**R4E450-AB09-06**

# AC centrifugal fan

backward curved, single inlet



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## Nominal data

| | |
|---|---|
| **Type** | **R4E450-AB09-06** |
| **Motor** | **M4E094-HA** |

| | | |
|---|---|---|
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Frequency | Hz | 50 |
| Type of data definition | | ml |
| Valid for approval / standard | | CE |
| Speed | $min^{-1}$ | 1290 |
| Power input | W | 640 |
| Current draw | A | 3.1 |
| Motor capacitor | µF | 10 |
| Capacitor voltage | VDB | 400 |
| Min. back pressure | Pa | 0 |
| Min. ambient temperature | °C | -40 |
| Max. ambient temperature | °C | 50 |
| Starting current | A | 6.2 |

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

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## Technical features

| | |
|---|---|
| **Mass** | 9.5 kg |
| **Size** | 450 mm |
| **Surface of rotor** | Coated in black |
| **Material of electronics housing** | Rotor: Coated in black |
| **Material of impeller** | Aluminium sheet |
| **Number of blades** | 6 |
| **Direction of rotation** | Clockwise, seen on rotor |
| **Type of protection** | IP 54 |
| **Insulation class** | "F" |
| **Humidity class** | F4-1 |
| **Max. permissible ambient motor temp. (transp./ storage)** | +80 °C |
| **Min. permissible ambient motor temp. (transp./storage)** | -40 °C |
| **Mounting position** | Any |
| **Condensate discharge holes** | None |
| **Operation mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)** | <= 3.5 mA |
| **Motor protection** | Thermal overload protector (TOP) brought out |
| **Cable exit** | Variable |
| **Protection class** | I (if protective earth is connected by customer) |
| **Product conforming to standard** | EN 60034 |
| **Approval** | CCC; EAC |

