# AC axial compact fan

**ebm-papst Mulfingen GmbH & Co. KG**
Bachmühle 2
74673 Mulfingen
Phone: +49 7938 81-0
Fax: +49 7938 81-110
www.ebmpapst.com
info1@de.ebmpapst.com

## Nominal data

| | |
|---|---|
| **Type** | **W2E142-BB05-87** |
| **Motor** | **M2E052-AK** |

| | | | |
|---|---|---|---|
| Phase | | 1~ | 1~ |
| Nominal voltage | [V] | 115 | 115 |
| Frequency | [Hz] | 50 | 60 |
| Type of data definition | | rfa | rfa |
| Valid for approval / standard | | CE | CE |
| Speed | [min$^{-1}$] | 2800 | 3350 |
| Power input | [W] | 27 | 28 |
| Current draw | [A] | 0.24 | 0.25 |
| Motor capacitor | [µF] | 3 | 3 |
| Capacitor voltage | [VDB] | 220 | 220 |
| Capacitor standard | | P0 (CE) | P0 (CE) |
| Max. ambient temperature | [°C] | 55 | 65 |

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

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## Technical features

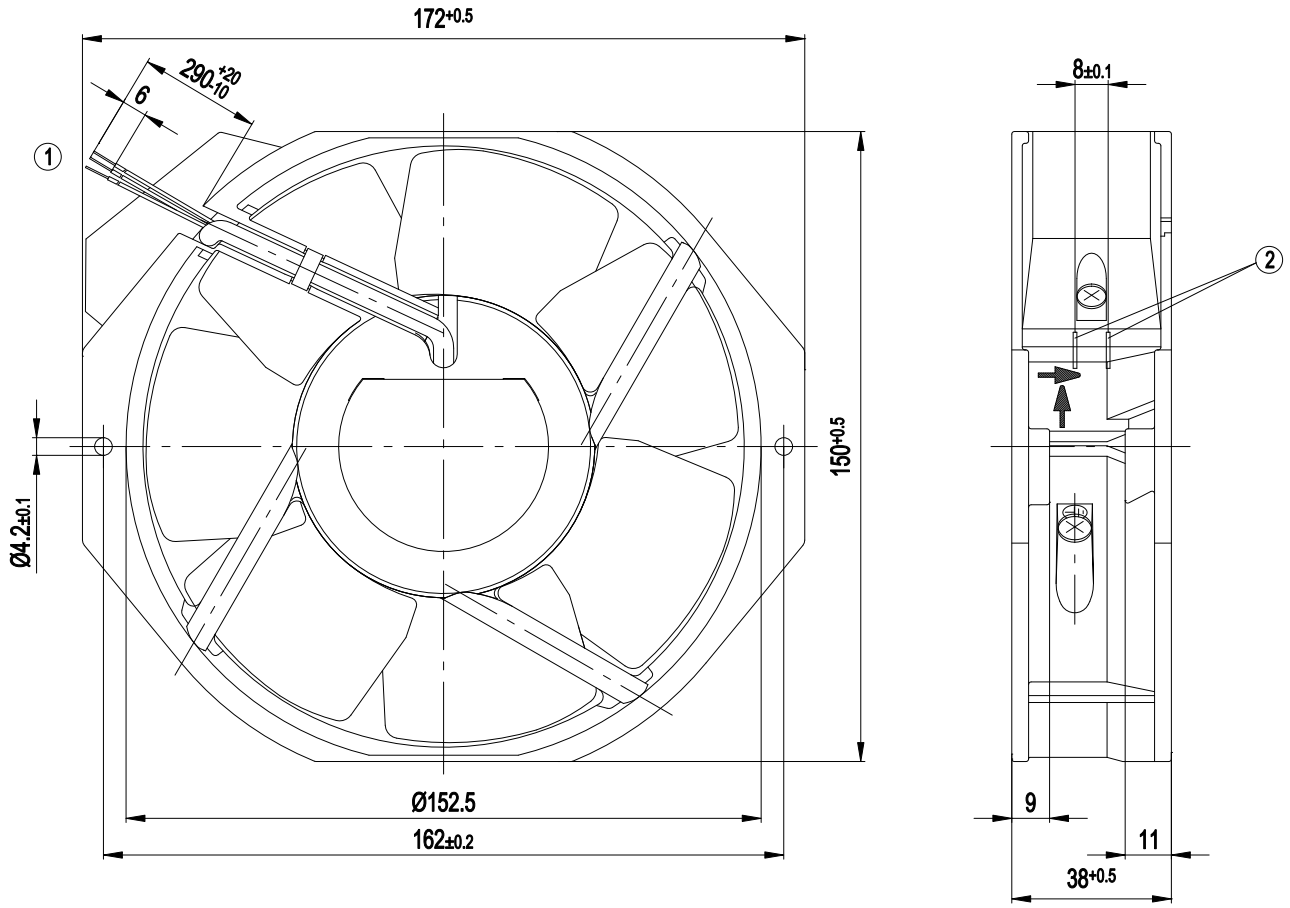
| | |
|---|---|
| **Leackage current** | < 0.75 mA |
| **Size** | 142 mm |
| **Operation mode** | S1 |
| **Direction of rotation** | Counter-clockwise, seen on rotor |
| **Mounting position** | Any |
| **Electrical leads** | With plug |
| **Direction of air flow** | "V" |
| **Insulation class** | "B" |
| **Condensate discharge holes** | None |
| **Bearing motor** | Ball bearing |
| **Mass** | 0.8 kg |
| **Material of blades** | Sheet steel, coated in black |
| **Material of wall ring** | Die-cast aluminium, coated in black |
| **Motor protection** | Thermal overload protector (TOP) wired internally |
| **Product conforming to standard** | CE; EN 60335-1 |
| **Surface of rotor** | Coated in black |
| **Number of blades** | 7 |
| **Type of protection** | IP 22; Depending on installation and position |
| **Protection class** | I (if earth wire is connected by customer) |
| **Max. permissible ambient motor temp. (transp./ storage)** | + 80 °C |
| **Min. permissible ambient motor temp. (transp./storage)** | - 40 °C |
| **Approval** | CSA C22.2 Nr.113; UL 507 |



