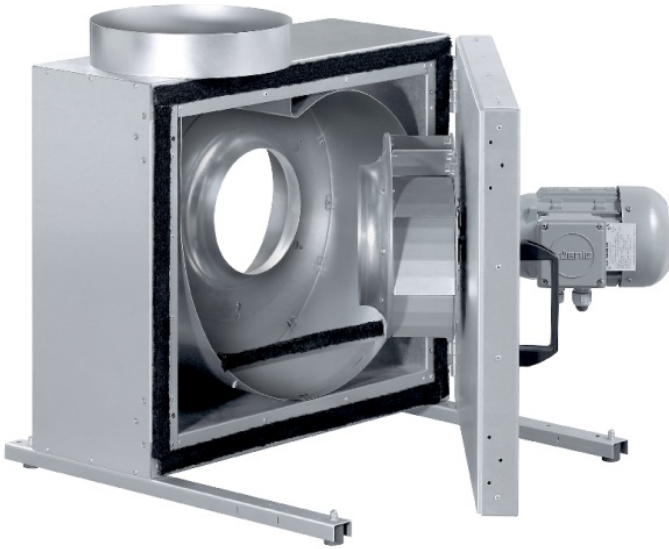


KBR/F Centrifugal Fans

High-performing smoke extract fans for harsh working conditions in the event of a fire

- Continuous medium temperature up to 200°C
- Smoke extraction 400°C/2h (F400)
- Acoustic and thermal insulation 50 mm
- Easy to service and maintain due to the swing-out inspection door

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



Powerful smoke extraction

The smoke extract units KBR/F are used in case of fire to extract smoke gases and also during normal working conditions for temperature up to 200°C continuously.

Hard-wearing design

The KBR casing is manufactured from doubleskinned galvanised sheet steel and is insulated with 50 mm mineral wool.

Performance

High performance impeller together with **high efficient** motors are designed to ensure high-level performance to **minimize power consumption** and **maximize efficiency**.

Certifications



Features

Construction

The KBR/F casing is manufactured from doubleskinned galvanised sheet steel and is insulated with 50 mm mineral wool. The fan is isolated from the casing via connectors and anti-vibration dampers are incorporated into the base frame. Standard is that the motor is outside the air stream. The KBR/F fans have a swing-out door for easy inspection and service. Tested according to EN 12101- 3. CE-Certification according to EN 12101-3 ;2002-06 through TÜV Süd.

Impeller

The KBR/F fans use **radial** impeller with **backward curved blades**. These are made out of aluminum, dynamically **balanced** and paired with corresponding **IEC motor** with efficiency **IE3 or EC motor**.

Motor

High temperature motors for temperature classification F400 (400°C/120 min).

Motor protection

Fans with **AC** motors have an **integrated** thermal protection with manual (electrical) reset, **thermistor PTC** for connection to a motor protection device. Fans with **EC** motors have an **integrated** electronic **thermal protection** including **locked-rotor protection** and **soft-start**.

Control

The **AC motors** can be controlled by **5-step, stepless** speed regulator, **D/Y** switch or **frequency converter**. **EC motors** with **built-in potentiometer** to adjust working point can be also controlled by external **signal 0-10V**.

Installation

The fans can be used **indoor** or with **specific accessories** also **outdoor**. Due to the mounted **base frame the fan** can stand **on floor**.

Technical parameters

Nominal data		
Voltage (nominal)	400	V
Frequency	50	Hz
Phases	3~	
Input power	3,322	W
Input power kW	3.322	kW
Starting current	46.8	A
Input current	5.35	A
Impeller speed	2,896	rpm
Air flow	max 7,081	m³/h
Max. Temperature of transported air for 120 min	400	°C
Temperature of transported air	max 200	°C
Max temperature of transported air, when speed controlled	200	°C

Sound data		
Sound pressure level at 10m (free field)	45	dB(A)
Sound pressure level at 4m (free field)	53	dB(A)

