

RVK Circular Duct Fans

Centrifugal fan for duct installation

- Available with AC motors for 50 and 60Hz
- Mounting bracket included
- Sound and energy optimized impeller

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



Flexibility

The RVK 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 **polypropylene** and **fiberglass casing** is lightweight and hard-wearing. This makes it perfect for protecting **against the damages** of regular use and **damp working environments**. The combination of casing and motor construction ensures to minimize the need for maintenance of the fans and allows long **continuous operation**.

Performance

The **sound optimized** impellers together with **high efficient** external rotor motors are designed to ensure high-level performance to **minimize power consumption** and **maximize efficiency**.

Accessories

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

RVK 100E2 sileo 1ph/230V

Centrifugal circular duct fan, <125W

- Maintenance-free and reliable
- Inclusive mounting bracket
- Can be installed in any position
- Integral thermal contacts
- Speed-controllable

The RVK series is designed for installation in ducts. The casing is manufactured from Polypropylene with 30% fibreglass reinforced plastic which gives the fan a less leakage casing. Duct connected wet room applications of the fan are possible due to the air tight casing and the IP 44 rated terminal box. We recommend a period of continued ventilation with dry air for wet room applications. The fans have backward-curved blades and external rotor motors.

The FK mounting clamp facilitates easy installation and removal, and prevents the transfer of vibration to the duct. The fans can be speed-controlled via a stepless

thyristor or a 5-step transformer. To protect the motor from overheating the models have integrated thermal contacts with manually reset.

Features

Construction

The casing made out of **polypropylene** and **fiberglass** is lightweight and hard-wearing.

The Fans are equipped with an external **terminal box with** protection class **IP55**.

Impeller

RVK 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

Fans are equipped with **AC** external rotor motor. Motors are suitable for **50Hz** and **60Hz**.

Motor protection

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

Control

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

Installation

RVK fans can be installed in any position **indoor** by using the **included mounting brackets**. Spigot with 25 mm length is perfectly designed to connect circular duct by **fast clamps preventing vibration** to the duct.

Technical parameters

Nominal data

Voltage (nominal)	230	V
Frequency	50	Hz
Phases	1~	
Input power	29	W
Input power kW	0.029	kW
Input current	0.171	A
Impeller speed	2,482	rpm
Air flow	max 184	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)	35	dB(A)
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Protection/Classification

Enclosure class, motor	IP44
Insulation class	B

Data according to ErP

ErP ready	Not ErP relevant
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Dimensions and weights

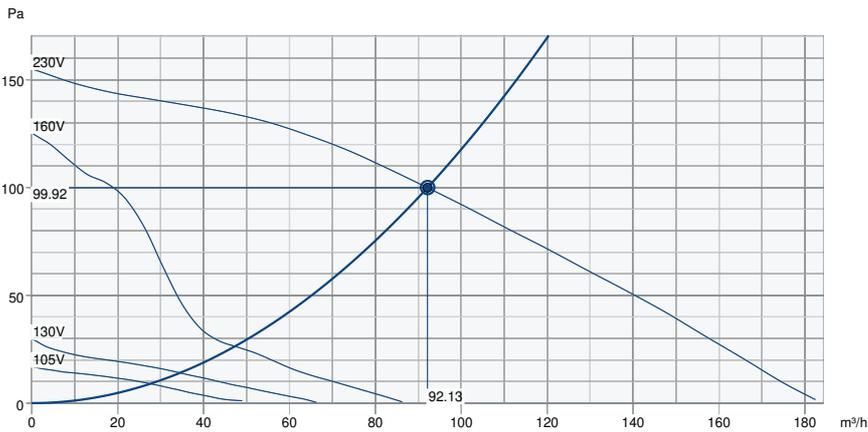
Duct dimension; Circular, inlet	100	mm
Duct dimension; Circular, outlet	100	mm
Weight	1.8	kg

