

AR 800DS sileo Axial fan

Axial duct fan

Item Number: 37418

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 | 1,650 | W |
| Input current | 3.7 | A |
| Impeller speed | 830 | r.p.m. |
| Air flow | max 6.182 | m ³ /s |
| Air flow at max. efficiency | 3.714 | m ³ /s |
| Specific ratio | 1,000000 | |
| Temperature of transported air | max 65 | °C |
| Max temperature of transported air, when speed controlled | 65 | °C |
| Sound data | | |
| Sound pressure level at 1m | 69 | dB(A) |

Protection/Classification

| | |
|------------------------|------|
| Enclosure class, motor | IP54 |
| Insulation class | F |

Data according to ErP

| | |
|---------------------------------|-------------------------------|
| ErP ready | ErP 2018 |
| Measurement category | A |
| Efficiency grade | 40.6 η_{actual} |
| Efficiency, static | 35.7 η_{statA} |
| Target efficiency grade ErP2013 | 36 $\eta_{\text{target2013}}$ |
| Target efficiency grade ErP2015 | 40 $\eta_{\text{target2015}}$ |

Dimensions and weights

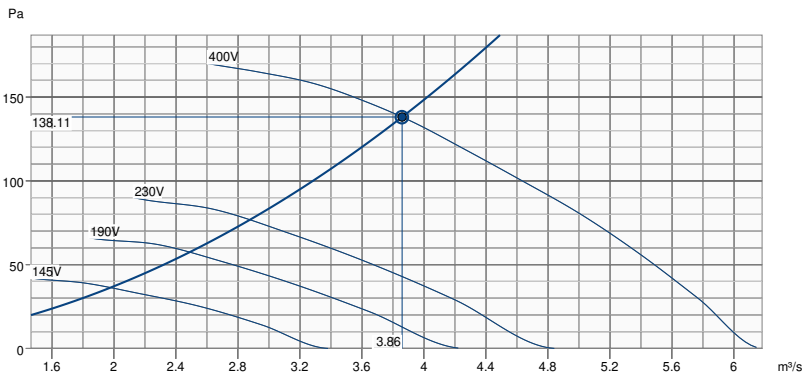
| | |
|----------------------------------|---------|
| Duct dimension; Circular, inlet | 800 mm |
| Duct dimension; Circular, outlet | 800 mm |
| Weight | 49.3 kg |

