

# AC axial fan

straight blades (A series)

W2D210-EA10-22 ebmpapst Datasheet  
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## Nominal data

|                             |                   |      |      |
|-----------------------------|-------------------|------|------|
| Type                        | W2D210-EA10-22    |      |      |
| Motor                       | M2D068-CF         |      |      |
| Phase                       |                   | 3~   | 3~   |
| Nominal voltage             | VAC               | 400  | 480  |
| Wiring                      |                   | Y    | Y    |
| Frequency                   | Hz                | 50   | 60   |
| Method of obtaining data    |                   | cs   | cs   |
| Valid for approval/standard |                   | CE   | CE   |
| Speed (rpm)                 | min <sup>-1</sup> | 2750 | 3250 |
| Power consumption           | W                 | 87   | 130  |
| Current draw                | A                 | 0.25 | 0.27 |
| Min. ambient temperature    | °C                | -25  | -25  |
| Max. ambient temperature    | °C                | -    | -    |

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



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## Technical description

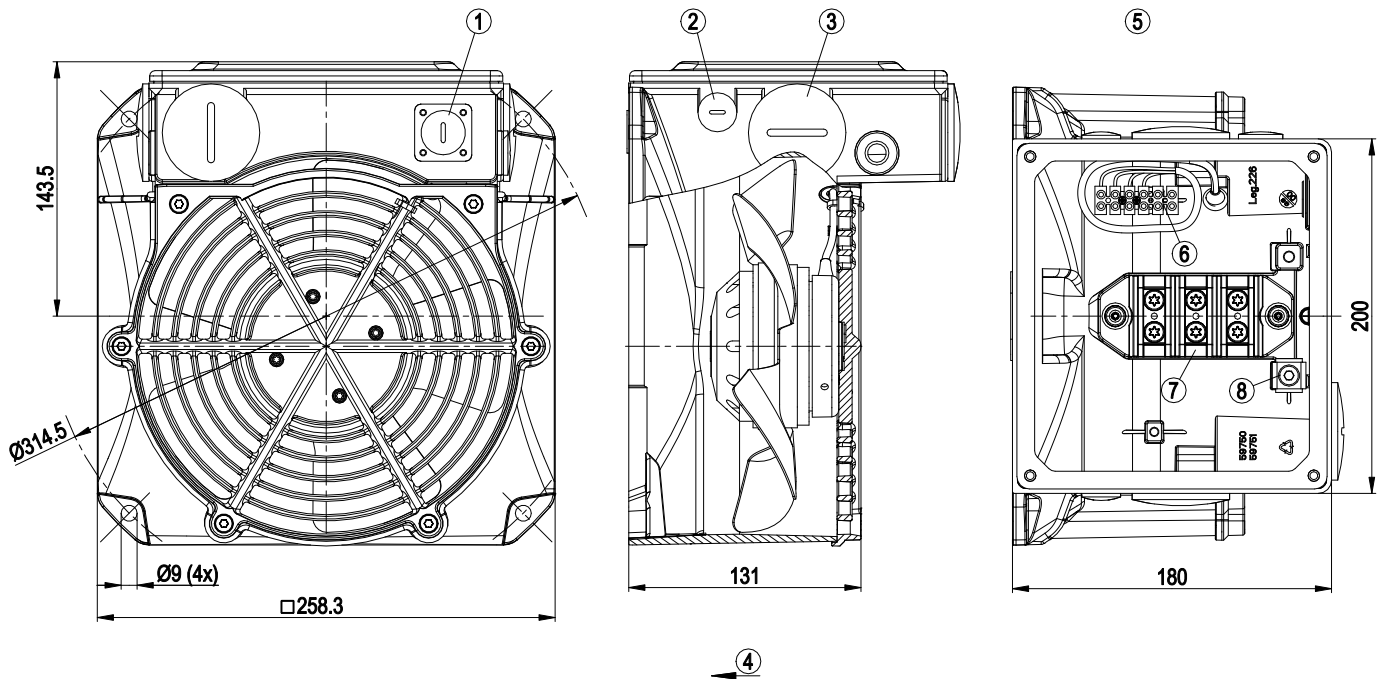
|                                                                            |                                                                               |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Weight                                                                     | 4.3 kg                                                                        |
| Size                                                                       | 210 mm                                                                        |
| Motor size                                                                 | 68                                                                            |
| Rotor surface                                                              | Painted black                                                                 |
| Blade material                                                             | Sheet steel, painted black                                                    |
| Housing material                                                           | Die-cast aluminum, painted black                                              |
| Guard grille material                                                      | Die-cast aluminum; steel, phosphated and coated with black plastic (RAL 9005) |
| Number of blades                                                           | 5                                                                             |
| Airflow direction                                                          | A; BS-AS                                                                      |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                                                |
| Degree of protection                                                       | IP44; installation- and position-dependent as per EN 60034-5                  |
| Insulation class                                                           | "F"                                                                           |
| Moisture (F) / Environmental (H) protection class                          | F2-2                                                                          |
| Max. permitted ambient temp. for motor (transport/storage)                 | + 60 °C                                                                       |
| Min. permitted ambient temp. for motor (transport/storage)                 | - 15 °C                                                                       |
| Installation position                                                      | Shaft horizontal                                                              |
| Condensation drainage holes                                                | On rotor side                                                                 |
| Mode                                                                       | S1                                                                            |
| Motor mounting                                                             | Ball bearing                                                                  |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | < 0.75 mA                                                                     |
| With cable                                                                 | Lateral                                                                       |
| Protection class                                                           | I (with customer connection of protective earth)                              |
| Conformity with standards                                                  | EN 60335-1; CE                                                                |
| Approval                                                                   | UL 1004-1; CSA C22.2 No. 100                                                  |



