

R2E175-AR70-05

# AC centrifugal fan

backward curved, single inlet

**ASIA PACIFIC SHENGRUI LIMITED**

Phone +00852 56261528

info@apacfan.com

www.apacfan.com

## Nominal data

|                               |                   |         |         |
|-------------------------------|-------------------|---------|---------|
| Type                          | R2E175-AR70-05    |         |         |
| Motor                         | M2E052-CA         |         |         |
| Phase                         |                   | 1~      | 1~      |
| Nominal voltage               | VAC               | 230     | 230     |
| Frequency                     | Hz                | 50      | 60      |
| Type of data definition       |                   | fa      | fa      |
| Valid for approval / standard |                   | CE      | CE      |
| Speed                         | min <sup>-1</sup> | 2600    | 2950    |
| Power input                   | W                 | 38      | 44      |
| Current draw                  | A                 | 0.17    | 0.20    |
| Motor capacitor               | µF                | 1.5     | 1.5     |
| Capacitor voltage             | VDB               | 400     | 400     |
| Capacitor standard            |                   | P0 (CE) | P0 (CE) |
| Min. back pressure            | Pa                | 0       | 0       |
| Max. ambient temperature      | °C                | 60      | 60      |

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



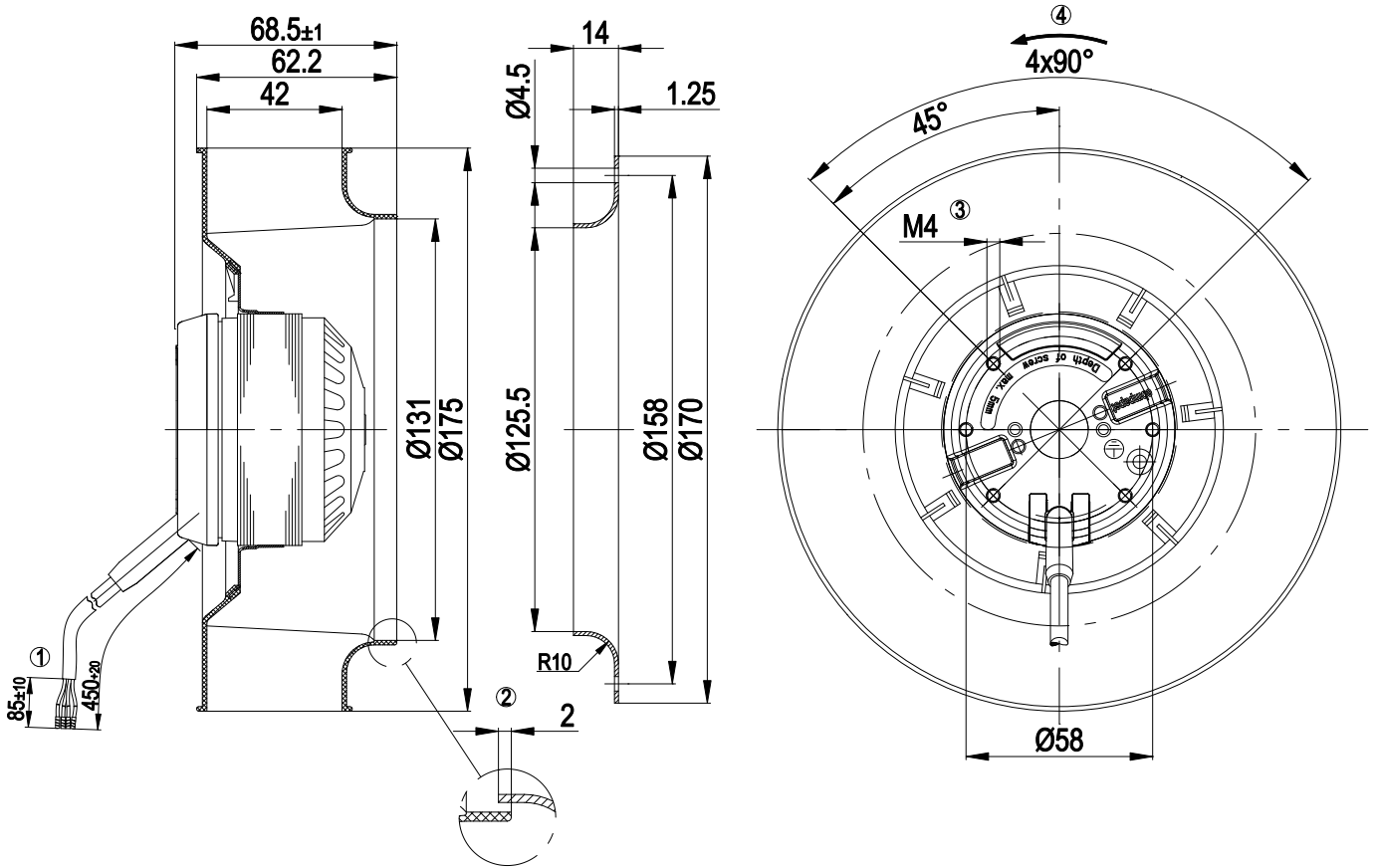
### Technical features

|  |   |
|--|---|
| Size   | 175 mm  |
| Surface of rotor   | Coated in black                                   |
| Material of impeller   | Plastic PA66, fibreglass-reinforced               |
| Number of blades   | 7   |
| Direction of rotation  | Clockwise, seen on rotor                          |
| Type of protection   | IP 44; Depending on installation and position     |
| Insulation class   | "F"   |
| 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) | < 0.75 mA   |
| Motor protection   | Thermal overload protector (TOP) wired internally |
| Cable exit   | Variable  |
| Protection class   | I (if protective earth is connected by customer)  |
| Product conforming to standard                                     | EN 60335-1; CE                                    |
| Approval   | CCC; GOST   |

# AC centrifugal fan

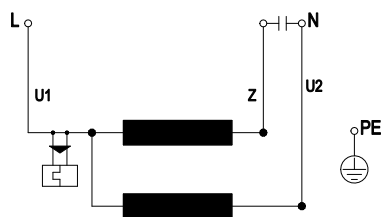
backward curved, single inlet

## Product drawing



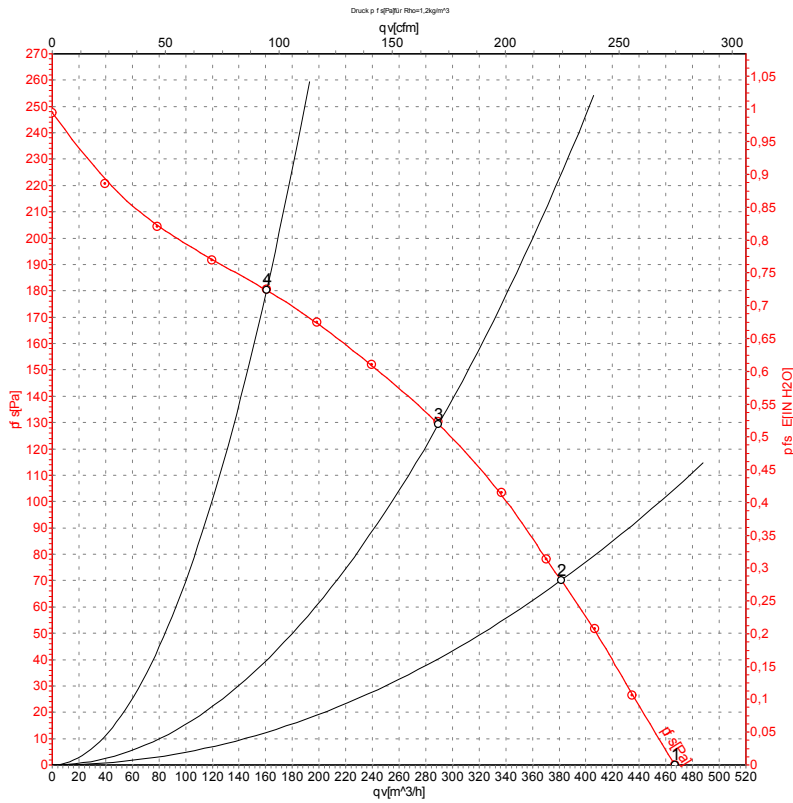
|   |   |
|---|---|
| 1 | Connection line ETFE AWG 20, 4x brass lead tips crimped                                   |
| 2 | Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery |
| 3 | Depth of screw max. 5 mm  |
| 4 | Direction of rotation clockwise, seen on rotor  |

