

AXCBF Axial Fans

Bifurcated axial fan for high temperature extraction

- Up to 200°C
- Bifurcated casing
- Performance tested

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

Application

The bifurcated build of the AXCBF range is designed for the extraction of dirty, humid and hot air up to 200°C.

Sturdy and dependable design

Corrosion-proof **aluminum impellers**, **IE3** high-efficiency **motors** and a **hot-dip galvanized steel casing** ensure **high quality** and a **long life time**.

Tested according to ISO 5801 and AMCA 210

The AXC axial fans have been **performance tested** in accordance with **ISO 5801** and **AMCA 210** standards on the Systemair fan test rig.

Certifications



Green Ventilation

Features

Construction

The **bifurcated casing** is made from **hot-dip galvanised steel** according to ISO 1461 with **pre-drilled flanges**. The terminal box with **IP 65** is mounted outside on the casing.

Impeller

The impellers are made of **aluminum** and are **dynamically balanced** in accordance with ISO 21940-11, balancing quality G6,3, and vibration limits according to ISO 14694.

Motor

Standard models are driven by three-phase **AC motors** with efficiency **IE3** suitable for **50Hz**.
The motor is **outside** the **airflow**.

Motor protection

The **motors** are equipped with **PTC thermistors** for motor protection.

Control

Motors can be speed controlled by **frequency inverter** between 10 and 60 Hz.

Installation

The **AXCBF** fans can be installed in different positions **indoor** and **outdoor** (for more information see the manual).
Recommended **accessories**: flexible connections, vibration dampers, mounting feet.

Technical parameters

Nominal data

Voltage (nominal)	400	V
Frequency	50	Hz
Phases	3~	
Motor circuit connection	D; Y	
Input power	3,229	W
Input power kW	3.229	kW
Nominal power at shaft (P2)	4	kW
Input current	7.95	A
Impeller speed	1,445	rpm
Air flow	max 21,781	m³/h
Temperature of transported air	max 200	°C

Sound data

Sound pressure level at 1m	99	dB(A)
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Protection/Classification

Enclosure class, motor	IP55
Insulation class	F

Ambient and duct temperature

Permitted ambient temperature	max 55	°C
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Dimensions and weights

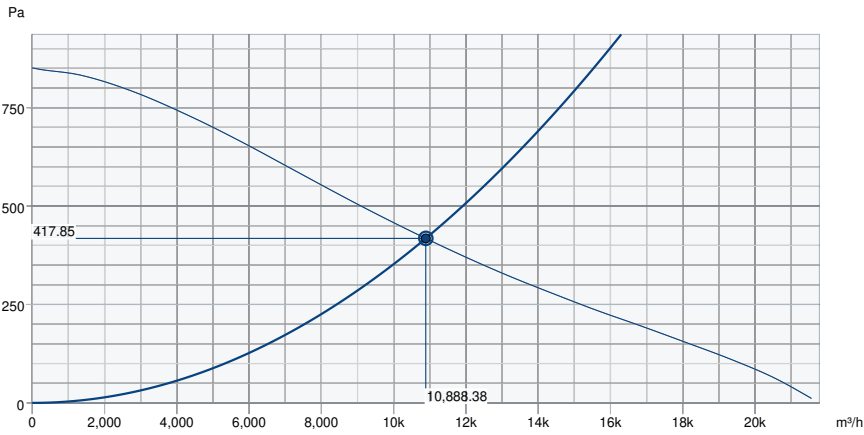
Duct dimension; Circular, inlet	800	mm
Duct dimension; Circular, outlet	800	mm
Weight	165	kg

Others

Duct connection type	Circular
Motor type	AC

Performance

Performance curve



Hydraulic data

Required air flow	10,891 m³/h
Required static pressure	418 Pa
Working air flow	10,888 m³/h
Working static pressure	418 Pa
Air density	1.204 kg/m³
Power	3,185.4 W
Fan control - RPM	1,470 rpm
Current	5.99 A
SFP	1.053 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)	57	82	88	88	88	87	82	75	95
Outlet	dB(A)	58	83	90	89	90	89	83	76	96

