

AR Axial Fans

Low-pressure axial duct fan

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

Find more details in our online catalogue

Flexible

The AR 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-optimised** axial impellers together with the **highly efficient** external rotor motors are designed to ensure high-level performance to **minimise power consumption** and **maximise efficiency**.

Features

Construction

The round casing is made of galvanised steel with powder coating in RAL9005.
The **complete** range is provided **with inlet protection grid**. An **outlet protection grid** is **available as accessory**.
Depending on type, the fans are equipped with an external **terminal box**, protection class **IP44 or IP54**.

Impeller

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

Motor

AR fans are equipped with an **AC external rotor motor**. The motors are suitable for **50Hz** and **60Hz.**

Motor protection

The **AC** motors are equipped with prewired integral **thermal contact** with leads to be connected to a **motor protection unit**.

Control

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

Installation

The AR fans can be installed in **any position** in the **duct** in **indoor** environments.

Technical parameters

Nominal data		
Voltage (nominal)	400	V
Frequency	50	Hz
Phases	3~	
Motor circuit connection	D	
Input power	1,050	W
Input power kW	1.05	kW
Input current	2.2	A
Impeller speed	1,280	rpm
Air flow	max 3.151	m^3/s
Air flow at max. efficiency	2.062	m^3/s
Specific ratio	1	
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	

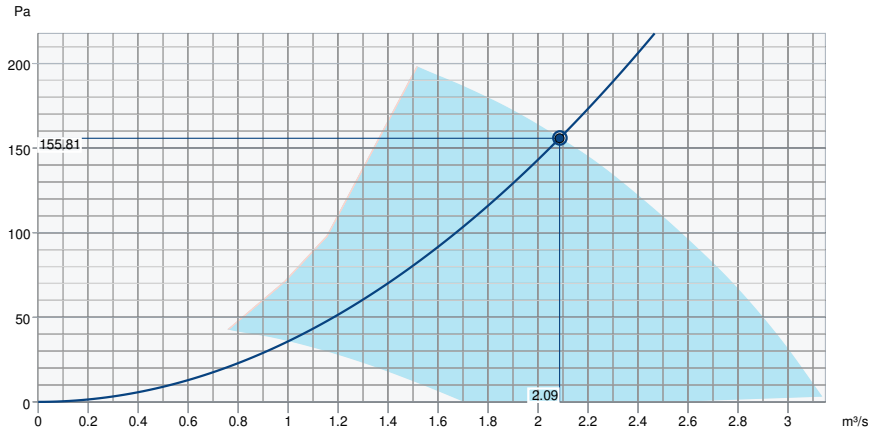
Data according to ErP		
ErP ready	ErP 2018	
Measurement category	A	
Efficiency grade	40.1	ηactual
Efficiency, static	33.7	ηstatA
Target efficiency grade ErP2013	36	ηtarget2013
Target efficiency grade ErP2015	40	ηtarget2015

Dimensions and weights		
Duct dimension; Circular, inlet	560	mm
Duct dimension; Circular, outlet	560	mm
Weight	23.2	kg

