

## AW 710D-L EC sileo Axial fan

Axial wall fan

Item Number: 35876

Variant: 400V 3~ 50/60Hz

- 100% speed controllable
- electric connection via terminal box mounted on the motor
- inlet protection guard
- Integrated motor protection
- safe and maintenance free operation
- installation in any mounting position

Axial fans of the range AW EC sileo are driven by high efficient, energy saving EC-external rotor motors. The power electronics is integrated in the motor casing/terminal box. All motors are suitable to be used for 50/60Hz. The input voltage for three phase units can vary between 380 and 480V. Speed control by a 0-10V signal. The AW EC sileo range is equipped with a square wall plate made from galvanized steel and is completely powder coated in black (RAL9005). The protection guard at the inlet side is powder coated in black. The axial impeller is manufactured from fiber-reinforced Plastic (PP) with metal core. The impeller is balanced dynamically in two levels in accordance with DIN ISO 1940 part 1, quality G6.3.



### Technical parameters

Nominal data		
Voltage (Nominal)	400	V
Frequency	50; 60	Hz
Phase(s)	3~	
Input power	2,834	W
Input current	4.35	A
Impeller speed	1,259	r.p.m.
Air flow	max 6.887	m <sup>3</sup> /s
Air flow at max. efficiency	3.9944	m <sup>3</sup> /s
Specific ratio	1,000000	
Temperature of transported air	max 60	°C
Max temperature of transported air, when speed controlled	60	°C
Sound data		
Sound pressure level at 1m	78	dB(A)

**Protection/Classification**

Enclosure class, motor	IP55
Insulation class	F

**Data according to ErP**

ErP ready	ErP 2018
Measurement category	A
Efficiency grade	42.8 $\eta_{\text{actual}}$
Efficiency, static	39.3 $\eta_{\text{statA}}$
Target efficiency grade ErP2013	36 $\eta_{\text{target2013}}$
Target efficiency grade ErP2015	40 $\eta_{\text{target2015}}$

**Dimensions and weights**

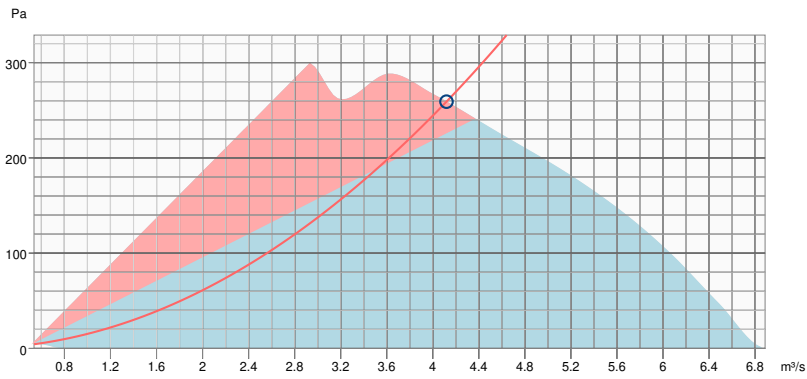
Weight	42 kg
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**Others**