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## Product drawing

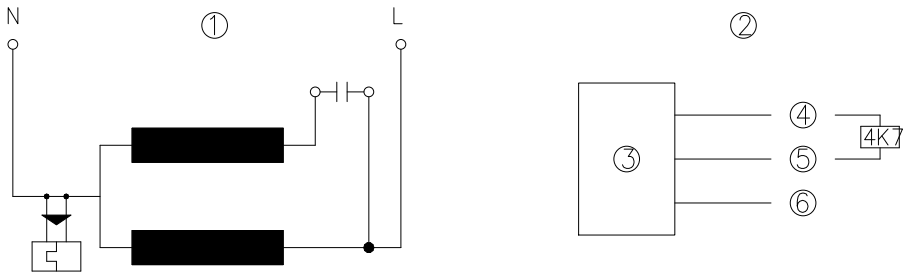



| | |
|---|---|
| 1 | Connection line AWG26, 3 x 6 mm, tin-plated |
| 2 | 2 x flat plugs 2.8 x 0.5 mm |



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## Connection screen




Tachometer

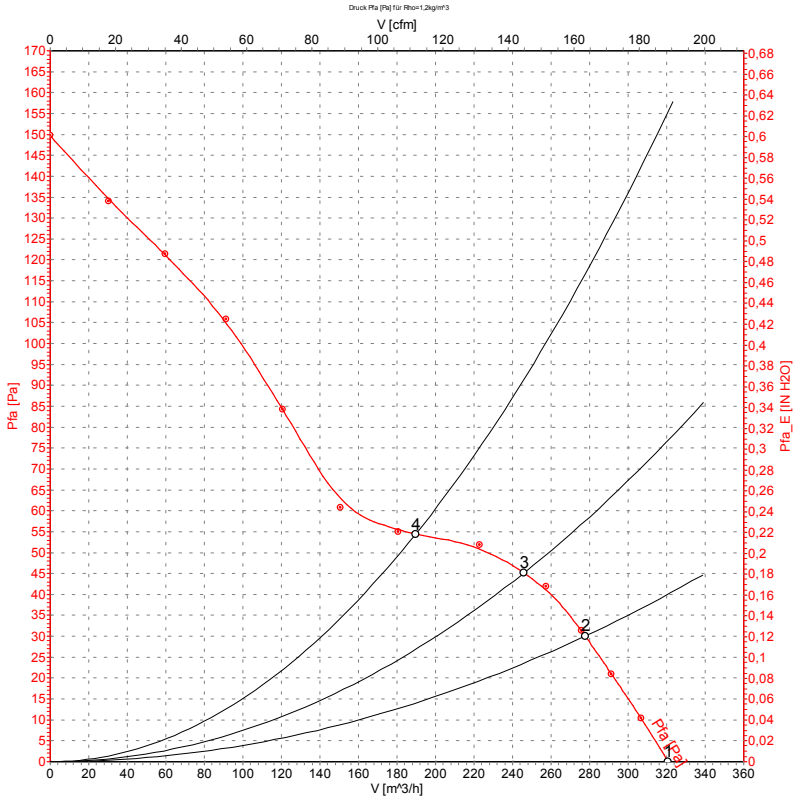
| | |
|---|---|
| 1 | Fan connection diagram |
| 2 | Hall IC circuit |
| 3 | Hall IC |
| 4 | Red (+5V) |
| 5 | White (out) |
| 6 | Black (0V) |



