# AC centrifugal fan

backward curved, single inlet



Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

## Nominal data

| Type | R2E250-RB06-32 | | |
|---|---|---|---|
| Motor | M2E074-EI | | |
| Phase | | 1~ | 1~ |
| Nominal voltage | VAC | 230 | 230 |
| Frequency | Hz | 50 | 60 |
| Type of data definition | | ml | ml |
| Valid for approval / standard | | - | - |
| Speed (rpm) | $min^{-1}$ | 2750 | 3090 |
| Power input | W | 240 | 385 |
| Current draw | A | 1.06 | 1.7 |
| Motor capacitor | µF | 5 | 5 |
| Capacitor voltage | VDB | 450 | 450 |
| Capacitor standard | | S0 (CE) | S0 (CE) |
| Min. back pressure | Pa | 0 | 0 |
| Min. ambient temperature | °C | -25 | -25 |
| Max. ambient temperature | °C | 80 | 70 |
| Starting current | A | 3.1 | 2.87 |

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations



R2E250-RB06-32 ebmpapst Datasheet FansCo sales@fansco.com www.fansco.com

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## Technical features

| | |
|---|---|
| **Mass** | 3.84 kg |
| **Size** | 250 mm |
| **Motor size** | 74 |
| **Surface of rotor** | Coated in black |
| **Material of impeller** | PA plastic |
| **Number of blades** | 7 |
| **Direction of rotation** | Clockwise, seen on rotor |
| **Type of protection** | IP44; Depending on installation and position as per EN 60034-5 |
| **Insulation class** | "F" |
| **Humidity (F) / environmental protection class (H)** | H1 |
| **Max. permissible ambient motor temp. (transp./ storage)** | +80 °C |
| **Min. permissible ambient motor temp. (transp./storage)** | -40 °C |
| **Mounting position** | Shaft horizontal or rotor on bottom; rotor on top on request |
| **Condensation drainage holes** | Rotor-side |
| **Operation mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)** | < 0.75 mA |
| **Motor protection** | Temperature limiter manual reset |
| **Cable exit** | Variable |
| **Safety classification** | I; If a protective earth is connected by the customer<br>This component to be built-in can have several local protection class ratings. The specification refers to the basic design of this component.<br>The final protection class is based on the intended installation and connection of the component. |
| **Product conforming to standard** | EN 60034-1; EN 60204-1; EN 60335-1 |
| **Note on CE** | Commissioning in the European Economic Area prohibited |

