

# AC axial fan

straight blades (A series)

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### Nominal data

|                             |                       |      |      |
|-----------------------------|-----------------------|------|------|
| <b>Type</b>                 | <b>A2D250-AA06-84</b> |      |      |
| <b>Motor</b>                | <b>M2D068-DF</b>      |      |      |
| Phase                       |                       | 3~   | 3~   |
| Nominal voltage             | VAC                   | 265  | 460  |
| Wiring                      |                       | Δ    | Y    |
| Frequency                   | Hz                    | 60   | 60   |
| Method of obtaining data    |                       | fa   | fa   |
| Valid for approval/standard |                       | CE   | CE   |
| Speed                       | min <sup>-1</sup>     | 2900 | 2900 |
| Power consumption           | W                     | 150  | 150  |
| Current draw                | A                     | 0.38 | 0.22 |
| Max. back pressure          | Pa                    | 125  | 125  |
| Min. ambient temperature    | °C                    | -25  | -25  |
| Max. ambient temperature    | °C                    | 65   | 65   |

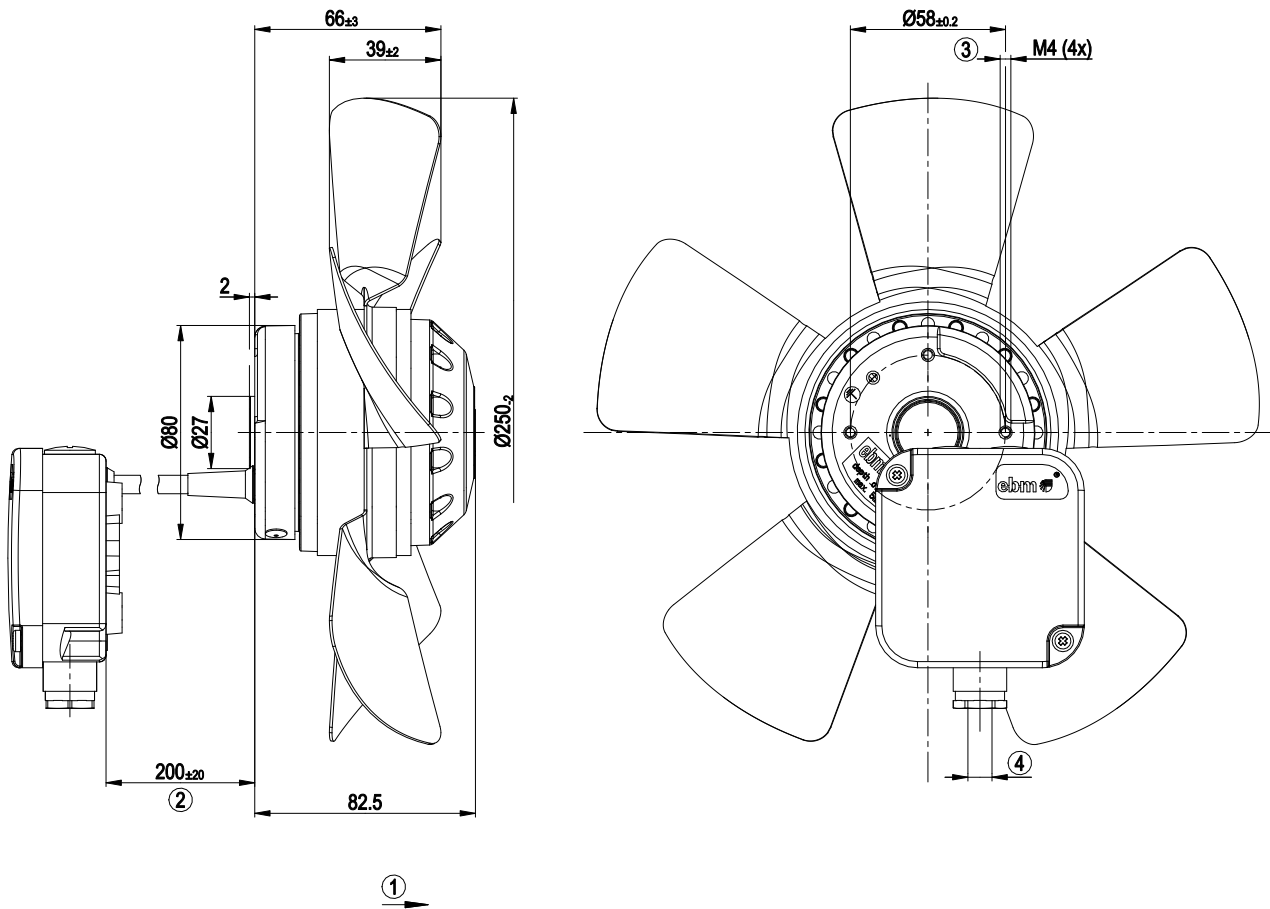
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



