

AR Axial Fans

Low pressure axial duct fan

- Available with AC motors for 50 and 60Hz
- Installation in any position
- Noise and energy optimized 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 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 round casing is made of galvanized 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 **aluminum**, 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)	230	V
Frequency	50	Hz
Phases	1~	
Motor circuit connection	D	
Input power	1,150	W
Input power kW	1.15	kW
Input current	5.6	A
Impeller speed	1,420	rpm
Air flow	max 11,930	m³/h
Air flow at max. efficiency	8,222	m³/h
Specific ratio	1	
Capacitance of capacitor	25	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	41.8 η_{actual}
Efficiency, static	35.8 η_{statA}
Target efficiency grade ErP2013	36 $\eta_{target2013}$
Target efficiency grade ErP2015	40 $\eta_{target2015}$

Dimensions and weights

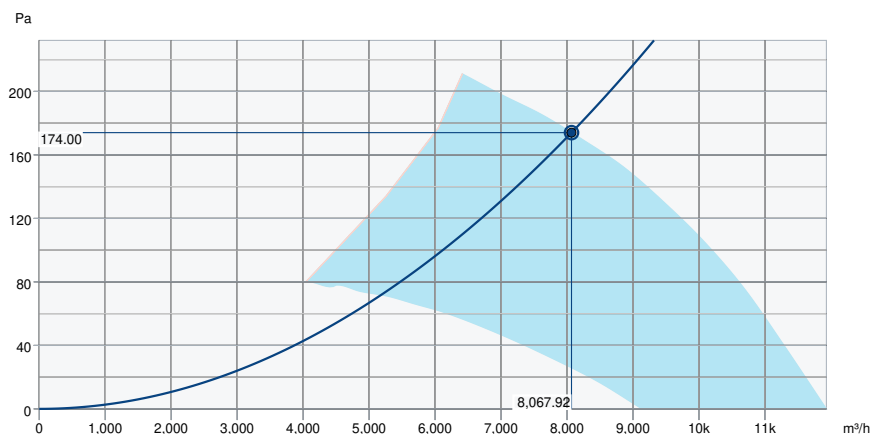
Duct dimension; Circular, inlet	560	mm
Duct dimension; Circular, outlet	560	mm
Weight	31.7	kg

Others

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

Performance

Performance curve



Hydraulic data

Required air flow	8,068 m³/h
Required static pressure	174 Pa
Working air flow	8,068 m³/h
Working static pressure	174 Pa
Air density	1.204 kg/m³
Power	1,117.0 W
Fan control - RPM	1,427 rpm
Current	5.32 A
SFP	0.498 kW/m³/s
Control voltage	229.8 V
Supply voltage	230 V

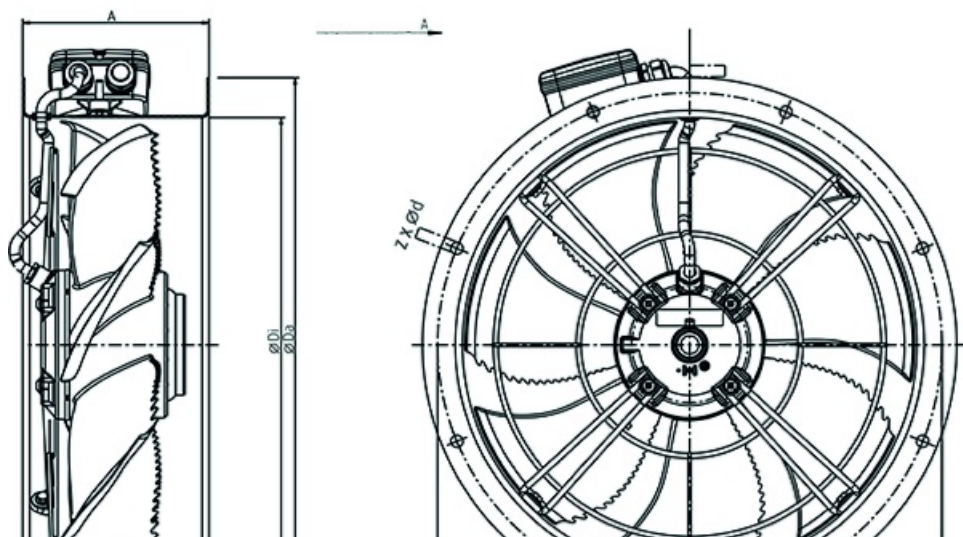
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	29	49	63	72	81	82	79	70	86
Outlet	dB(A)	28	49	62	72	81	83	80	71	87

Ecodesign

Ecodesign 327

Manufacturer	Systemair GmbH	
Type	AR 560E4	
Year of manufacture	See name plate of the fan	
Air flow q_v	8,222	m ³ /h
Efficiency category	static	
Efficiency grade N	41.8	
Efficiency grade target N	40	
Speed (rpm) n	1,428	rpm
Pressure increase total psf	170	Pa
Power consumption P_{ed}	1,110	W
Overall efficiency	35.8	%
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.	

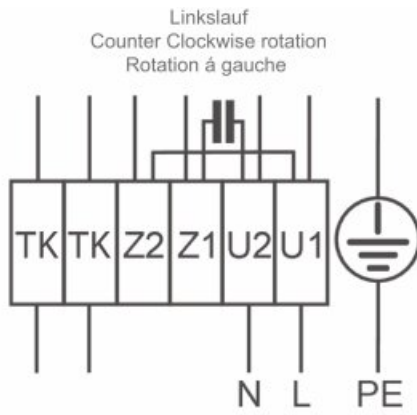
Dimension





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

Wiring



Accessories

- EV-AR/AXC 560 flex.conn. 70°C (8357)
- GFL-AR/AXC 560 counter flange (8381)
- Motor protect. switch S-ET 10 (161199)
- RTRE 7 Speed control (5011)
- Frequency converter FRQSE-6A (37419)
- SG-20 AXC560 protection grill (254257)
- Frequency converter FRQ5SE-6A (37421)
- MFA-AXC/AM 560 mounting foot (311288)
- REV-5POL/05-7,5kW R/Y (33979)
- SG AXC/AM/AR 560 guard grill (310690)
- VK-56 Louvre shutter (87714)

Documents

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