# AC axial fan

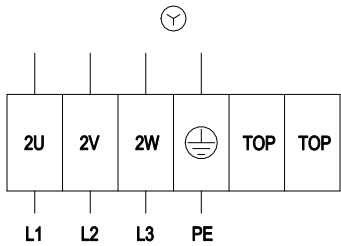
straight blades (A series)

## Product drawing



|   |                                                   |
|---|---------------------------------------------------|
| 1 | Screw plug PG 13.5 (3x); tightening torque 1.9 Nm |
| 2 | Screw plug PG 11 (2x); tightening torque 1.9 Nm   |
| 3 | Screw plug PG 36 (3x), tightening torque 3.9 Nm   |
| 4 | Direction of air flow "A", BS-AS                  |
| 5 | Shown without housing cover                       |
| 6 | Terminal strip                                    |
| 7 | Connection board for customer                     |
| 8 | PE                                                |

Connection diagram

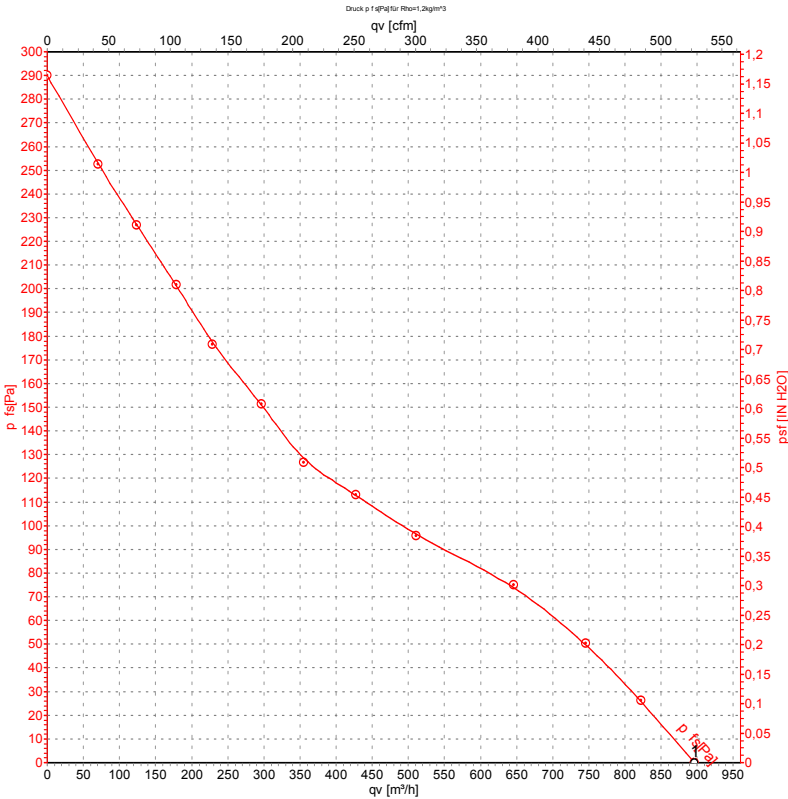


|     |                                    |
|-----|------------------------------------|
| Y   | Star connection, three-phase motor |
| L1  | black                              |
| L2  | blue                               |
| L3  | brown                              |
| PE  | Green/yellow                       |
| TOP | not used                           |



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straight blades (A series)

Curves: Air performance 50 Hz