Others		
Duct connection type	Circular	
Color name, casing	Black	
Motor type	AC	

Performance

Performance curve



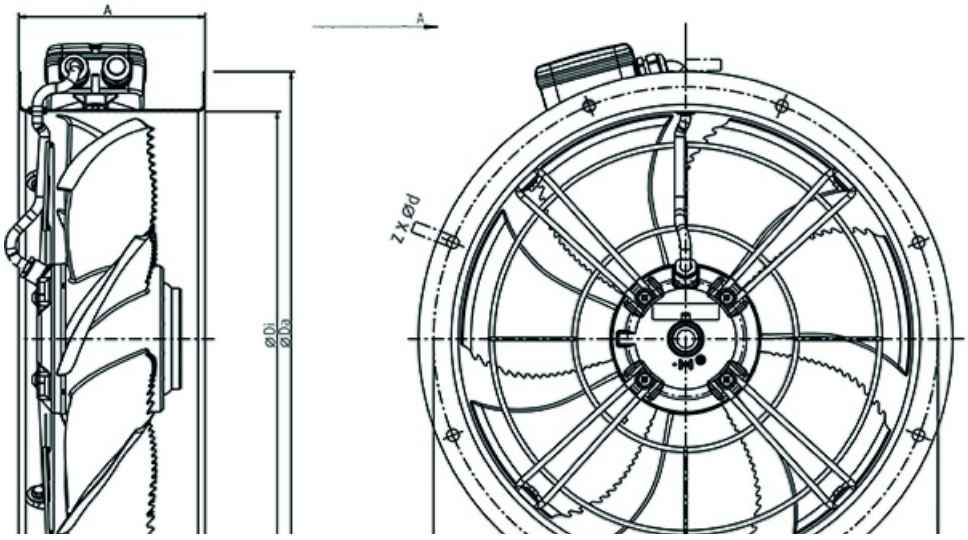
Hydraulic data	
Required air flow	2.09 m³/s
Required static pressure	156 Pa
Working air flow	2.09 m³/s
Working static pressure	156 Pa
Air density	1.204 kg/m³
Power	988.7 W
Fan control - RPM	1,301 rpm
Current	2.10 A
SFP	0.474 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

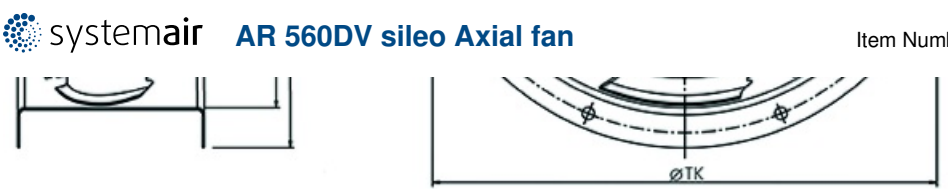
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	25	46	57	67	75	75	71	60	79
Outlet	dB(A)	24	45	58	69	75	75	71	60	79

Ecodesign

Ecodesign 327		
Manufacturer	Systemair GmbH	
Type	AR 560DV	
Year of manufacture	See name plate of the fan	
Air flow qv	2.0622	m^3/s
Efficiency category	static	
Efficiency grade N	40.1	
Efficiency grade target N	40	
Speed (rpm) n	1,300	rpm
Pressure increase total psf	158	Pa
Power consumption Ped	990	W
Overall efficiency	33.7	%
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 mainenance is provided in the operating instructions.	
Recycling / disposal	Information on recycling and disposal is provided in the operating instructions.	

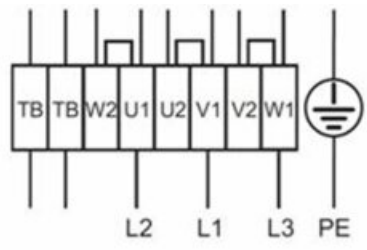
Dimension

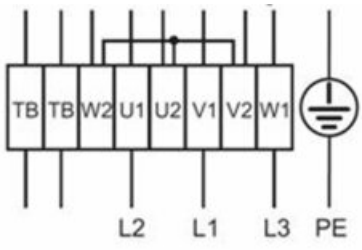




	A	ØDi	ØDa	ØTK	z x Ød
AR 560 sileo	235	559	650	620	12 x Ø11,5

Wiring





High speed	Low Speed
Δ-Connection	Y-Connection

Accessories

- EV-AR/AXC 560 flex.conn. 70°C (8357)
- Frequency converter FRQS-4A (36231)
- GFL-AR/AXC 560 counter flange (8381)
- Motor protect. switch S-DT 16E (161207)
- RTRD 3 Speed control IP54 (32594)
- SG AXC/AM/AR 560 guard grill (310690)
- Frequency converter FRQ5S-4A (36233)
- Frequency converter FXDM5AM (31387)
- MFA-AXC/AM 560 mounting foot (311288)
- 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
- installation variations_1_AR_AW.pdf