Others

Duct connection type	Circular
Motor type	AC

Performance

Performance curve



Hydraulic data

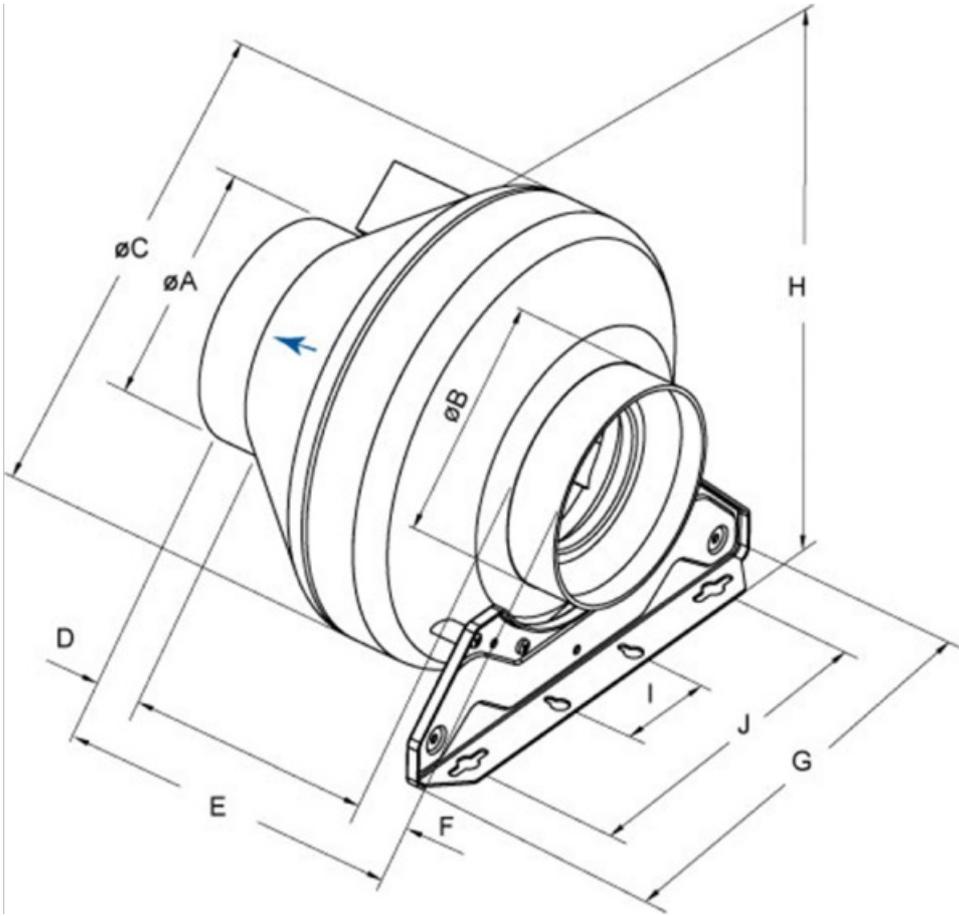
Required air flow	92 m³/h
Required static pressure	100 Pa
Working air flow	92 m³/h
Working static pressure	100 Pa
Air density	1.204 kg/m³
Power	28.0 W
Fan control - RPM	2,541 rpm
Current	0.16 A
SFP	1.094 kW/m³/s
Control voltage	230.0 V
Supply voltage	230 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	41	58	58	58	51	44	39	27	63
Outlet	dB(A)	44	53	52	52	47	43	39	28	58
Surrounding	dB(A)	<10	11	30	37	37	34	25	14	42
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	35
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	21

Ecodesign

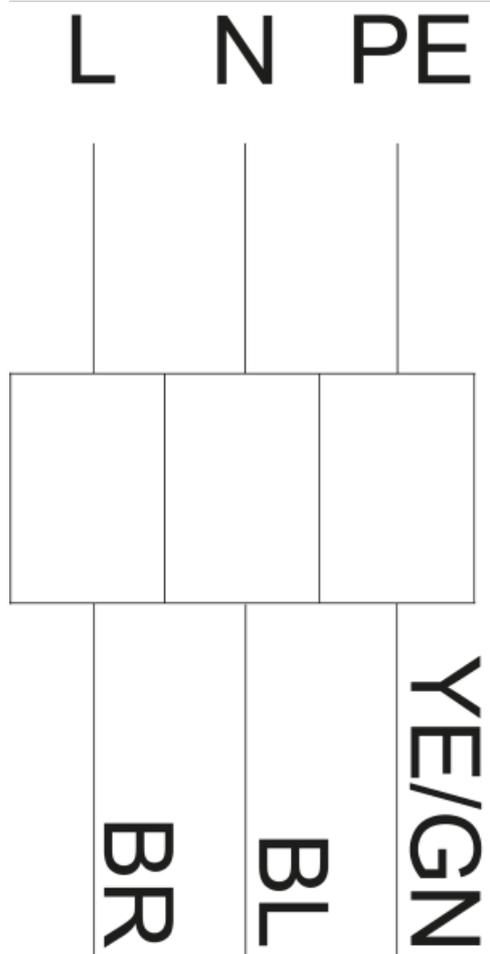
Product	
Trade name	Systemair
Product name	RVK 100E2 sileo 1ph/230V
Ecodesign	
Unit category	NRVU
Drive	External MSD or VSD
Unit type	UVU
Heat recovery type	None
Temperature ratio (UVU)	Not applicable
qv nom	0.025 m ³ /s
P nom	0.028 kW
Ps nom	99 Pa
Fan efficiency	9 %
External Leakage	5 %
Sound power (LWA)	29 dB(A)

Dimension



	øA	øB	øC	D	E	F	G	H	I	J
RVK 100	99	99	251	30	237,5	30	272	265	60	200

Wiring



. assignment

BL= blue

BR= brown

YE/GN= yellow/green

Accessories

- Frequency converter FRQ5SE-6A (37421)
- REE 1 Speed control (5314)
- REV-3POL/03-7,5kW R/Y (33978)
- VKK-100 Back draft damper (1623)
- IGK-100 Wall Grid (1630)
- CB 100-0,6 230V/1 Duct heater (5376)
- CWK 100-3-2,5 Duct cooler,circ (30019)
- FGR 100 Filter cassette (1802)
- LDC 100-1200 Silencer (5996)
- LDC 100-900 Silencer (5189)
- VBC 100-2 Water heating batt (5456)
- VBF 100 Water heating battery (1724)
- IGC-100 Intake grille (76874)
- RE 1,5 Speed control (5000)
- REU 1.5 Speed control (5004)
- SG 100 Protection guard (5606)
- Frequency converter FRQSE-6A (37419)
- CB 100-0,4 230V/1 Duct heater (5288)
- CBM 100-0,6 230V/1 Duct heater (5479)
- FFR 100 Filter cassette (1766)
- FK 100 Fast clamp (1607)
- LDC 100-600 Silencer (5188)
- RSK-100 Back draft damper (5597)
- VBC 100-3 Water heating batt (9838)
- VK-10 Louvre shutter (87682)

Documents

- [MANUAL_RVK_EN_003.PDF](#)
- [rvk100_sileo_kpl.dxf](#)
- [EU DECLARATION OF CONFORMITY_RVK_EN_005.PDF](#)
- [PP compound \(30% glass fibre content\).pdf](#)

Specification

RVK 100E2-A Circular duct fan made of plastic. DN 100, 230V/50Hz, 1~, plastic casing Circular duct fan for easy and direct installation in ducts. The casing is manufactured from Polypropylene with 30% glass fibre content. Circular connection spigot, length 25mm, acc. to EN1506:1997 Free-running, backward curved centrifugal impeller made of plastic. Balancing made to G 6.3, motor compl. with impeller statically and dynamically balanced in two planes acc. to DIN ISO 1940 T.1. Voltage controllable external rotor motor, maintenance-free, the motor is placed inside the air flow for cooling. Integral thermal contacts with manually reset, speed-controlled via a 5-step transformer or a stepless thyristor. Silent, long-life ball bearings. Terminal box on the casing Mounting bracket included in delivery (unmounted). For indoor installation. Installation in any mounting position. PRODUCT: SYSTEMAIR TYPE: RVK 100E2-A Item no. 5755