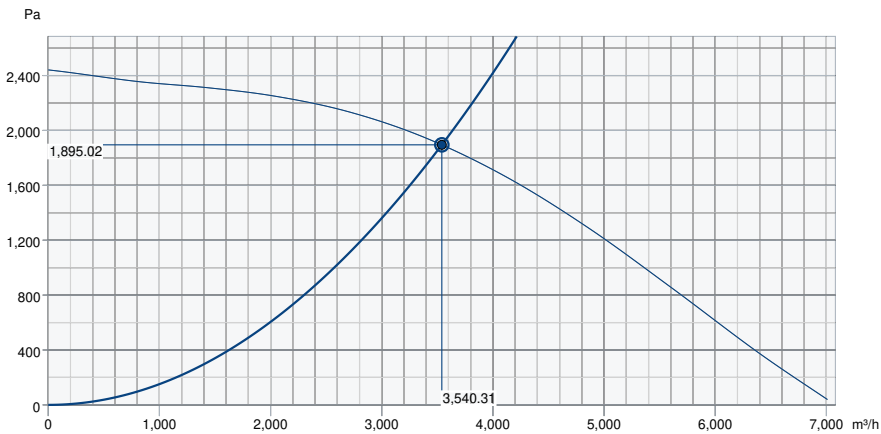
Protection/Classification		
Enclosure class, motor	IP55	
Insulation class	F	

Dimensions and weights		
Duct dimension; Circular, inlet	355	mm
Weight	88	kg

Others		
Motor type	AC	

Performance

Performance curve

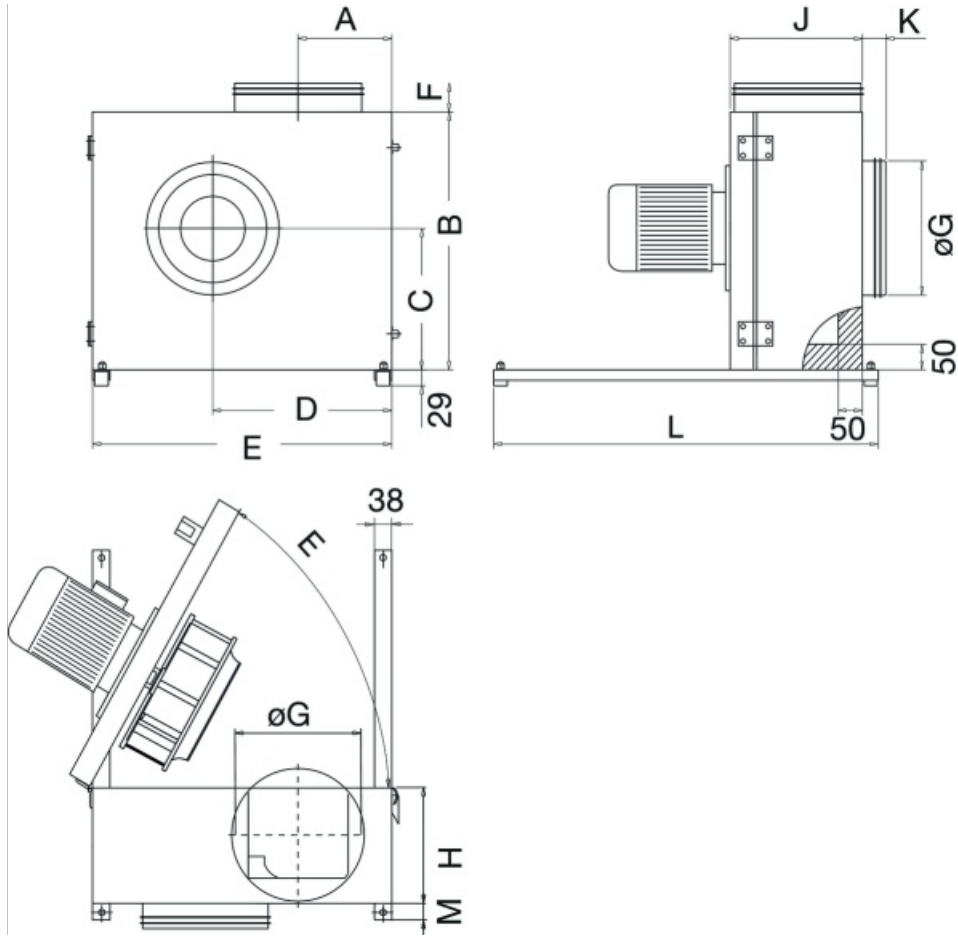


Hydraulic data

Required air flow	3,540 m³/h
Required static pressure	1,895 Pa
Working air flow	3,540 m³/h
Working static pressure	1,895 Pa
Air density	1.204 kg/m³
Power	3,375.8 W
Fan control - RPM	2,894 rpm
Current	5.42 A
SFP	3.433 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