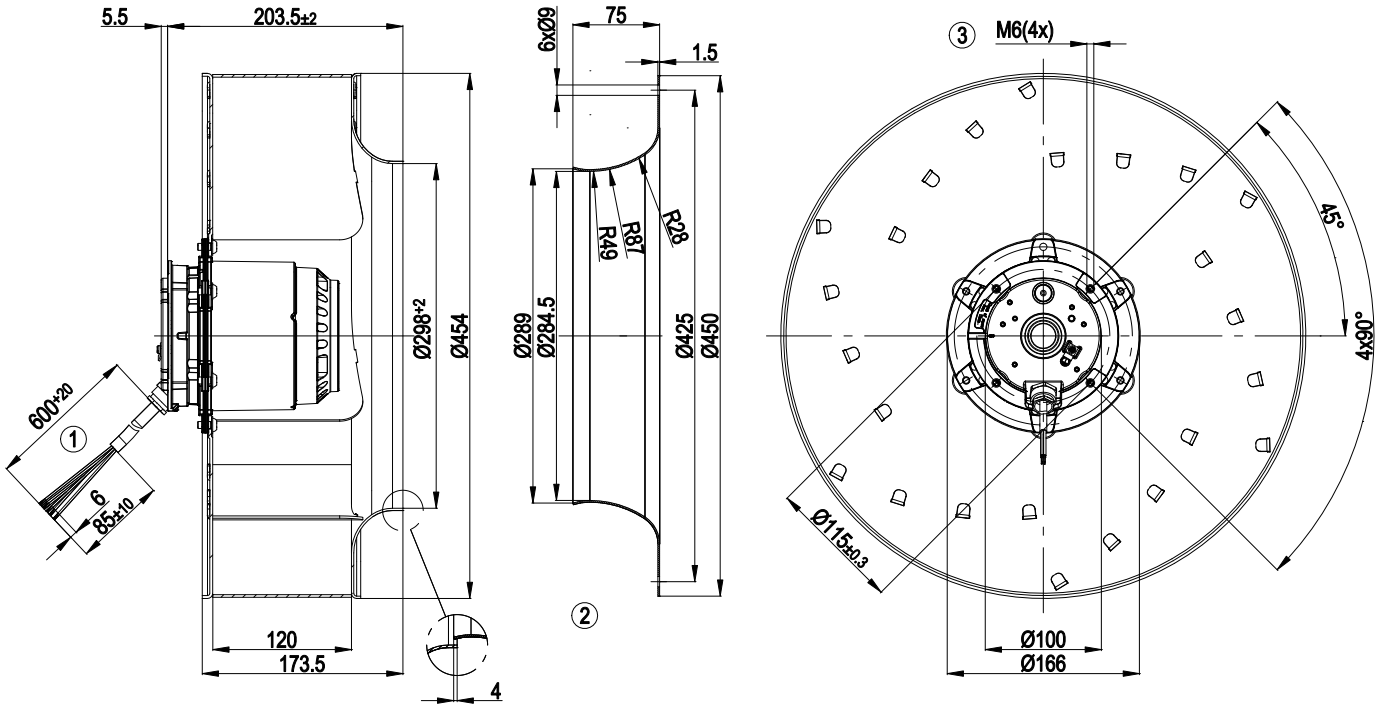


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## Product drawing




| | |
|---|---|
| 1 | Connection line silicone 6G 0.5 mm², 6 x brass lead tips crimped |
| 2 | Accessory part: inlet nozzle 63045-2-4013, not included in the standard scope of delivery; other inlet nozzles on request |
| 3 | Depth of screw max. 12 mm |

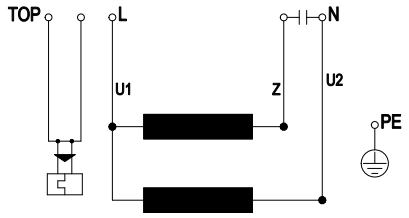


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## Connection screen




| | | | | | |
|---|---|---|---|---|---|
| TOP | 2 x grey | U1 | blue | Z | brown |
| U2 | black | PE | green / yellow | | |

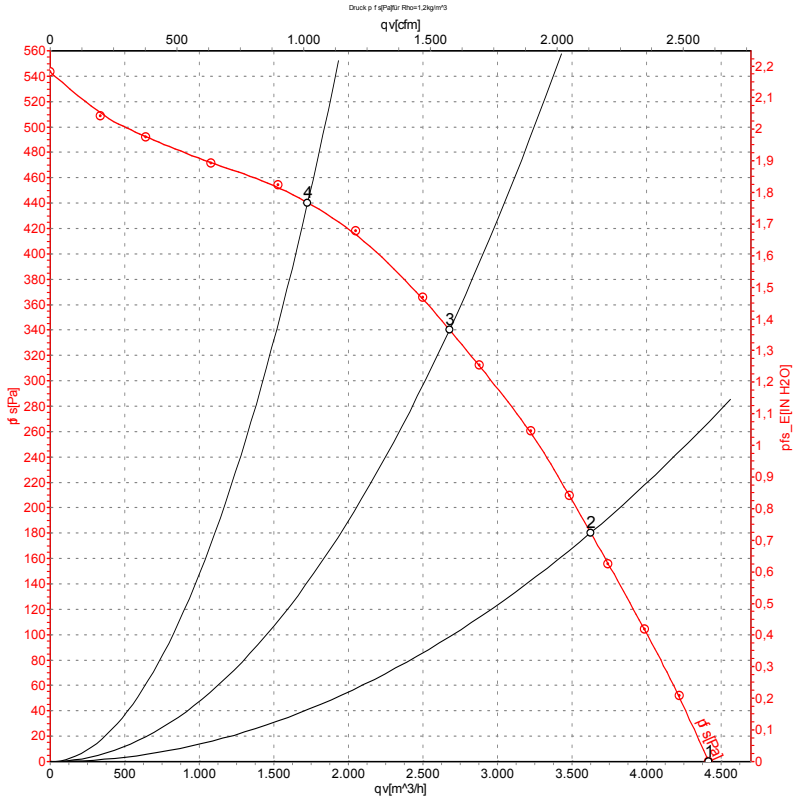


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## Charts: Air flow 50 Hz




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 | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa |
| 1 | 230 | 50 | 1385 | 445 | 2.27 | 4415 | 0 |
| 2 | 230 | 50 | 1320 | 588 | 2.88 | 3625 | 180 |
| 3 | 230 | 50 | 1290 | 640 | 3.10 | 2680 | 340 |
| 4 | 230 | 50 | 1325 | 573 | 2.80 | 1725 | 440 |

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



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