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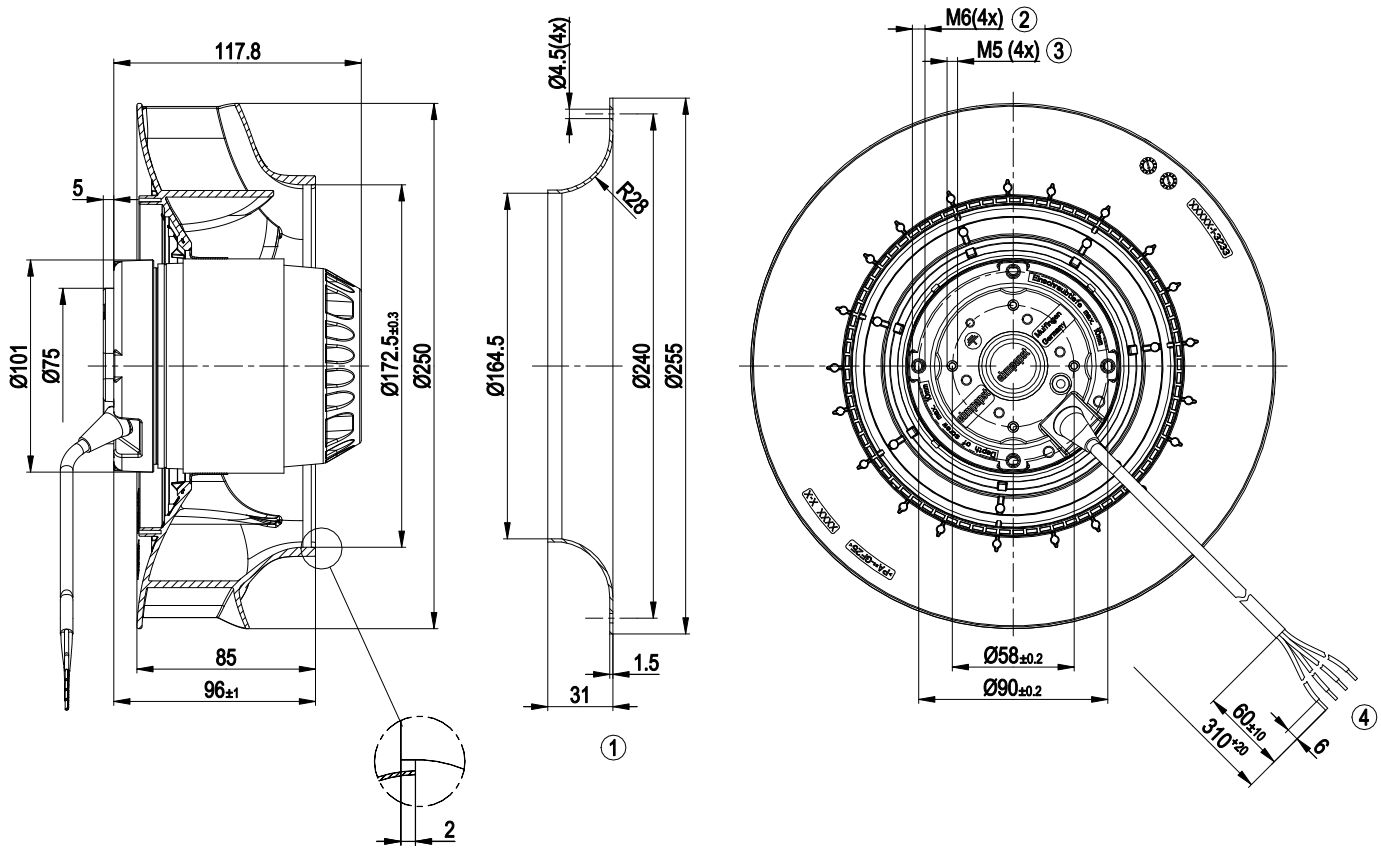
## Product drawing




| | |
|---|---|
| 1 | Accessory part: Inlet nozzle 96359-2-4013, not included in scope of delivery |
| 2 | Thread reach max. 10 mm |
| 3 | Thread reach max. 5 mm |
| 4 | Connection line silicone 4G 0.5 mm², 4x lead tips crimped |

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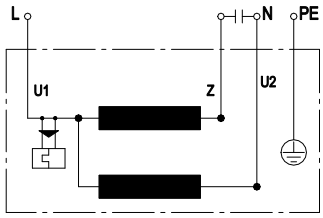
## Connection screen




| | | | | | |
|---|---|---|---|---|---|
| U1 | blue | Z | brown | U2 | black |
| PE | green/yellow | | | | |

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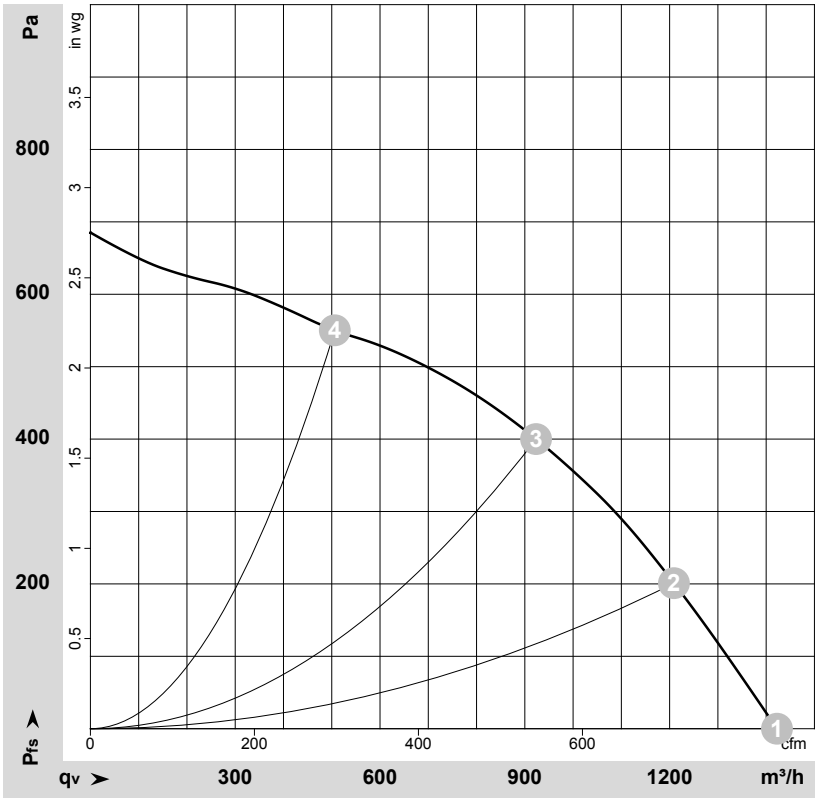
## Charts: Air flow 50 Hz




ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-156972-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

| | U | f | n | $P_e$ | I | $q_V$ | $p_{fs}$ | $q_V$ | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa | cfm | in. wg |
| 1 | 230 | 50 | 2810 | 209 | 0.91 | 1420 | 0 | 835 | 0.00 |
| 2 | 230 | 50 | 2790 | 226 | 0.99 | 1210 | 200 | 710 | 0.80 |
| 3 | 230 | 50 | 2750 | 240 | 1.06 | 925 | 400 | 545 | 1.61 |
| 4 | 230 | 50 | 2795 | 219 | 0.96 | 505 | 550 | 300 | 2.21 |

U = Supply voltage · f = Frequency · n = Speed (rpm) · $P_e$ = Power input · I = Current draw · $q_V$ = Air flow · $p_{fs}$ = Pressure increase

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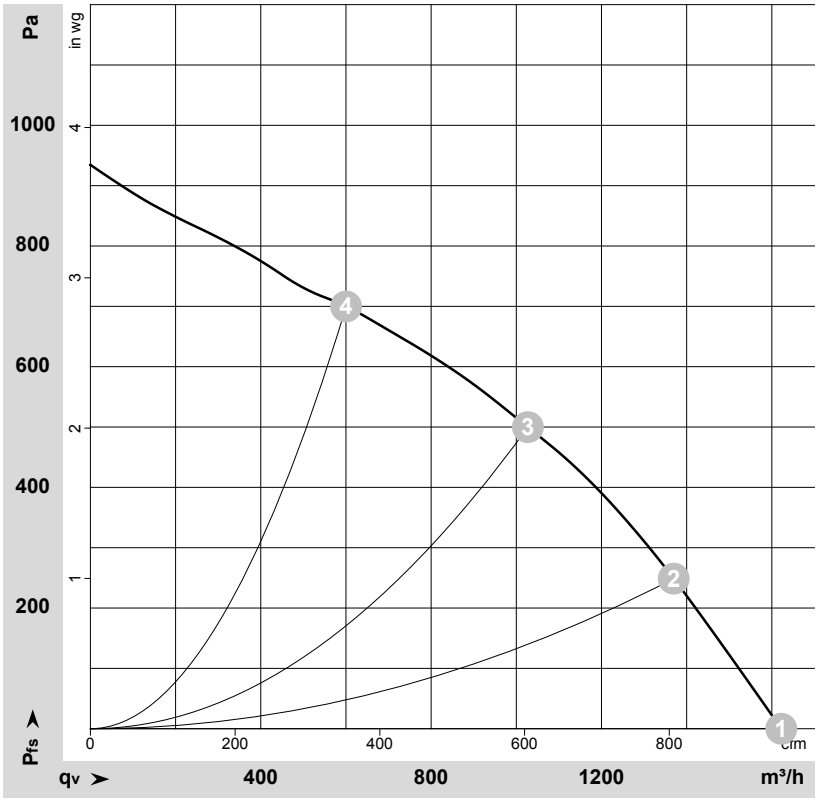
## Charts: Air flow 60 Hz




ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-157035-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

| | U | f | n | $P_e$ | I | $q_V$ | $p_{fs}$ | $q_V$ | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa | cfm | in. wg |
| 1 | 230 | 60 | 3210 | 338 | 1.48 | 1620 | 0 | 955 | 0.00 |
| 2 | 230 | 60 | 3140 | 363 | 1.59 | 1370 | 250 | 805 | 1.00 |
| 3 | 230 | 60 | 3090 | 385 | 1.70 | 1025 | 500 | 605 | 2.01 |
| 4 | 230 | 60 | 3170 | 354 | 1.54 | 600 | 700 | 355 | 2.81 |

U = Supply voltage · f = Frequency · n = Speed (rpm) · $P_e$ = Power input · I = Current draw · $q_V$ = Air flow · $p_{fs}$ = Pressure increase