

A2D250-AA02-02

# AC axial fan

straight blades (A series)



**ebm-papst Mulfingen GmbH & Co. KG**

Bachmühle 2

D-74673 Mulfingen

Phone: +49(0)7938/81-0

Fax: +49(0)7938/81-110

info1@de.ebmpapst.com

www.ebmpapst.com

## Nominal data

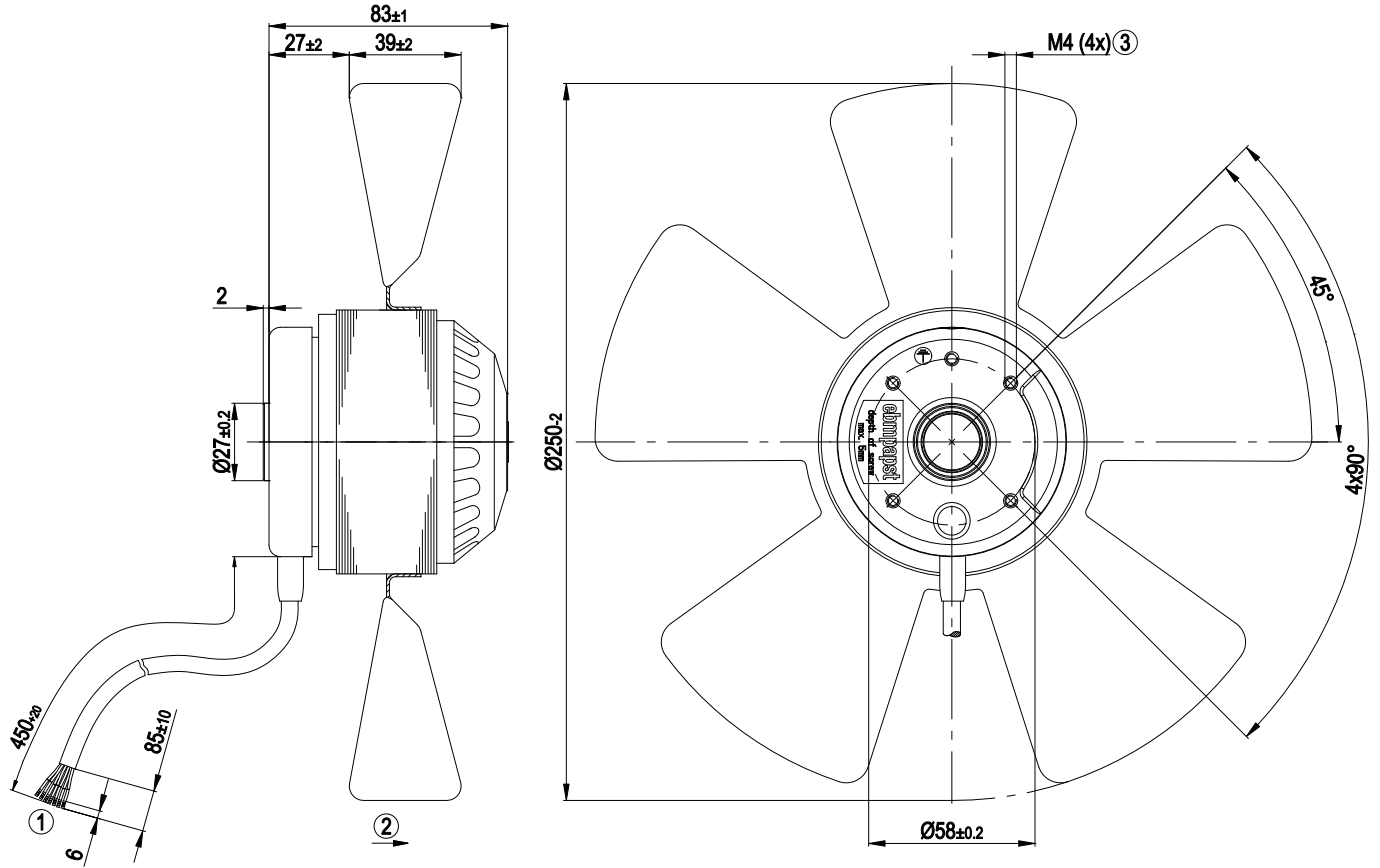
|                               |                      |      |      |
|-------------------------------|----------------------|------|------|
| Type                          | A2D250-AA02-02       |      |      |
| Motor                         | M2D068-DF            |      |      |
| Phase                         |                      | 3~   | 3~   |
| Nominal voltage               | [V]                  | 400  | 400  |
| Connection                    |                      | Y    | Y    |
| Frequency                     | [Hz]                 | 50   | 60   |
| Type of data definition       |                      | rfa  | rfa  |
| Valid for approval / standard |                      | CE   | CE   |
| Speed                         | [min <sup>-1</sup> ] | 2650 | 2950 |
| Power input                   | [W]                  | 110  | 160  |
| Current draw                  | [A]                  | 0.22 | 0.26 |
| Max. back pressure            | [Pa]                 | 205  | 300  |
| Max. ambient temperature      | [°C]                 | 70   | 40   |