Others

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

Performance

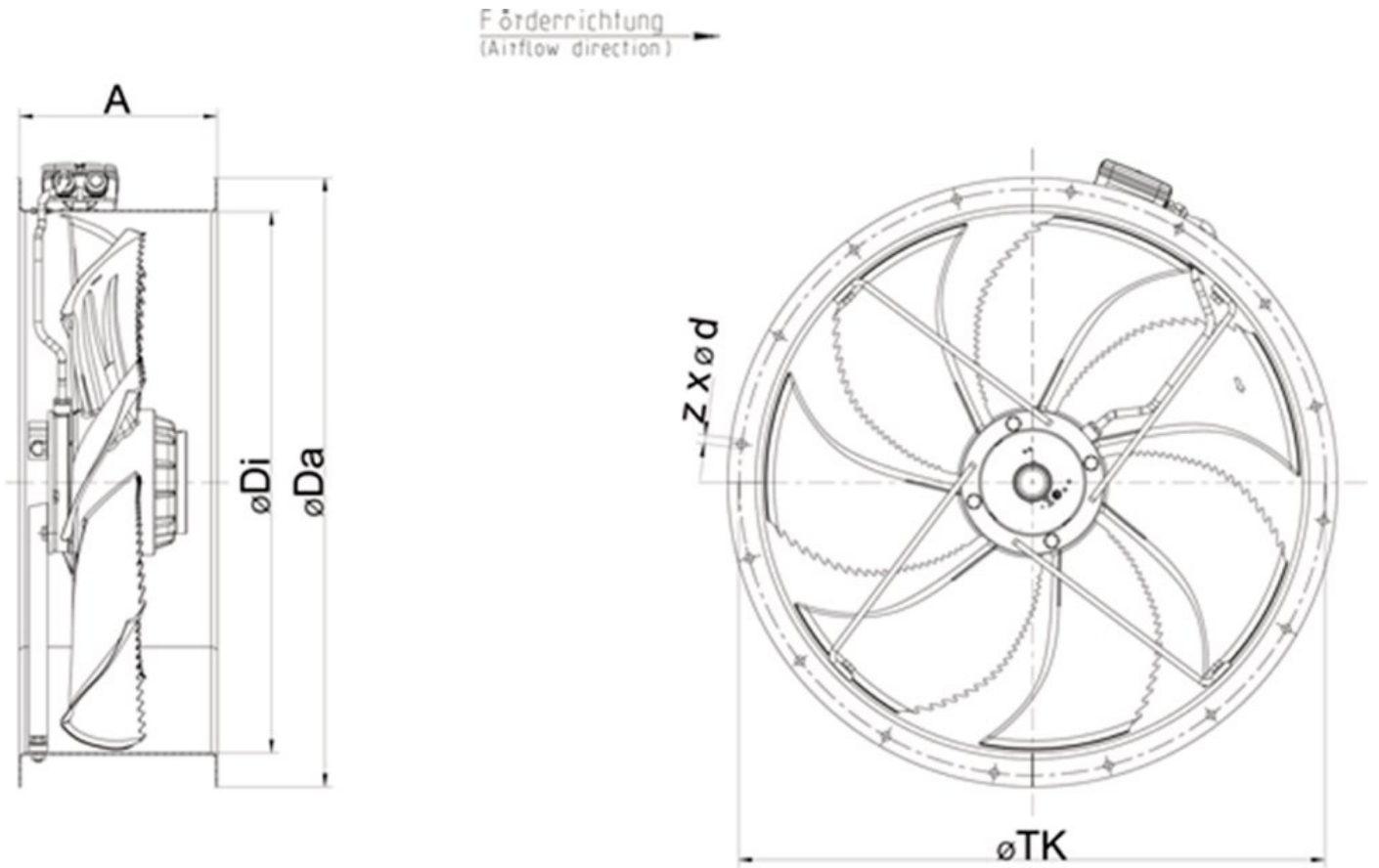
Performance curve



| Hydraulic data | |
|--------------------------|---------------|
| Required air flow | 3.86 m³/s |
| Required static pressure | 138 Pa |
| Working air flow | 3.86 m³/s |
| Working static pressure | 138 Pa |
| Air density | 1.204 kg/m³ |
| Power | 1574.8 W |
| Fan control - RPM | 842 rpm |
| Current | 3.58 A |
| SFP | 0.408 kW/m³/s |
| Control voltage | 400.0 V |
| Supply voltage | 400 V |

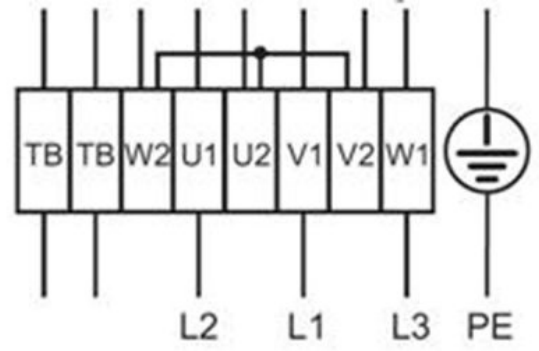
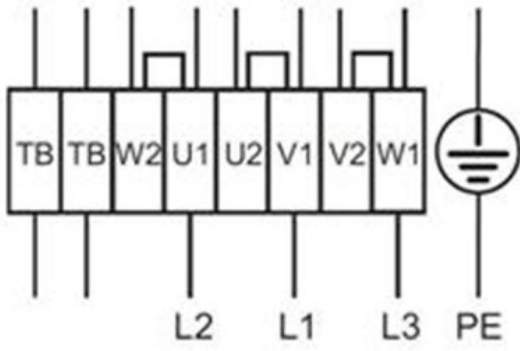
| Sound power level | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | Total |
|-------------------|-------|----|-----|-----|-----|----|----|----|----|-------|
| Inlet | dB(A) | 22 | 39 | 54 | 59 | 66 | 67 | 63 | 53 | 71 |
| Outlet | dB(A) | 23 | 41 | 57 | 60 | 66 | 64 | 61 | 53 | 70 |

Dimension



| | A | ØDi | ØDa | ØTK | z x Ød |
|----------------|-----|-----|-----|-----|------------|
| AR 800DS sileo | 280 | 797 | 890 | 860 | 16 x Ø11.5 |

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 800DS |
| Year of manufacture | See name plate of the fan |
| Air flow qv | 3.7139 m ³ /s |
| Efficiency category | static |
| Efficiency grade N | 40.6 |
| Efficiency grade target N | 40 |
| Speed (rpm) n | 860 r.p.m. |
| Pressure increase total psf | 154 Pa |
| Power consumption Ped | 1,650 W |
| Overall efficiency | 35.7 % |
| 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 800 flex.conn. 70°C (8360)
- MFA-AXC/AM 800 mounting foot (311291)
- RTRDU 4 Speed contr. Systemair (5946)
- S-DT2SKT Two speed switch Y/D (2697)
- GFL-AR/AXC 800 counter flange (8384)
- RTRD 4 Speed cont. Systemair (5942)
- S-DT 16E Motor Protection (161207)
- SG AXC/AM/AR 800 guard grill (310693)

Documents

- L-BAL-001-SYSTEMAIR.PDF
- UKCA-declaration of conformity_AXC_001
- installation variations_1_AR_AW.pdf