Measurement: LU-42529-1

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

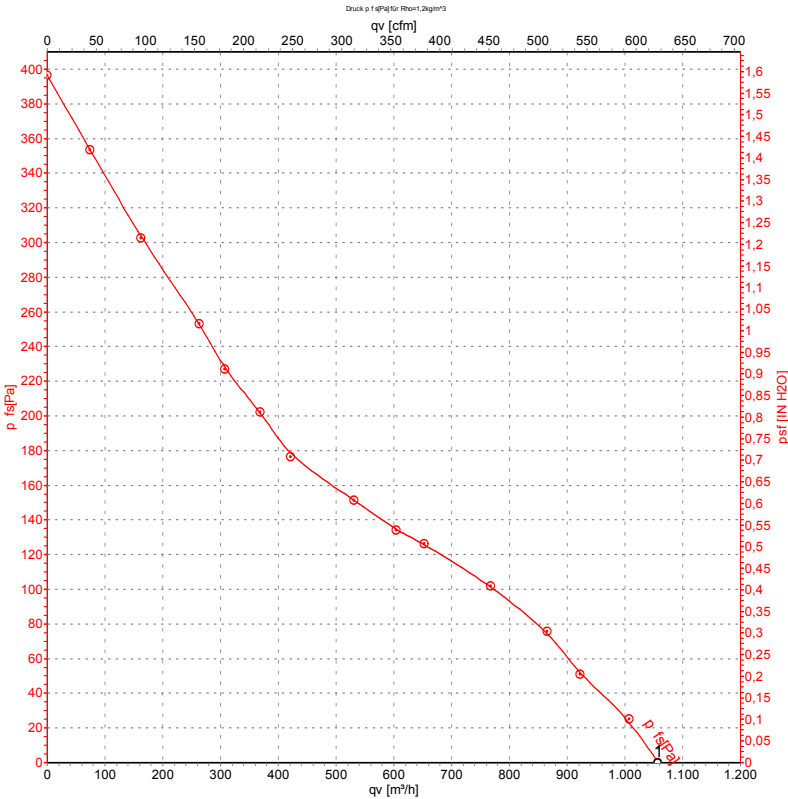
|   | U   | f  | n                 | P <sub>e</sub> | I    | q <sub>v</sub>    | q <sub>v</sub> | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|-------------------|----------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m <sup>3</sup> /h | cfm            | in. wg          |
| 1 | 400 | 50 | 2750              | 87             | 0.25 | 895               | 525            | 0.00            |

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow



AC axial fan  
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Curves: Air performance 60 Hz



Measurement: LU-42531-1

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

|   | U   | f  | n                 | P <sub>e</sub> | I    | q <sub>v</sub>    | q <sub>v</sub> | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|-------------------|----------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m <sup>3</sup> /h | cfm            | in. wg          |
| 1 | 480 | 60 | 3250              | 130            | 0.27 | 1055              | 620            | 0.00            |

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow

