

## AxZent 400D2

Centrifugal fan, 120°C continuous temperature

Item number: 87796

Variant: 400V 3~ 50Hz

Inline airflow direction

Up to 120°C medium temperature, continuous operation

Easy to maintain and reliable

High efficient motors in accordance with DIN EN 60034-30

Speed-controllable via frequency converter

Motor outside the air stream

Spun flanges according to Eurovent 1/2

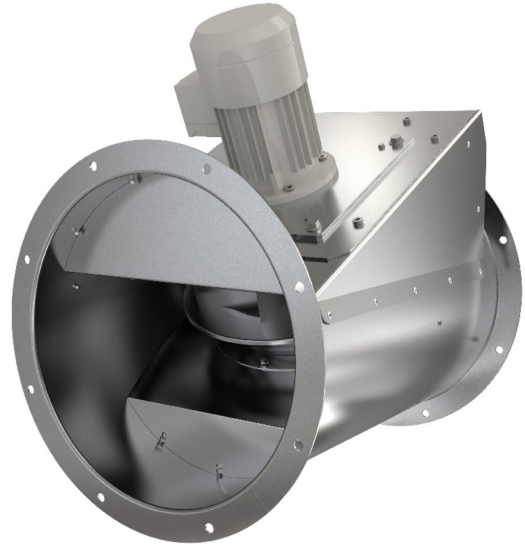
Long casing, pre-galvanized steel

All AxZent fans have new optimized and high efficient HD impellers with backward curved blades, manufactured from aluminium. The fans are equipped with IEC standard motors outside the air stream for all 400V three phase motors from 0.75 kW. Optimum motor protection by cold conductors to be connected to an external motor protection device. The long casing is manufactured from pre-galvanized steel and has spun flanges according Eurovent 1/2, for direct installation in duct systems.

Please note: Speed control by voltage, i.e. voltage transformers, is not possible!

In accordance with Commission Regulation (EC) no 640/2009 of the European Parliament - eco-design requirements for electric motors - the new international efficiency classes are binding as of 16 June 2011. These guidelines defined by CEMEP and EPACT are regarded as international standard for energy-saving high-efficiency motors for frequencies of 50 or 60 Hz and make the use of IE3 motors mandatory.

With this new and more efficient technology we offer our customers many advantages such as environmentally friendly operation, reduced energy consumption and hence lower emissions. IE3 motors have a higher efficiency even in part load operation and allow optimum adjustment to the operating point. In addition, the IE3 motors generate less noise and develop less heat, which has a positive influence on the efficiency and the cooling requirement of the motor. Please note: IE3 motors cannot be speed controlled by voltage, i.e. voltage transformers.



### Technical parameters

| Norminal data   |              |        |
|---|--------------|--------|
| Voltage (nominal)   | 400          | V      |
| Frequency   | 50           | Hz     |
| Phase(s)  | 3~           |        |
| Input power   | 1,333        | W      |
| Input current   | 2.31         | A      |
| Impeller speed  | 2,931        | r.p.m. |
| Air flow  | max ; 4,183; | 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)                   | 74           | dB(A)  |
| Protection/Classification                                 |              |        |
| Enclosure class, motor                                    | IP55         |        |
| Insulation class  | F            |        |

**Dimensions and weights**

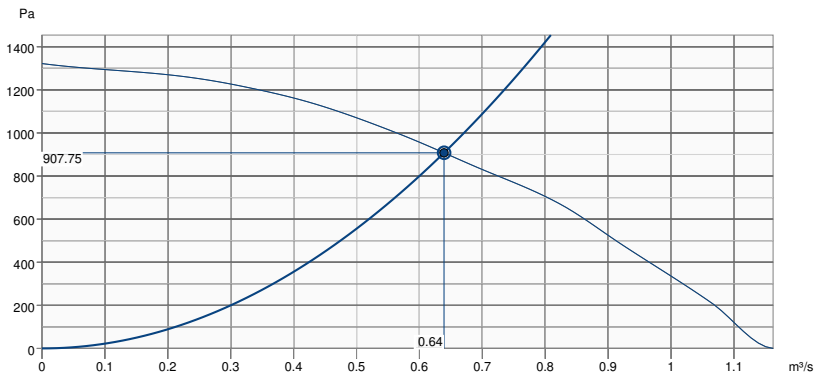
|        |         |
|--------|---------|
| Weight | 41.2 kg |
|--------|---------|

**Others**

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

# Performance

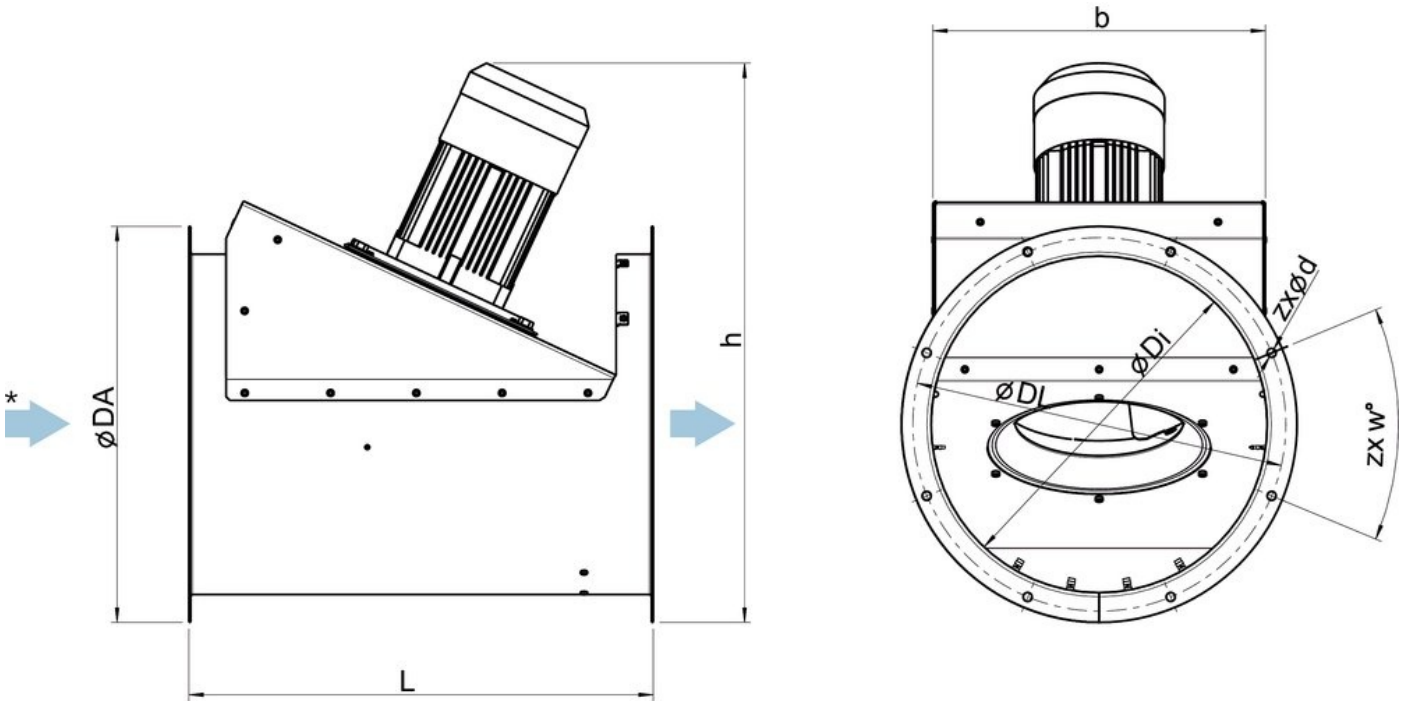
## Performance curve



| Hydraulic data           |               |
|--------------------------|---------------|
| Required air flow        | 0.64 m³/s     |
| Required static pressure | 908 Pa        |
| Working air flow         | 0.64 m³/s     |
| Working static pressure  | 908 Pa        |
| Air density              | 1.204 kg/m³   |
| Power                    | 1287.6 W      |
| Fan control - RPM        | 2935 rpm      |
| Current                  | 2.26 A        |
| SFP                      | 2.015 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) | 52 | 64  | 84  | 84  | 82 | 79 | 76 | 70 | 89    |
| Outlet            | dB(A) | 53 | 66  | 85  | 86  | 84 | 80 | 77 | 71 | 90    |

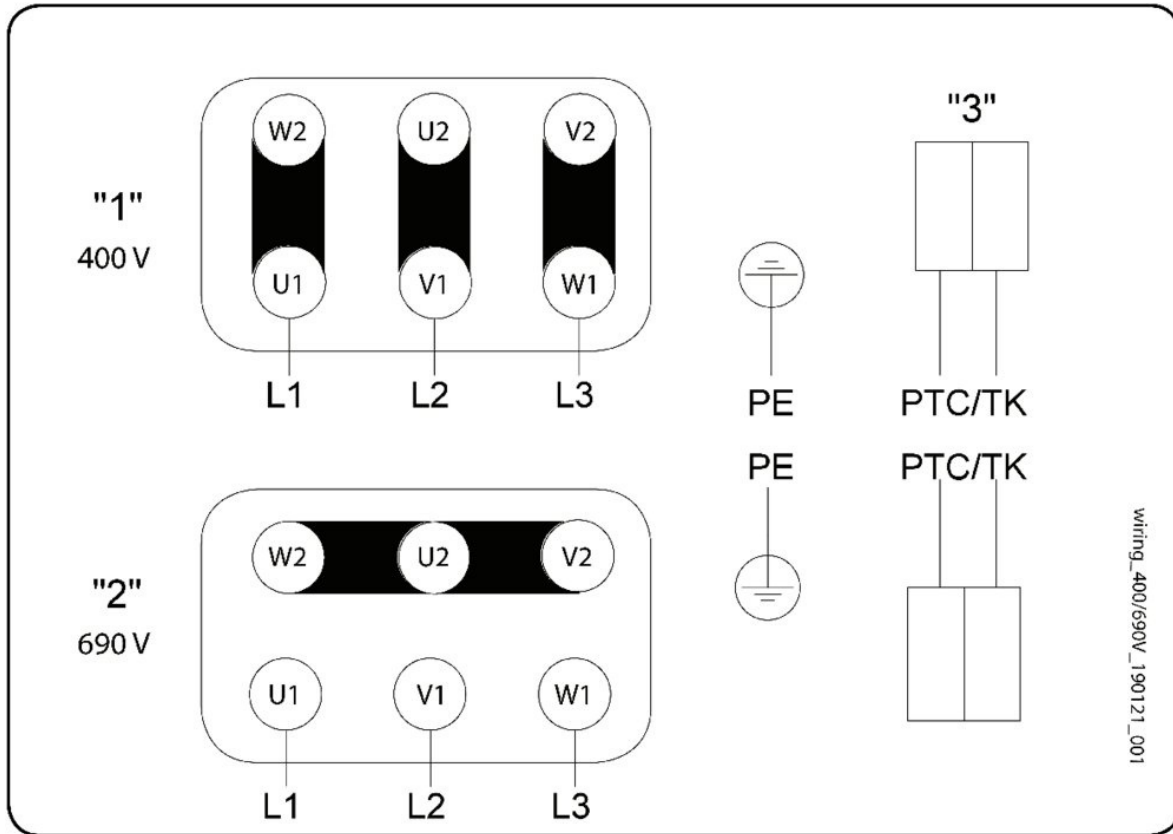
## Dimension



\*Air direction

|                  | L     | ØDA | h     | b     | ØDI   | ØDL | ZX W° | ZX Ød |
|------------------|-------|-----|-------|-------|-------|-----|-------|-------|
| AxZent 400D2 IE3 | 585,7 | 480 | 722,5 | 391,7 | 400,5 | 450 | 8x45° | 8xØ12 |

## Wiring



Three phase motor with cold conductor

"1" Delta connection

"2" Star connection

"3" Thermal motor protection optional

Changing of direction of rotation by interchanging of two phases

## Accessories

- ESD-F 400 inlet cone AXC (305258)
- FRQ-4A V2 (36227)
- FRQ5S-4A+LED V2 (36233)
- FSD1 AXC spring d. set ≤64kg (311438)
- LRK 400(F) air oper. damper (8318)
- MPR 400 mounting ring AXC (309802)
- REV-9POL/12 ON/OFF (33981)
- RSA 400/600/070 (F) (311353)
- SG AXC/AM/AR 400 guard grill (310687)
- WSD AxZent 400 (37504)
- REV-5POL/05 incl. EMC KIT (34549)
- EVH 400 flex.conn. AXC 400°C (8366)
- FRQ5-4A+LED V2 (36229)
- FRQS-4A V2 (36231)
- GFL-AR/AXC 400 counter flange (8378)
- MFA-AXC/AM 400 mounting foot (311285)
- REV-5POL/05 ON/OFF (33979)
- RSA 400/400/070 (F) (311352)
- RSA 400/800/070 (F) (311354)
- U-EK230E Motor protection (30199)
- ZSD1 AXC spring d. set ≤64kg (311436)

## Documents

- MANUAL\_AXZENT\_314481\_EN\_[004].PDF
- EU DECLARATION OF CONFORMITY\_THERMOFANS\_EN\_[003].PDF

## Specification