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations

## Technical features

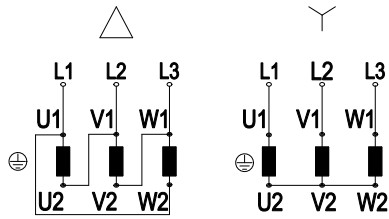
|   |  |
|---|--|
| Leakage current   | < 0.75 mA  |
| Size  | 250 mm   |
| Operation mode  | S1   |
| Direction of rotation                                   | Clockwise, seen on rotor                                     |
| Mounting position                                       | Shaft horizontal or rotor on bottom; rotor on top on request |
| Humidity class  | F2-2   |
| Direction of air flow                                   | "A"  |
| Insulation class  | "B"  |
| Cable exit  | Lateral  |
| Condensate discharge holes                              | Rotor-side   |
| Bearing motor   | Ball bearing   |
| Mass  | 2.05 kg  |
| Material of blades                                      | Sheet steel, coated in black                                 |
| Product conforming to standard                          | EN 60335-1   |
| Surface of rotor  | Coated in black  |
| Number of blades  | 5  |
| Type of protection                                      | IP 44  |
| Protection class  | I  |
| Max. permissible ambient motor temp. (transp./ storage) | + 80 °C  |
| Min. permissible ambient motor temp. (transp./storage)  | - 40 °C  |
| Approval  | CCC  |

Product drawing



|   |   |
|---|---|
| 1 | Connection line PVC 7 x 0.5 mm <sup>2</sup> ; 7 x brass lead tips crimped |
| 2 | Direction of air flow "A"   |
| 3 | Depth of screw max. 5 mm  |

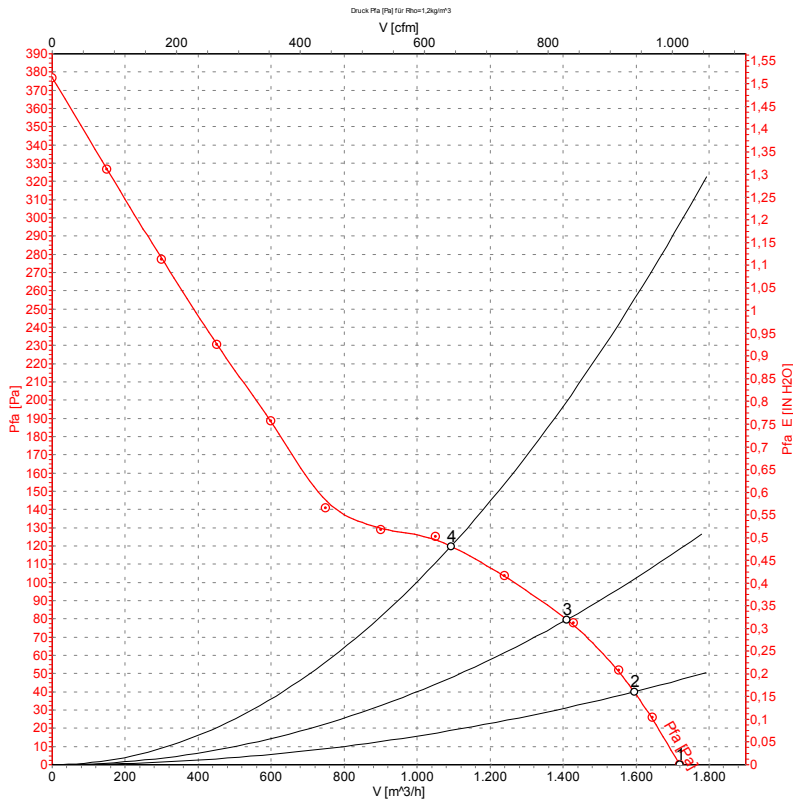
## Connection screen



Note: Direction of rotation changes when two phases are reversed

|    |                  |    |                 |    |       |
|----|------------------|----|-----------------|----|-------|
| Δ  | Delta connection | Y  | Star connection | L1 | black |
| L2 | blue             | L3 | brown           | U1 | black |
| V1 | blue             | W1 | brown           | U2 | green |
| V2 | white            | W2 | yellow          |    |       |