## Technical description

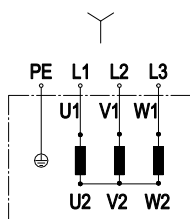
|                                                                                   |                                                              |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------|
| <b>Weight</b>                                                                     | 2.5 kg                                                       |
| <b>Fan size</b>                                                                   | 250 mm                                                       |
| <b>Rotor surface</b>                                                              | Painted black                                                |
| <b>Terminal box material</b>                                                      | Die-cast aluminum                                            |
| <b>Terminal box cover material</b>                                                | Die-cast aluminum                                            |
| <b>Impeller material</b>                                                          | Sheet steel, painted black                                   |
| <b>Number of blades</b>                                                           | 5                                                            |
| <b>Airflow direction</b>                                                          | "A"                                                          |
| <b>Direction of rotation</b>                                                      | Clockwise, viewed toward rotor                               |
| <b>Degree of protection</b>                                                       | IP54                                                         |
| <b>Insulation class</b>                                                           | "B"                                                          |
| <b>Moisture (F) / Environmental (H) protection class</b>                          | F3-1                                                         |
| <b>Max. permitted ambient temp. for motor (transport/storage)</b>                 | + 80 °C                                                      |
| <b>Min. permitted ambient temp. for motor (transport/storage)</b>                 | - 40 °C                                                      |
| <b>Installation position</b>                                                      | Shaft horizontal or rotor on bottom; rotor on top on request |
| <b>Condensation drainage holes</b>                                                | None                                                         |
| <b>Mode</b>                                                                       | S1                                                           |
| <b>Motor storage</b>                                                              | Ball bearing                                                 |
| <b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b> | < 0.75 mA                                                    |
| <b>Electrical hookup</b>                                                          | Via terminal box                                             |
| <b>With cable</b>                                                                 | Axial                                                        |
| <b>Protection class</b>                                                           | I (with customer connection of protective earth)             |
| <b>Conformity with standards</b>                                                  | EN 60335-1                                                   |

## Product drawing



|   |                                     |
|---|-------------------------------------|
| 1 | Direction of air flow "A"           |
| 2 | Cable A03VV-F7G0.5                  |
| 3 | Max. clearance for screw 5 mm       |
| 4 | Cable diameter min. 6 mm, max. 9 mm |

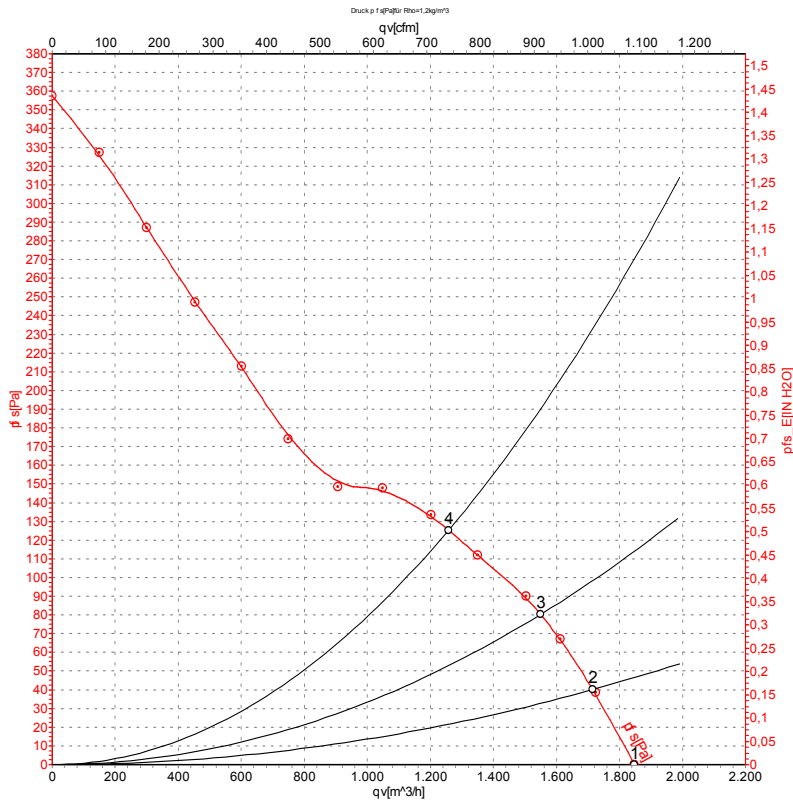
## Connection diagram



Change of rotation direction by reversing two phases

|    |                   |    |                 |    |              |
|----|-------------------|----|-----------------|----|--------------|
|    | Three-phase motor | Y  | Star connection | L1 | black        |
| L2 | blue              | L3 | brown           | PE | green/yellow |

## Curves: Air performance 60 Hz



Measurement: LU-110509

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## Measured values

|   | Wired | U   | f  | n                 | P <sub>e</sub> | I    | qv                | p <sub>fs</sub> |
|---|-------|-----|----|-------------------|----------------|------|-------------------|-----------------|
|   |       | V   | Hz | min <sup>-1</sup> | W              | A    | m <sup>3</sup> /h | Pa              |
| 1 | Y     | 460 | 60 | 2900              | 150            | 0.22 | 1850              | 0               |
| 2 | Y     | 460 | 60 | 2835              | 160            | 0.23 | 1715              | 40              |
| 3 | Y     | 460 | 60 | 2800              | 166            | 0.23 | 1550              | 80              |
| 4 | Y     | 460 | 60 | 2765              | 172            | 0.24 | 1260              | 125             |

Wired = Wiring · U = Power supply · f = Frequency · n = Speed · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