## Connection screen



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

## Charts: Air flow 50 Hz



Measurement: LU-122918

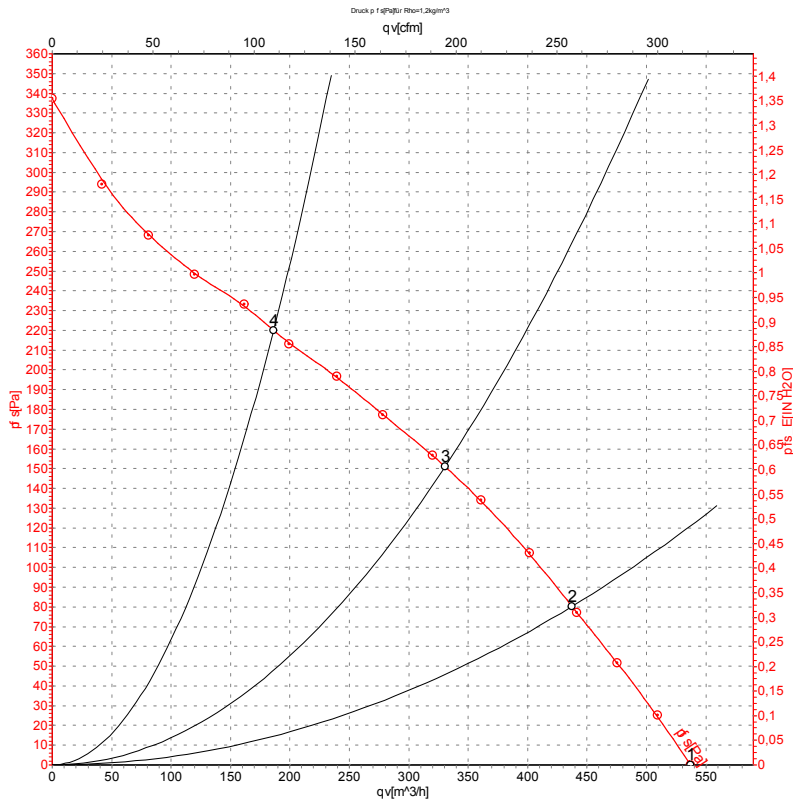
Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> measured with 1m distance to fan axis. The values given are valid under the 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 <sub>e</sub> | I    | qv                | P <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|-------------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m <sup>3</sup> /h | Pa              |
| 1 | 230 | 50 | 2600              | 38             | 0.17 | 465               | 0               |
| 2 | 230 | 50 | 2510              | 39             | 0.17 | 380               | 70              |
| 3 | 230 | 50 | 2445              | 41             | 0.18 | 290               | 130             |
| 4 | 230 | 50 | 2475              | 40             | 0.17 | 160               | 180             |

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

## Charts: Air flow 60 Hz



Measurement: LU-122920

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: L<sub>WA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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 <sub>e</sub> | I    | qv                | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|-------------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m <sup>3</sup> /h | Pa              |
| 1 | 230 | 60 | 2950              | 44             | 0.20 | 535               | 0               |
| 2 | 230 | 60 | 2830              | 47             | 0.21 | 435               | 80              |
| 3 | 230 | 60 | 2705              | 49             | 0.22 | 330               | 150             |
| 4 | 230 | 60 | 2750              | 48             | 0.22 | 185               | 220             |

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase