



# 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).

#### Item number: #19512 Operating Mode: 230V 1~ 50Hz

### **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.

Item number: **#19512** Operating Mode: **230V 1~50Hz** 

# **Technical parameters**

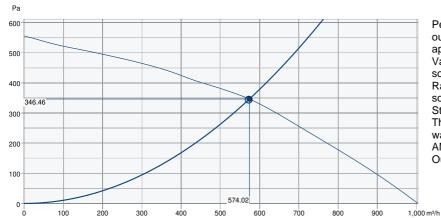
Motor type

lechnical parameters		
Nominal data		
Voltage (nominal)	230	V
Frequency	50	Hz
Phases	1~	
Input power	158	W
Input power kW	0.158	kW
Input current	0.677	Α
Impeller speed	2,645	rpm
Air flow	max 950	m³/h
Capacitance of capacitor	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 (20m² Sabin)	41	dB(A)
Protection/Classification		
Enclosure class, motor	IP44	
Insulation class	F	
Data according to ErP		
ErP ready	ErP 2016; ErP 2018	
Dimensions and weights		
Duct dimension; Circular, inlet	250	mm
Duct dimension; Circular, outlet	250	mm
Weight	4.6	kg
Others		
Duct connection type	Circular	

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 oulet 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 10-12 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	572 m³/h
Required static pressure	344 Pa
Working air flow	574 m³/h
Working static pressure	346 Pa
Air density	1.204 kg/m³
Power	156.1 W
Fan control - RPM	2,656 rpm
Current	0.67 A
SFP	0.979 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)	53	62	65	61	62	60	54	50	70
Outlet	dB(A)	56	62	59	62	62	62	55	49	69
Surrounding	dB(A)	30	30	42	42	41	42	34	28	48
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	41
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	27

## **Certifications**



## AMCA Worldwide Certified Ratings: Sound and Air Performance

Systemair Production AB certifies that the model K 250 L 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