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# AC axial compact fan

## Charts: Air flow 50 Hz




Measurement: LU-64115

## Measured values

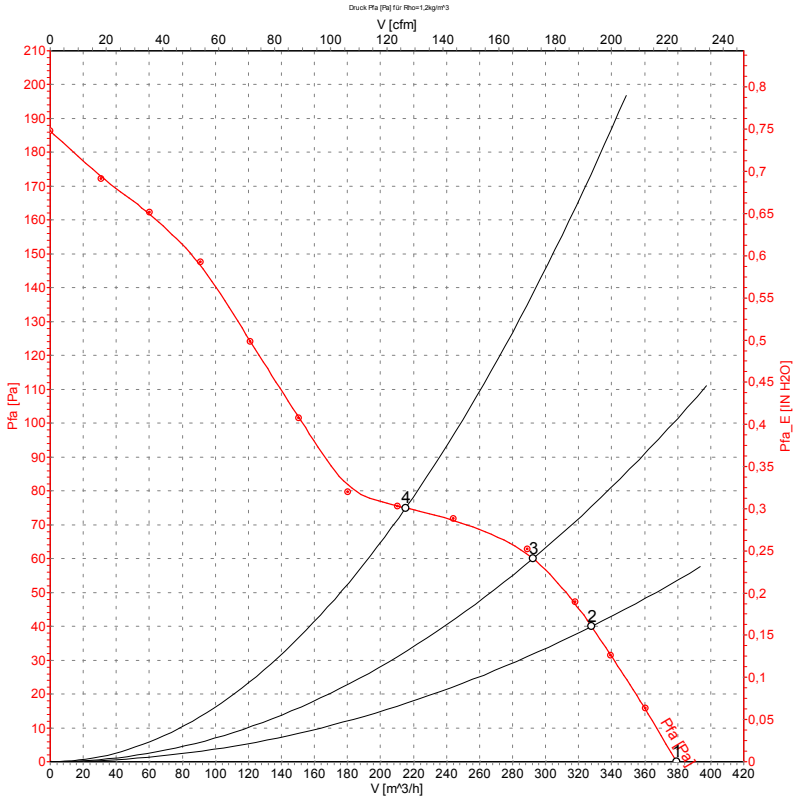
| | U | f | n | $P_1$ | I | $\dot{V}$ | $p_{fa}$ |
|---|---|---|---|---|---|---|---|
| | [V] | [Hz] | [$min^{-1}$] | [W] | [A] | [$m^3/h$] | [Pa] |
| 1 | 115 | 50 | 2830 | 24 | 0.22 | 320 | 0 |
| 2 | 115 | 50 | 2795 | 24 | 0.23 | 280 | 30 |
| 3 | 115 | 50 | 2775 | 25 | 0.23 | 245 | 45 |
| 4 | 115 | 50 | 2775 | 25 | 0.23 | 190 | 54 |



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# AC axial compact fan

## Charts: Air flow 60 Hz




Measurement: LU-64116

## Measured values

| | U | f | n | $P_1$ | I | $\dot{V}$ | $p_{fa}$ |
|---|---|---|---|---|---|---|---|
| | [V] | [Hz] | [$min^{-1}$] | [W] | [A] | [$m^3/h$] | [Pa] |
| 1 | 115 | 60 | 3340 | 26 | 0.23 | 380 | 0 |
| 2 | 115 | 60 | 3280 | 28 | 0.24 | 330 | 40 |
| 3 | 115 | 60 | 3240 | 28 | 0.25 | 290 | 60 |
| 4 | 115 | 60 | 3230 | 29 | 0.25 | 215 | 75 |



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