



## K Circular Duct Fans

### High Quality radial fan for circular ducts

- Available with AC and EC motors
- Indoor and outdoor installation
- Reliable and airtight
- Mounting bracket included
- Noise and energy optimized impeller

[Find more details in our online catalogue.](#)

### Flexibility

The K fans are intended to use for **supply** or **extract** air, designed to be installed in **any position**. This ensures that the fans can be used in a variety of **commercial** and **domestic** applications.

### Reliability

The unit's **airtight casing** and corrosion resistance permits **outdoor** and **indoor** use. The combination of reliable casing and motor construction ensures, to minimize the need for maintenance of the fans and allows long **continuous operation**.

### Performance

**Sound optimized** radial impeller together with **high efficient** external rotor motor are designed to ensure high-level performance to **minimize power consumption** and **maximize efficiency**.

### Accessories

K fans can be selected together with variety types of **accessories** as fast clamps, heaters, filters, dampers, etc.

## Certifications



### Ecodesign (ErP) compliant

Compliant with today's and tomorrow's European Union rules and requirements for energy labelling and ecodesign for Energy-related Products (ErP).

## Features

### Construction

Casing made of **galvanised sheet steel**, corrosion **class C3** is fully **air tight class C** according to EN1751. The fans are equipped with an external **terminal box with** protection class **IP55**.

### Impeller

K fans use backward curved **radial** impellers. These are from lightweight, hard-wearing fiberglass reinforced **polyamide**, dynamically **balanced** and paired with corresponding external rotor motors.

### Motor

Depending on type, K fans are equipped with **AC** or high efficient **EC** external rotor motors. All motors are suitable for **50Hz** and **60Hz**.

### Motor protection

Fans with **AC** motors have **integrated** thermal protection with manual (electrical) reset. Size 100 and 125 has an impedance motor protection.

Fans with **EC** motors have an **integrated** electronic **thermal protection** including **locked-rotor protection** and **soft-start**.

### Control

**EC motor** with **built-in potentiometer** to adjust working point can be also controlled by external **signal 0-10V**.

**AC motor** can be controlled by **5-step** or **stepless** speed regulator.

### Installation

K fans can be installed in **any** position **indoor** and **outdoor** by included **mounting brackets**. All models have a spigot with 25 mm length which is perfectly designed to connect circular duct by **fast clamps preventing vibration** to the duct. Installation can be combined with filter boxes, sound attenuators, and other mechanical accessories from recommended list.

## Technical parameters

### Nominal data

|   |         |      |
|---|---------|------|
| Voltage (nominal)   | 230     | V    |
| Frequency   | 50      | Hz   |
| Phases  | 1~      |      |
| Input power   | 30      | W    |
| Input power kW  | 0.03    | kW   |
| Input current   | 0.163   | A    |
| Impeller speed  | 2,481   | rpm  |
| Air flow  | max 180 | m³/h |
| Temperature of transported air                            | max 70  | °C   |
| Max temperature of transported air, when speed controlled | 70      | °C   |

### Sound data

|   |    |       |
|---|----|-------|
| Sound pressure level at 3m (20m² Sabin) | 38 | dB(A) |
|---|----|-------|

### Protection/Classification

|                        |      |
|------------------------|------|
| Enclosure class, motor | IP44 |
| Insulation class       | B    |

### Data according to ErP

|                            |          |
|----------------------------|----------|
| Energy class, Basic unit   | F        |
| Energy class, Local demand | D        |
| ErP ready                  | ErP 2018 |

### Dimensions and weights

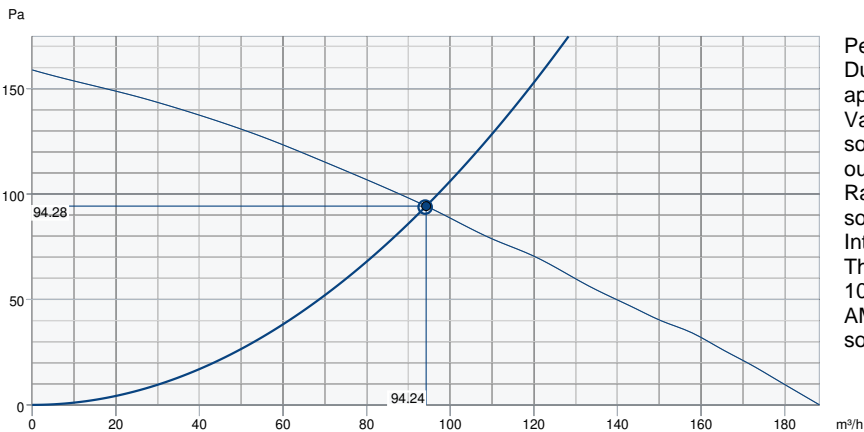
|                                  |     |    |
|----------------------------------|-----|----|
| Duct dimension; Circular, inlet  | 100 | mm |
| Duct dimension; Circular, outlet | 100 | mm |
| Weight                           | 2.3 | kg |

### Others

|                      |          |
|----------------------|----------|
| Duct connection type | Circular |
| Motor type           | AC       |

## Performance

### Performance curve



Performance certified is for installation type D – Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Values shown are for inlet Lwi and LwiA and outlet Lwo and LwoA sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. The sound power level ratings shown are in decibels, referred to 10<sup>-12</sup> watts, calculated per AMCA International Standard 301. AMCA certified data is, Airflow, Static pressure, Power, Inlet sound, Outlet sound at 230V

#### Hydraulic data

|                          |               |
|--------------------------|---------------|
| Required air flow        | 94 m³/h       |
| Required static pressure | 94 Pa         |
| Working air flow         | 94 m³/h       |
| Working static pressure  | 94 Pa         |
| Air density              | 1.204 kg/m³   |
| Power                    | 28.4 W        |
| Fan control - RPM        | 2,533 rpm     |
| Current                  | 0.16 A        |
| SFP                      | 1.085 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) | 48 | 59  | 58  | 60  | 53 | 50 | 37 | 27 | 64    |
| Outlet                                   | dB(A) | 51 | 60  | 61  | 51  | 53 | 46 | 34 | 28 | 64    |
| Surrounding                              | dB(A) | 17 | 21  | 24  | 41  | 41 | 38 | 25 | 23 | 45    |
| Sound pressure level at 3m (20m² Sabine) | dB(A) | -  | -   | -   | -   | -  | -  | -  | -  | 38    |
| Sound pressure level at 3m free field    | dB(A) | -  | -   | -   | -   | -  | -  | -  | -  | 24    |

## Certifications



### [AMCA Worldwide Certified Ratings: Sound and Air Performance](#)

Systemair Production AB certifies that the model K 100 M Sileo is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Check the AMCA Certified and Listed Product Search for our products  
<https://www.amca.org/certify/#certified-product-search>