

AW 450E4 sileo Axial fan

Axial fan

Item Number: 37411

Variant: 230V 1~ 50Hz

- speed controllable by voltage reduction, plus option of 2-step operation by D/Y switching for 400V versions
- inlet protection guard up to size 630 (from size 710-1000 available as an accessory)
- safe and maintenance free operation
- can be installed in any mounting position
- electric connection via terminal box mounted on the motor
- single phase fans are supplied with capacitor

Axial fans of the AW sileo range do have a bionic shape of the fan blade, and are driven by external rotor motors. The AW range is equipped with a square wall plate, galvanized steel and powder coated in black (RAL9005). Sizes 200-630 include are protection guard on the intake side. Protection guards for the sizes 710-1000 are available as an accessory. The axial impeller is manufactured from pressure die cast aluminum and also painted in black (RAL9005). 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)	230	V
Frequency	50	Hz
Phase(s)	1~	
Motor circuit connection	D	
Input power	600	W
Input current	2.9	A
Impeller speed	1,390	r.p.m.
Air flow	max 2.028	m ³ /s
Air flow at max. efficiency	2.0278	m ³ /s
Specific ratio	1	
Capacitance of capacitor	14	µF
Temperature of transported air	max 70	°C
Max temperature of transported air, when speed controlled	70	°C
Sound data		
Sound pressure level at 1m	67	dB(A)

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	34 η_{statA}
Target efficiency grade ErP2013	36 $\eta_{\text{target2013}}$
Target efficiency grade ErP2015	40 $\eta_{\text{target2015}}$

Dimensions and weights

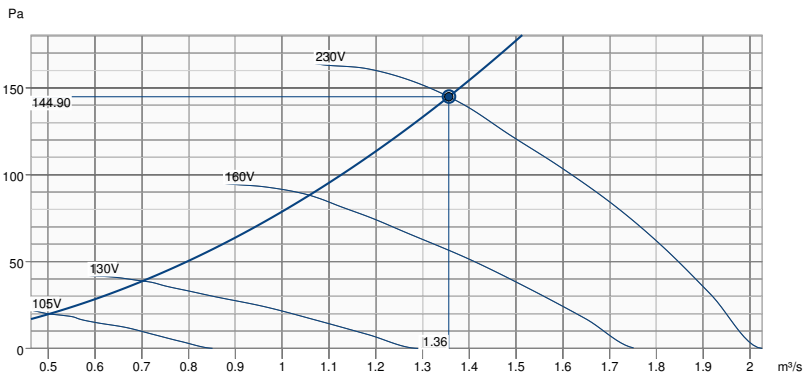
Weight	16.2 kg
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Others

