

## AR 1000DS sileo Axial fan

Axial duct fan

Item Number: 34487

Variant: 400V 3~ 50Hz

Speed controllable by voltage reduction.  
 FI-controllable using an all-pole sine filter.  
 Inlet protection guard available as accessory.  
 Safe and maintenance free operation.  
 Can be installed in any mounting position.  
 Electric connection via terminal box mounted on the casing.  
 Supplied with capacitor.

Axial fans of the AR sileo range do have a bionic shape of the fan blade, and are driven by external rotor motors. The AR range is mounted in a round casing according Eurovent 1/2, galvanized steel and powder coated in black (RAL9005). The protection guard at the inlet side is powder coated in black. The axial impeller is manufactured from black high efficiency composite material. The impeller is balanced dynamically in two levels in accordance with DIN ISO 1940 part 1, quality G6.3.

The motors are equipped with thermal contacts for motor protection, with leads to be connected to a motor protection unit.



### Technical parameters

Nominal data		
Voltage (Nominal)	400	V
Frequency	50	Hz
Phase(s)	3~	
Motor circuit connection	D; Y	
Input power	2,700	W
Input current	5.4	A
Impeller speed	820	r.p.m.
Air flow	max 10.13	m <sup>3</sup> /s
Air flow at max. efficiency	6.1806	m <sup>3</sup> /s
Specific ratio	1,000000	
Temperature of transported air	max 70	°C
Max temperature of transported air, when speed controlled	70	°C
Sound data		
Sound pressure level at 1m	72	dB(A)

**Protection/Classification**

Enclosure class, motor	IP54
Insulation class	F

**Data according to ErP**

ErP ready	ErP 2018
Measurement category	A
Efficiency grade	40.5 $\eta_{\text{actual}}$
Efficiency, static	36.8 $\eta_{\text{statA}}$
Target efficiency grade ErP2013	36 $\eta_{\text{target2013}}$
Target efficiency grade ErP2015	40 $\eta_{\text{target2015}}$

**Dimensions and weights**

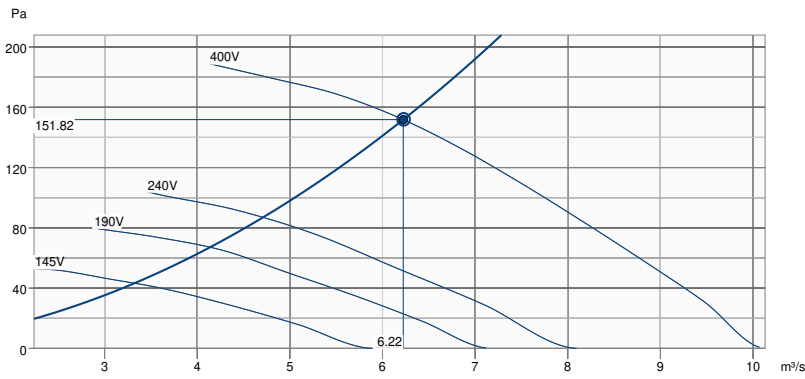
Duct dimension; Circular, inlet	1,000 mm
Duct dimension; Circular, outlet	1,000 mm
Weight	74 kg