Color name, casing	Black
Motor type	EC

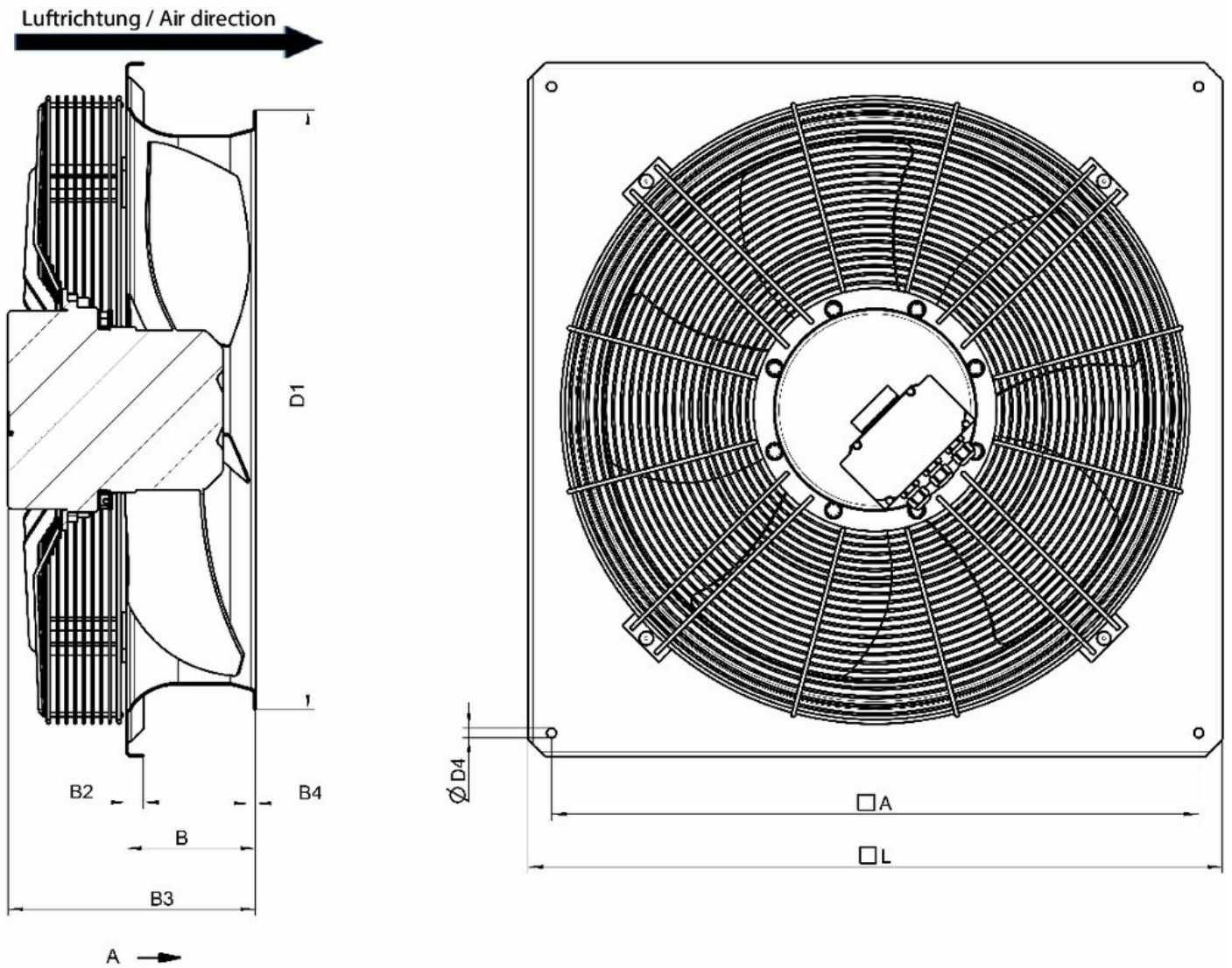
# Performance

## Performance curve



Hydraulic data	
Required air flow	4.12 m³/s
Required static pressure	259 Pa
Working air flow	-
Working static pressure	-
Air density	1.204 kg/m³
Power	-
Fan control - RPM	-
Current	-
SFP	-
Control voltage	-
Supply voltage	-

