

# AR 450E4 SILEO AXIAL FAN

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## Description

- speed controllable by voltage reduction, plus option of 2-step operation by D/Y switching for 400V versions
- safe and maintenance free operation
- can be installed in any mounting position
- electric connection via terminal box mounted on the casing

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 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	230	V
Frequency	50	Hz
Phase	1	~
Input power (P1)	600	W
Current	2.9	A
Max. airflow	2.03	m³/s
R.p.m.	1390	r.p.m.
Weight	17	kg
Temperature data		
Max. temperature of transported air	70	°C
Max. temperature of transported air when speed-controlled	70	°C
Sound data		
Sound pressure level at 1 m	66	dB(A)
Protection / Classification		
Insulation class	F	
Enclosure class, motor	IP54	IP

### Data according to ErP directive

Efficiency, static	34	$\eta_{statA}$
Air flow at max efficiency	1.39	$m^3/s$
Efficiency grade	41.8	$N_{actual}$
Target efficiency grade ErP2013	36	$N_{target2013}$
Target efficiency grade ErP2015	40	$N_{target2015}$
Measurement category	A	
Specific ratio	1	

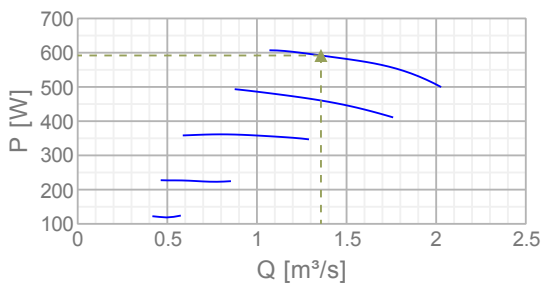
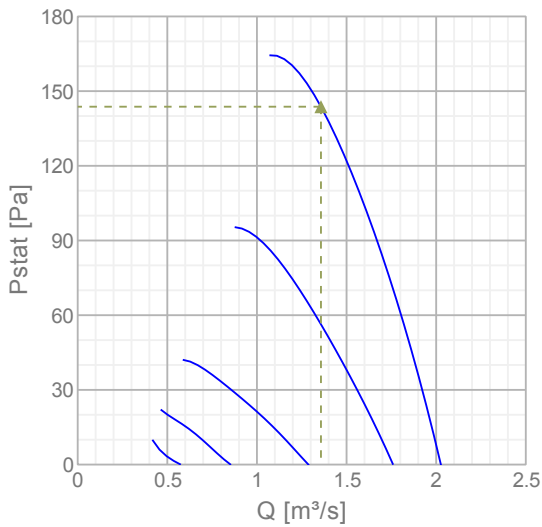
### Default group

Capacitor	14	$\mu F$
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## EPS diagrams