## Charts: Air flow 50 Hz Y

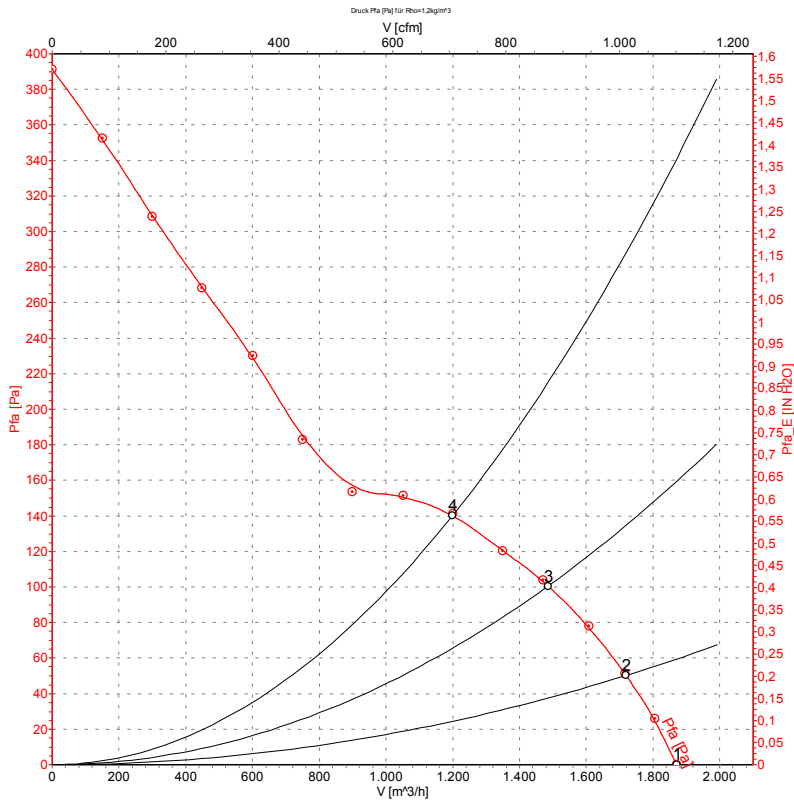


Measurement: LU-69121

## Measured values

|   | Conn. | U   | f    | n                    | P <sub>1</sub> | I    | $\hat{V}$           | P <sub>fa</sub> |
|---|-------|-----|------|----------------------|----------------|------|---------------------|-----------------|
|   |       | [V] | [Hz] | [min <sup>-1</sup> ] | [W]            | [A]  | [m <sup>3</sup> /h] | [Pa]            |
| 1 | Y     | 400 | 50   | 2650                 | 110            | 0.22 | 1720                | 0               |
| 2 | Y     | 400 | 50   | 2620                 | 126            | 0.23 | 1595                | 40              |
| 3 | Y     | 400 | 50   | 2600                 | 131            | 0.24 | 1410                | 80              |
| 4 | Y     | 400 | 50   | 2595                 | 131            | 0.24 | 1090                | 120             |

## Charts: Air flow 60 Hz Y



Measurement: LU-69123

### Measured values

|   | Conn. | U   | f    | n                    | P <sub>1</sub> | I    | $\hat{V}$           | P <sub>fa</sub> |
|---|-------|-----|------|----------------------|----------------|------|---------------------|-----------------|
|   |       | [V] | [Hz] | [min <sup>-1</sup> ] | [W]            | [A]  | [m <sup>3</sup> /h] | [Pa]            |
| 1 | Y     | 400 | 60   | 2950                 | 160            | 0.26 | 1870                | 0               |
| 2 | Y     | 400 | 60   | 2850                 | 177            | 0.28 | 1720                | 50              |
| 3 | Y     | 400 | 60   | 2810                 | 184            | 0.29 | 1485                | 100             |
| 4 | Y     | 400 | 60   | 2805                 | 184            | 0.29 | 1200                | 140             |