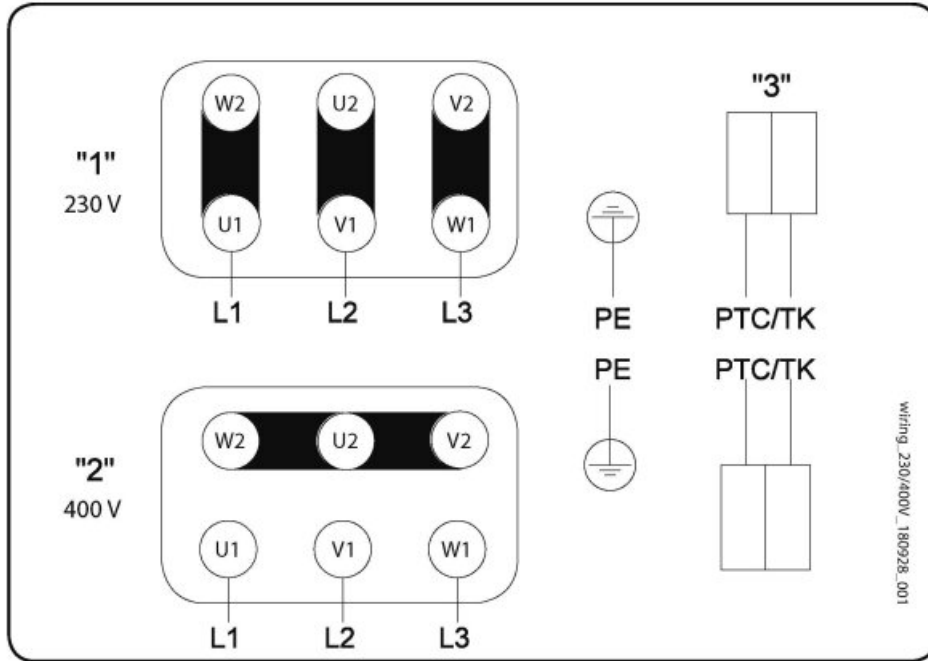
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	51	67	74	85	81	74	66	58	87
Outlet	dB(A)	53	69	75	87	82	76	68	59	89

Dimension



KBR	A	B	C	D	E	F	$\varnothing G$	H	J	K	L	M
355	206,7	655	372	451	770	125	355	273	331	70	770	55

Wiring



- 1 3 x 230V Delta Connection
 - 2 3 x 400V Star connection
 - 3 PTC / TK
- Changing of direction of rotation by interchanging of two phases

Accessories

- ASF 355/KB Flex. connection (2719)
- Frequency converter FRQ5S-10A (36234)
- LRK 355(F) air oper. damper (8317)
- RSA 355/355/070 (F) (311349)
- RSA 355/710/070 (F) (311351)
- UGF 355 Transition flange (305494)
- Frequency converter FRQS-10A (36232)
- ALS-KBR drain plug (2727)
- REV-5POL/07-EMV-7,5kW B/G (281744)
- EVH 355 flex.conn. AXC 400°C (8365)
- Frequency converter FXDM8AM (31388)
- REV-5POL/05-7,5kW R/Y (33979)
- RSA 355/532,5/070 (F) (311350)
- U-EK230E Motor protection (30199)
- WSD KBR-2 Weather roof f.motor (2729)
- REV-5POL/07-EMV-7,5kW R/Y (34549)
- WBK 315/355 Wall bracket (2721)

Documents

- Installation, Operation and Maintenance instruction_005
- 2797_CPR_719672.PDF
- eu_declaration_of_conformity_smoke_extract_fans_en_003.pdf