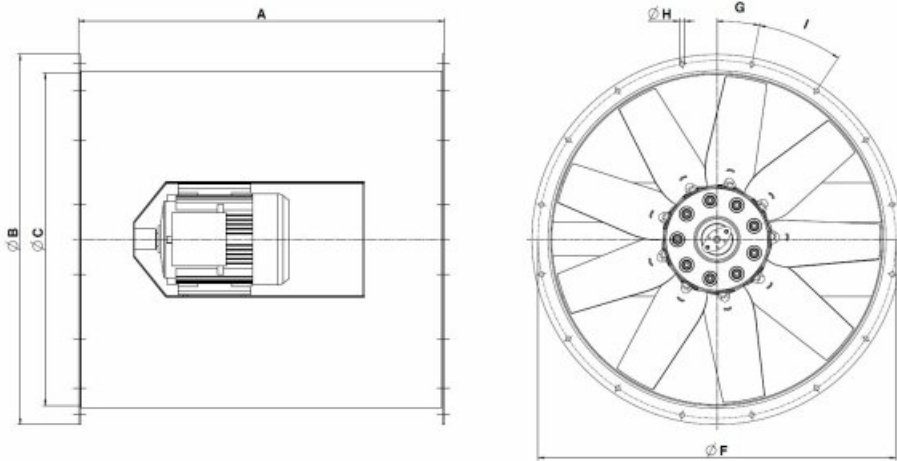
Acoustic

Mid-frequency band, Hz

	Hz	Tot	63	125	250	500	1k	2K	4K	8K
LwA inlet /outlet	dB(A)	99	71	81	90	94	94	91	87	80

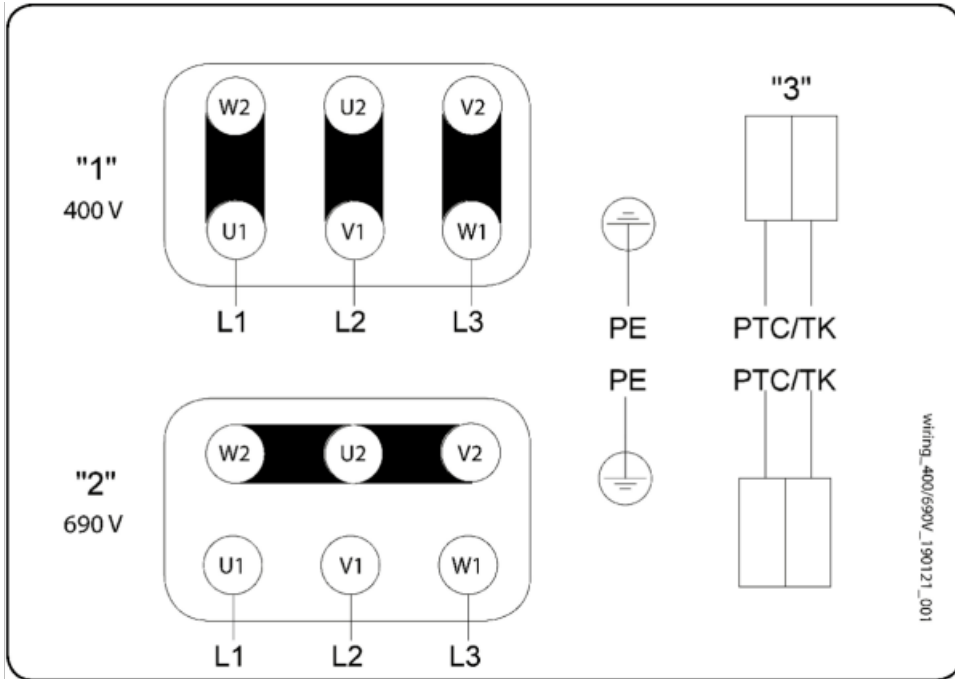
Measuring point: qv = 3,0 m3/s, Ps = 401 Pa

Dimension



	A	Ø B	Ø C	Ø F	G	Ø H	I
AXCBF 800	880	890	800	860	11,25°	12	16 x 22,5°

Wiring



400/690V motor

"1" 3 x 400V Delta connection

"2" 3 x 690V Star connection

"3" Thermal motor protection optional

See motor name plate!

Accessories

- EVH 800 flex.conn. AXC 400°C (8372)
- Frequency converter FRQ5-10A (36230)
- FSD3 AXC spring set 4 ≤168kg (30546)
- LRK 800(F) air oper. damper (8324)
- REV-9POL/12-7,5kW R/Y (33981)
- RSA 800/1600/100 (F) (311374)
- SG AXC/AM/AR 800 guard grill (310693)
- Frequency converter FRQS-10A (36232)
- REV-9POL/12-7,5kW B/G (281743)
- Frequency converter FRQ-10A (36228)
- Frequency converter FRQ5S-10A (36234)
- GFL-AR/AXC 800 counter flange (8384)
- MFA-AXC/AM 800 mounting foot (311291)
- RSA 800/1200/100 (F) (311373)
- RSA 800/800/100 (F) (311372)
- U-EK230E Motor protection (30199)
- FC102-4,0kW/10A-IP55, 150/50m (36162)
- SG-20 AXC800 protection grill (254260)

Documents

- [technical-documentation-manuals_308013_EN_015](#)