## Dimension



	□A	B	B2	B3	B4	ØD1	ØD4	□L
AW 710D-L EC sileo	810	170	20	275	2	772	14,5	850

## Wiring

1	RSA	Din 2	8
2	RSB	Din 3	9
3	GND	GND	10
4	Ain 1 U	Ain 2 U	11
5	+ 10 V	+ 20 V	12
6	Ain 1 I	Ain 2 I	13
7	Din 1	Aout	14

KL 3

1	NO
2	COM
3	NC

KL 2

PE
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PE

1	L1
2	L2
3	L3

KL 1

N o .		P i n	S i g n a l	Function / assignment
K L 1	1	L 1		Mains supply connection, supply voltage 3~380-480 VAC; 50/60 Hz
K L 1	2	L 2		Mains supply connection, supply voltage 3~380-480 VAC; 50/60 Hz
K L 1	3	L 3		Mains supply connection, supply voltage 3~380-480 VAC; 50/60 Hz
P E		P E		Earth connection, PE connection
K L 2	1	N O		Status relay, floating status contact; normally open; close with error
K L 2	2	C O M		Status relay; floating status contact; changeover contact; common connection; contact rating 250 VAC / max. 2 A (AC1) / min. 10 mA
K L 2	3	N C		Status relay, floating status contact; break with error
K L 3	1	R S A		Bus connection RS485; RSA; MODBUS RTU
K L 3	2	R S B		Bus connection RS485; RSB; MODBUS RTU
K L 3	3 / 0	G N D		Signal ground for control interface KL3
K L 3	4	A i n 1 U		Analogue input 1 (set value); 0-10 V; Ri= 100 kΩ; parametrisable curves; only usable as alternative to input Ain1 I
K L 3	5	+ 1 0 V		Fixed voltage output 10 VDC; + 10 V +/-3%; max. 10 mA; short circuit proof; power supply for ext. devices (e.g. potentiometer)
K L 3	6	A i n 1 I		Analogue input 1 (set value); 4-20 mA; Ri= 100 Ω; parametrisable curves; only usable as alternative to input Ain1 U
K L 3	7	D i n 1		Digital input 1: enabling of electronics; enabling: open pin or applied voltage 5 to 50 VDC; disabling: bridge to GND or applied voltage < 1 VDC; reset function: triggers software reset after a level change to <1 V
K L 3	8	D i n 2		Digital input 2: parameter set switch 1/2; according to EEPROM setting, the valid/used parameter set is selectable per BUS or per digital input DIN2. Parameter set 1: open pin or applied voltage 5 to 50 VDC; parameter set 2: bridge to GND or applied voltage < 1 VDC
K L 3	9	D i n 3		Digital input 3: Control characteristic of the integrated controller; according to EEPROM setting, the control characteristic of the integrated controller is normally/inversely selectable per BUS or per digital input; normal: open pin or applied voltage 5 to 50 VDC (control deviation = actual sensor value - set value) inverse: bridge to GND or applied voltage < 1 VDC (control deviation = set value - actual sensor value)
K L 3	1 1	A i n 2 U		Analogue input 2; actual sensor value 0-10 V; Ri= 100 kΩ; parametrisable curve; only usable as alternative to input Ain2 I
K L 3	1 2	+ 2 0 V		Fixed voltage output 20 VDC; + 20 V +/-10 %; max. 50 mA; short circuit proof; power supply for ext. devices (e.g. sensors)
K L 3	1 3	A i n 2 I		Analogue input 2; actual sensor value 4-20 mA; Ri= 100 Ω; parametrisable curve; only usable as alternative to input Ain2 U
K L 3	1 4	A o u t		Analogue output 0-10 V; max. 5 mA; output of the actual motor control factor (output voltage of electronics)/ of the actual motor speed; function selectable per bus; parametrisable curve.

## Ecodesign

Ecodesign 327	
Manufacturer	Systemair GmbH, Seehöfer Str. 45, DE-97944 Boxberg, Amtsgericht (court of registration) Mannheim, HRB 560437
Type	AW 710D-L EC
Year of manufacture	See name plate of the fan
Air flow qv	3.9944 m <sup>3</sup> /s
Efficiency category	static
Efficiency grade N	42.8
Efficiency grade target N	40
Speed (rpm) n	1,260 r.p.m.
Pressure increase total psf	267 Pa
Power consumption Ped	2,860 W
Overall efficiency	39.3 %
Overall efficiency target	36.5 %
Variable speed drive	Yes
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

- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Vent control board (3115)
- MTP 10, 10K, Speed control (32731)
- MTV-1/010 Controller 0..10V+ (30650)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent Room Unit (3018)
- MTP 20, on/off, 3-step (310220)
- S-5EC/FRQ (76738)

## Documents

- IMO\_AW 710D-L EC SILEO\_35876\_DE,EN.PDF
- MANUAL\_AW\_\_AR\_EBM\_EN\_003-MIN.PDF
- UKCA-declaration of conformity\_AXC\_001
- installation variations\_2\_AR\_AW.pdf