### Diagrams

#### Diagrams



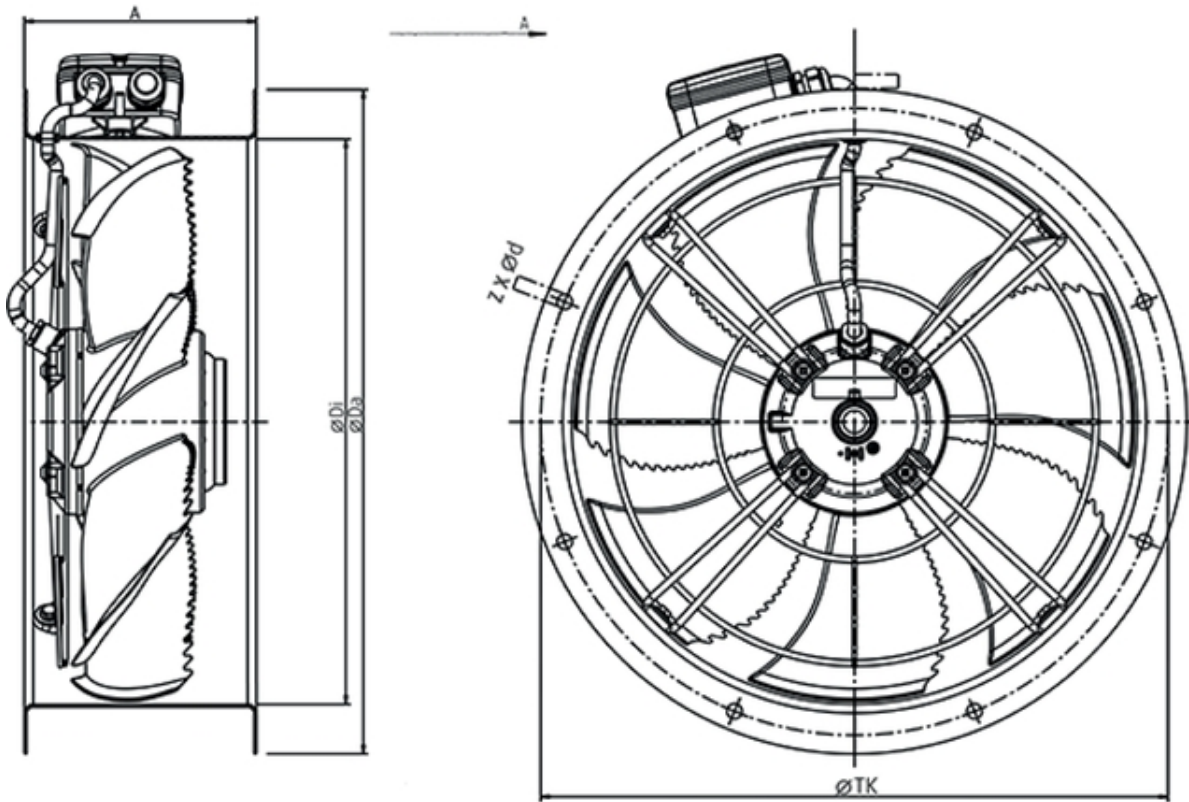
### Max efficiency

#### Hydraulic data

▲ Working air flow	1.36	$m^3/s$
▲ Working static pressure	144	Pa
▲ Power	592	W
Speed	1398	r.p.m.
Current	2.82	A
SFP	0.436	$W/(l/s)$
Voltage	230	V

Sound power level		63	125	250	500	1k	2k	4k	8k	Tot
Inlet	dB(A)	20	42	53	64	68	68	65	58	73
Outlet	dB(A)	20	42	53	65	68	68	65	60	73

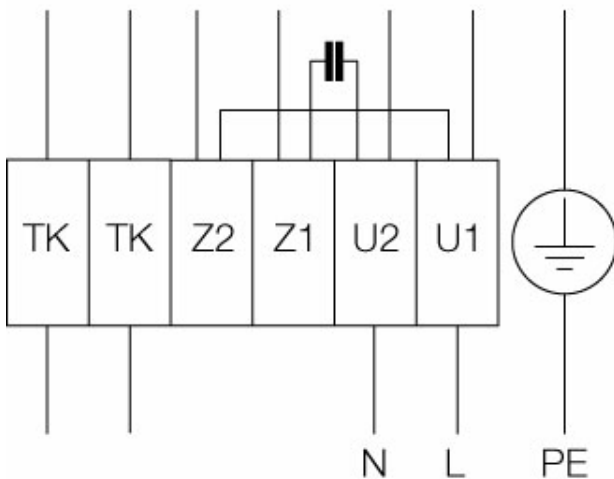
### Dimensions



	A	ØDi	ØDa	ØTK	z x Ød
AR 450 sileo	185	451	530	500	8 x Ø12

### Wiring

Linkslauf  
Counter Clockwise rotation  
Rotation à gauche



## Accessories

### Electric accessories

[REU 5 Speed control \(5006\)](#)

[RTRE 5 Speed control \(5010\)](#)

[REE 4 Speed control \(5317\)](#)

[S-ET 10 Motor Protection \(5154\)](#)

[STL 5 Speed controller \(84271\)](#)

[REV-5POL/05 ON/OFF \(33979\)](#)

## Documentation



L-BAL-001-Systemair.pdf (210,31kB)



ec-dec\_axial\_160414\_DE,GB\_003\_ab 20. April.pdf (557,42kB)

## Specification text

The box is made up of electroplated steel- plate witch is powder coated. A protection guard is included. The fan can be installed in each fitting position. The axial impeller with airfoil made of aluminum and is coated black. The actuation is carried out by a maintenance- free, speed- controlled external rotor motor. The fan is speed- controllable by a thyristor or a transformer alternatively at a 400V- Construction a 2- stepped operation trough a D/Y- Connection is also possible. For protecting the motor integrated thermostat relays with completed lines to a motor protection device are built in. For annealing the motor is situated in the air flow. Impeller according to VDI 2060, quality category Q6,3 and dynamically weigh heavy in to levels