Motor type	AC
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Performance

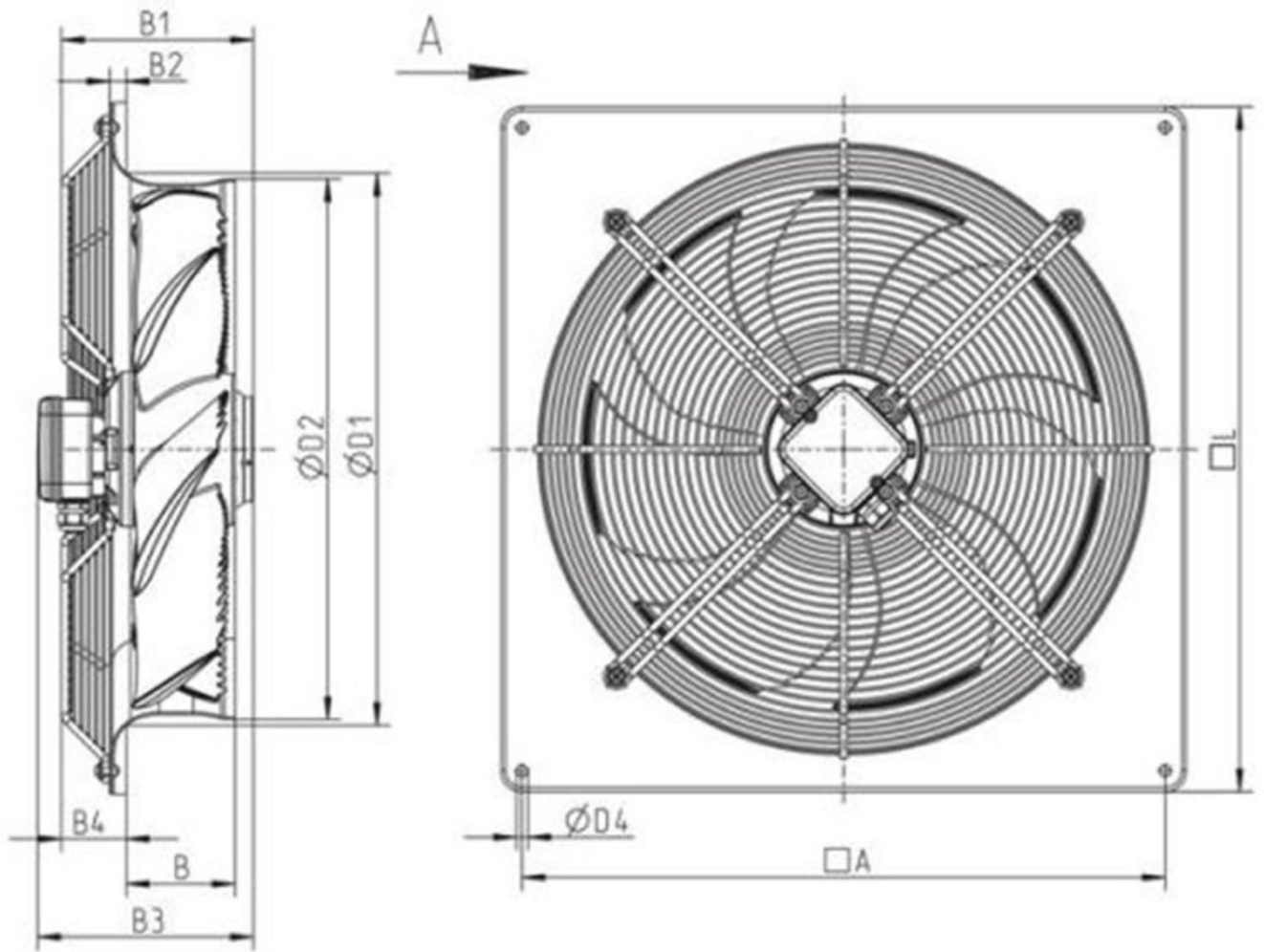
Performance curve



Hydraulic data	
Required air flow	1.36 m³/s
Required static pressure	145 Pa
Working air flow	1.36 m³/s
Working static pressure	145 Pa
Air density	1.204 kg/m³
Power	590.8 W
Fan control - RPM	1397 rpm
Current	2.81 A
SFP	0.436 kW/m³/s
Control voltage	230.0 V
Supply voltage	230 V

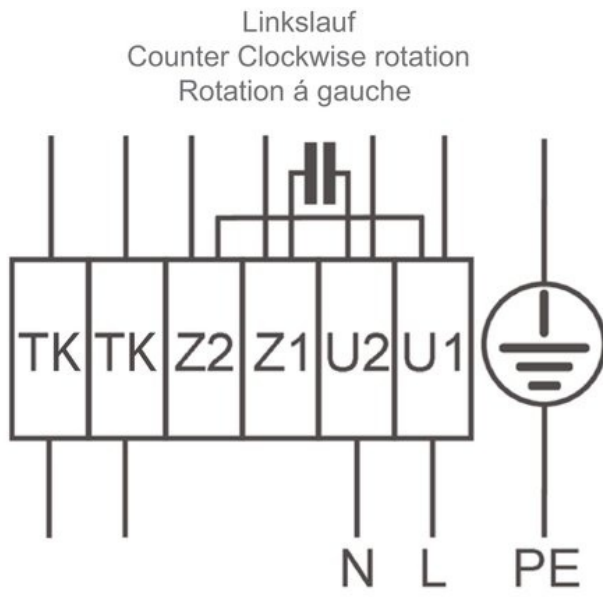
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	19	42	52	64	68	68	65	58	73
Outlet	dB(A)	19	42	52	65	68	68	65	60	73

Dimension



	□A	B	B1	B2	B3	B4	ØD1	ØD2	ØD4	□L
AW 450	535	96	190	14	226	47	480	463	11	575

Wiring



Ecodesign

Ecodesign 327	
Manufacturer	Systemair GmbH, Seehöfer Str. 45, DE-97944 Boxberg, Amtsgericht (court of registration) Mannheim, HRB 360437
Type	AW 450E4
Year of manufacture	See name plate of the fan
Air flow qv	2.0278 m ³ /s
Efficiency category	static
Efficiency grade N	41.8
Efficiency grade target N	40
Speed (rpm) n	1,398 r.p.m.
Pressure increase total psf	140 Pa
Power consumption Ped	590 W
Overall efficiency	34 %
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

- REE 4 Speed control (5317)
- REV-5POL/05 ON/OFF (33979)
- S-ET 10 Motor Protection (5154)
- SG AW-D BGr 045/042, RAL 9005 (30602)
- REU 5 Speed control (5006)
- RTRE 5 Speed control (5010)
- S-ET 10 Motor Protection (161199)
- RAW 400/450 Roof Cowl c/w BG (86511)

Documents

- L-BAL-001-SYSTEMAIR.PDF
- EU_DECLARATION_OF_CONFORMITY_AXIAL_FANS_EN_004.PDF
- installation_variations_1_AR_AW.pdf

Specification

Axial fans of the AW sileo range do have a bionic shape of the fan blade, and are driven by external rotor motors. The AW range is equipped with a square wall plate, 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 pressure die cast aluminum and is powder coated in black. 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, for example Systemair unit S-ET.