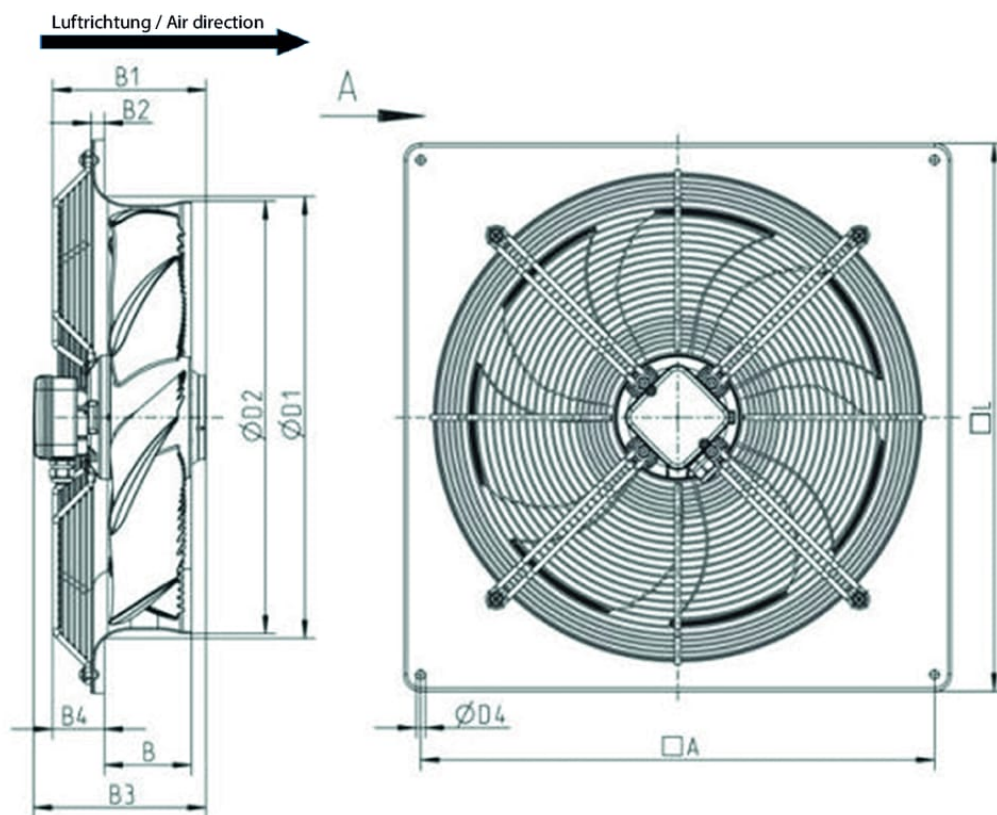
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	45	50	54	60	63	64	59	51	68
Outlet	dB(A)	47	52	55	62	64	65	60	52	70
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	63
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	49

Ecodesign

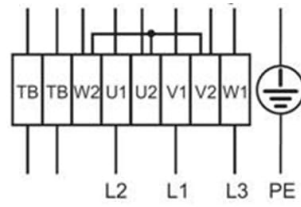
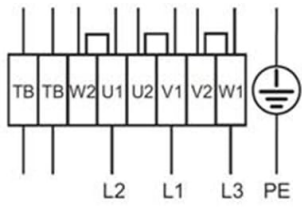
Ecodesign 327		
Manufacturer	Systemair GmbH	
Type	AW 350DV	
Year of manufacture	See name plate of the fan	
Air flow qv	2319	m ³ /h
Efficiency category	static	
Efficiency grade N	40	
Efficiency grade target N	40	
Speed (rpm) n	1396	rpm
Pressure increase total psf	80	Pa
Power consumption Ped	180	W
Overall efficiency	29.3	%
Overall efficiency target	29.3	%
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 350	435	68	117,5	12	182	22	388	355	9	485



Wiring



High speed Low Speed
 Δ-Connection Y-Connection

Accessories

- AWE-SK Motorprotection 2A/230V (5138)
- Frequency converter FRQ5S-4A (36233)
- Frequency converter FXDM5AM (31387)
- MFA-AXC/AM 355 mounting foot (311284)
- Motor protect. switch S-DT 16E (161207)
- REV-5POL/07-7,5kW R/Y (33980)
- RTRDU 2 Speed contr. Systemair (5945)
- VK-35 Louvre shutter (87689)
- EV-AR/AXC 355 flex.conn. 70°C (8353)
- Frequency converter FRQS-4A (36231)
- GFL-AR/AXC 355 counter flange (8377)
- Motor protect. switch S-DT 16 (161206)
- REV-5POL/07-7,5kW B/G (281742)
- RTRD 2 Speed Cont. Systemair (5941)
- Step switch S-DT2SKT, Y/D (2697)

Documents

- installation variations_1_AR_AW.pdf
- L-BAL-001-SYSTEMAIR.PDF