

## AXZENT Centrifugal Fans

### Low-maintenance thermo-centrifugal fan solution for duct systems

- For industrial environments
- Up to 120°C medium temperature, continuous operation
- Energy Efficient
- Spun flanges according to Eurovent 1/2

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

#### Robust

The AXZENT series combine the strengths of axial and radial fans for use in demanding professional environments. The thermal centrifugal fan for medium temperatures up to 120°C in continuous operation is reliable in operation, for simple, direct installation in the duct system.

#### Performance

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

#### Accessories

AXZENT can be selected together with variety types of **accessories** as Co2 and temperature controls, speed controllers, silencers, and other options.

### Certifications



Green Ventilation

## Features

### Construction

The long casing is manufactured from pre-galvanized steel and has spun flanges according Eurovent 1/2, for direct installation in duct systems. The motor is outside the air stream.

### Impeller

Depending on the type, AXZENT fans are equipped with **AC** or **EC** external rotor motors. Motors are suitable for **50Hz** and **60Hz**.

### Motor

Depends on the model AXZENT fans are delivered with **AC motor** or **EC motor**. Motors are suitable for **50Hz** and **60Hz**.

### Motor protection

Depending on the type, **AC** motors have an **integrated** thermal protection with manual (electrical) reset, prewired integral **thermocontact TK** or **thermistor PTC** with leads to a **motor protection device**.

Fans with **EC** motors have an **integrated** electronic **thermal protection** including **locked-rotor protection** and **soft-start**.

### Control

**EC motors** with **built-in potentiometer** to adjust working point can be also controlled by external **signal 0-10V**.

**EC motors, depending on the type** are also equipped with **ModBus** communication or **alarm signal**.

**AC motors** can be controlled by **5-step, stepless** speed regulator, **D/Y** switch or **frequency converter**.

### Installation

The fans can be used **indoor** or with **specific accessories** also **outdoor**. With Spun flanges according Eurovent 1/2, for direct installation in duct systems.

## Technical parameters

### Nominal data

Voltage (nominal)	400	V
Frequency	50	Hz
Phases	3~	
Input power	2,331	W
Input power kW	2.331	kW
Input current	3.85	A
Impeller speed	2,916	rpm
Air flow	max 6,304	m³/h
Temperature of transported air	max 120	°C
Max temperature of transported air, when speed controlled	120	°C

### Sound data

Sound pressure level at 3m (20m² Sabin)	73	dB(A)
-----------------------------------------	----	-------

### Protection/Classification

Enclosure class, motor	IP55
Insulation class	F

### Dimensions and weights

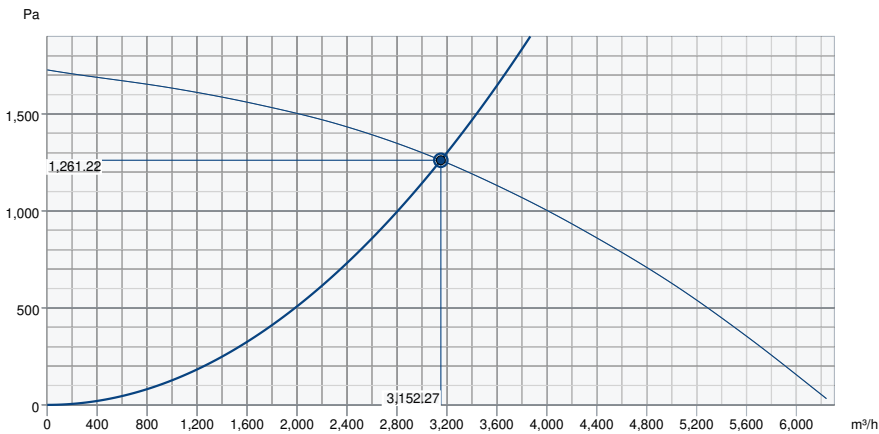
Duct dimension; Circular, inlet	450	mm
Weight	49.8	kg

### Others

Motor type	AC
------------	----

## Performance

### Performance curve



#### Hydraulic data

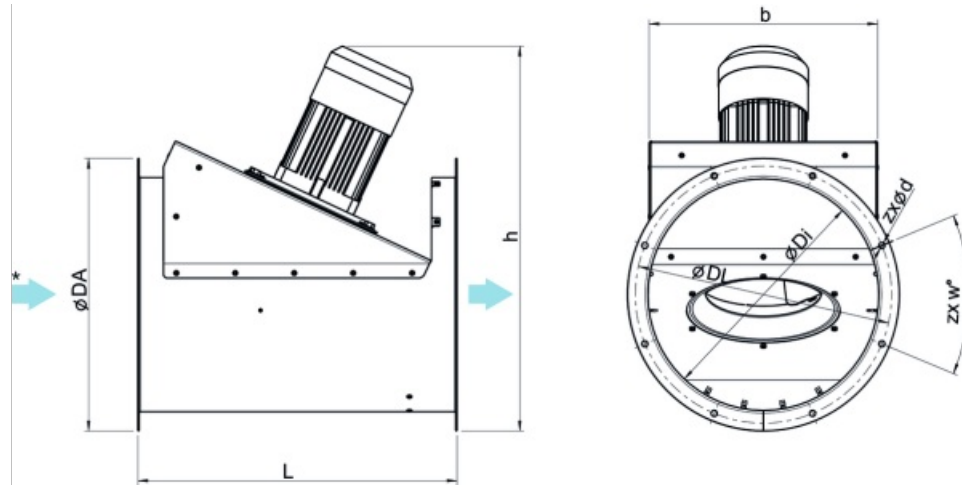
Required air flow	3,152 m³/h
Required static pressure	1,261 Pa
Working air flow	3,152 m³/h
Working static pressure	1,261 Pa
Air density	1.204 kg/m³
Power	2,353.5 W
Fan control - RPM	2,915 rpm
Current	3.88 A
SFP	2.688 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	53	70	89	87	86	82	79	72	93
Outlet	dB(A)	54	72	91	88	87	84	80	73	94

#### AMCA Certified Rating statements

- Catalogue Version:

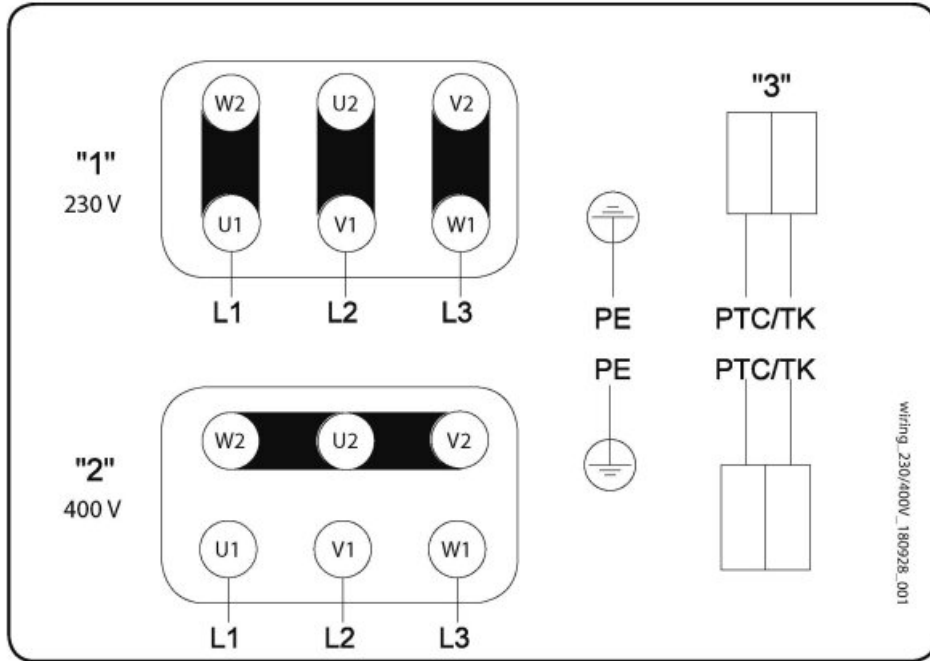
Dimension



\*Air direction

	L	ØDA	h	b	ØDI	ØDL	zx w°	zx Ød
AxZent 450D2 IE3	622,5	530	748,4	445,7	450,5	500,4	8x45°	8xØ12

## 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

- ESD-F 450 inlet cone AXC (305259)
- Frequency converter FRQ-10A (36228)
- Frequency converter FRQ5S-10A (36234)
- GFL-AR/AXC 450 counter flange (8379)
- MFA-AXC/AM 450 mounting foot (311286)
- REV-5POL/05-7,5kW R/Y (33979)
- RSA 450/675/080 (F) (311356)
- SG AXC/AM/AR 450 guard grill (310688)
- WSD AxZent 450 (37505)
- Frequency converter FRQS-10A (36232)
- REV-5POL/07-EMV-7,5kW B/G (281744)
- EVH 450 flex.conn. AXC 400°C (8367)
- Frequency converter FRQ5-10A (36230)
- FSD1 AXC spring set 4 ≤64kg (311438)
- LRK 450(F) air oper.damper (8319)
- MPR 450 mounting ring AXC (309803)
- RSA 450/450/080 (F) (311355)
- RSA 450/900/080 (F) (311357)
- U-EK230E Motor protection (30199)
- ZSD1 AXC spring set 4 ≤64kg (311436)
- REV-5POL/07-EMV-7,5kW R/Y (34549)
- SG-20 AXC450 protection grill (254255)

## Documents

- MANUAL\_AXZENT\_EN\_002.PDF
- COMMISSIONING REPORT\_FANS\_160628\_EN\_001.PDF