

# 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).

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#### **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**.

#### **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.

#### 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.

#### 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.

#### 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**.

#### 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.

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## **Technical parameters**

Nominal data		
Voltage (nominal)	230	V
Frequency	50	Hz
Phases	1~	
Input power	53	W
Input power kW	0.053	kW
Input current	0.231	А
Impeller speed	2,388	rpm
Air flow	max 450	m³/h
Capacitance of capacitor	1.5	μF
Temperature of transported air	max 70	°C
Max temperature of transported air, when speed controlled	70	°C

Sound data		
Sound pressure level at 3m (20m <sup>2</sup> Sabin)	38	dB(A)

#### Protection/Classification

Enclosure class, motor	IP44	
Insulation class	В	

Data according to ErP		
Energy class, Basic unit	E	
Energy class, Local demand	В	
ErP ready	ErP 2016; ErP 2018	

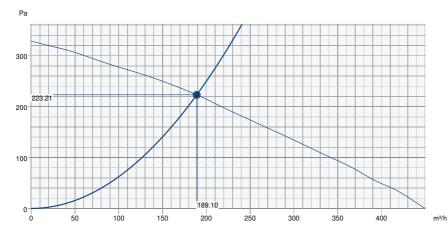
Dimensions and weights	
Duct dimension; Circular, inlet	<b>160</b> mm
Duct dimension; Circular, outlet	<b>160</b> mm
Weight	<b>3.3</b> kg

Others		
Duct connection type	Circular	
Motor type	AC	

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## 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 oulet Lwo and LwoA sound power levels for installation type D: ducted inlet, ducted outlet.

Ratings include the effects of duct end correction. The Aweighted 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	189 m³/h
Required static pressure	223 Pa
Working air flow	189 m³/h
Working static pressure	223 Pa
Air density	1.204 kg/m³
Power	50.6 W
Fan control - RPM	2,452 rpm
Current	0.22 A
SFP	0.963 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)	42	62	59	58	59	58	52	41	67
Outlet	dB(A)	45	61	54	59	58	56	51	40	66
Surrounding	dB(A)	17	21	32	39	38	40	34	25	45
Sound pressure level at 3m (20m <sup>2</sup> 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 160 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