**Others**

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

# Performance

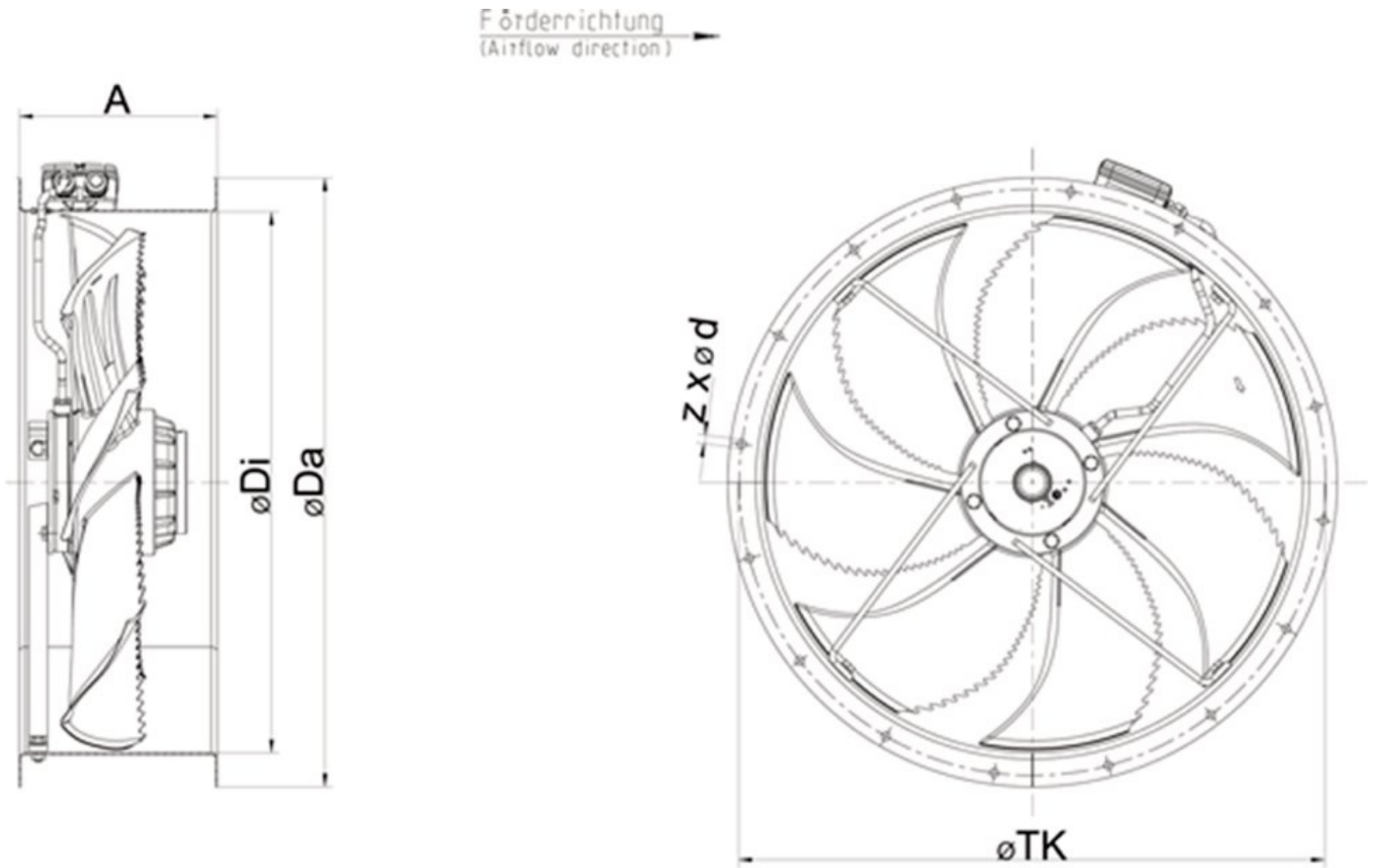
## Performance curve



Hydraulic data	
Required air flow	6.23 m³/s
Required static pressure	152 Pa
Working air flow	6.22 m³/s
Working static pressure	152 Pa
Air density	1.204 kg/m³
Power	2630.9 W
Fan control - RPM	830 rpm
Current	5.21 A
SFP	0.423 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

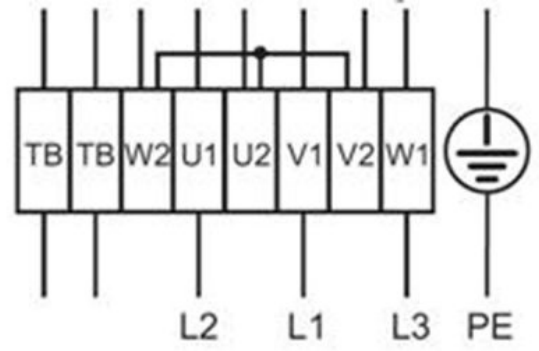
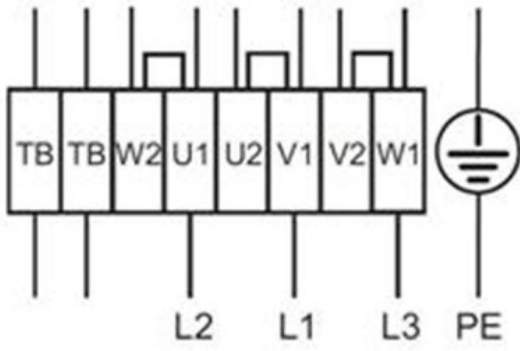
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	58	63	71	72	74	72	68	64	79
Outlet	dB(A)	58	63	71	73	74	70	67	64	79

## Dimension



	A	øDi	øDa	øTK	z x ød
AR 1000DS sileo	330	1001	1105	1070	16 x Ø14.5

## Wiring



High speed

Low Speed

Δ-Connection

Y-Connection

## Ecodesign

Ecodesign 327	
Manufacturer	Systemair GmbH, Seehöfer Str. 45, DE-97944 Boxberg, Amtsgericht (court of registration) Mannheim, HRB 560437
Type	AR 1000DS
Year of manufacture	See name plate of the fan
Air flow qv	6.1806 m <sup>3</sup> /s
Efficiency category	static
Efficiency grade N	40.5
Efficiency grade target N	40
Speed (rpm) n	830 r.p.m.
Pressure increase total psf	153 Pa
Power consumption Ped	2,630 W
Overall efficiency	36.8 %
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.

## Accessories

- EV-AR/AXC 1000 flex.conn. 70°C (8362)
- MFA-AXC/AM 1000 mounting foot (311293)
- RTRDU 7 Speed contr. Systemair (5947)
- S-DT2SKT Two speed switch Y/D (2697)
- FSAF1000C1DA Silencer 1070/16 (58305)
- FSAF1000FC Flx con ea 90°C (8640)
- FSAF1000MFX Flange ea dual (53097)
- GFL-AR/AXC 1000 counter flange (8386)
- RTRD 7 speed control Systemair (5943)
- S-DT 16E Motor Protection (161207)
- SG AXC/AM/AR 1000 guard grill (310695)
- FSAF1000C2DA Silencer 1070/16 (58318)
- FSAF1000FTX Mtg ft ea dual (8628)
- FSAFAV MP1 33 Green each (89401)

## Documents

- L-BAL-001-SYSTEMAIR.PDF
- UKCA-declaration of conformity\_AXC\_001
- installation variations\_1\_AR\_AW.pdf