

## KARTA KATALOGOWA

# R2E175-RA72-13

Wentylator promieniowy AC RadiCal, łopatki zakrzywione do tyłu, jednostronnie ssący

Producent: ebm-papst

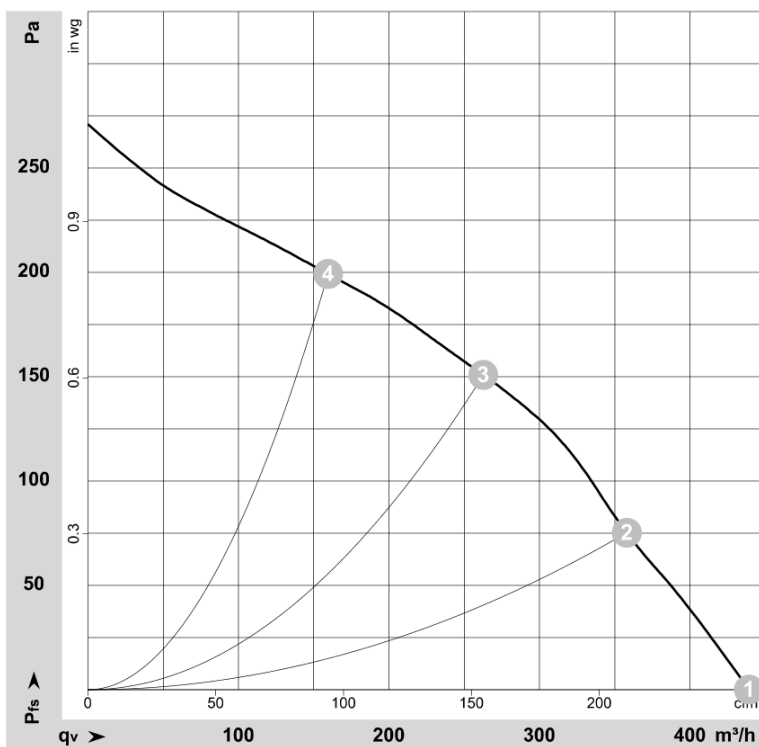


Zdjęcie poglądowe

| Dane znamionowe           |                              | Budowa                 |              |
|---------------------------|------------------------------|------------------------|--------------|
| Napięcie znamionowe       | 1~ 230 V                     | Średnica wirnika       | 175 mm       |
| Częstotliwość             | 50/60 Hz                     | Materiał wirnika       | tworzywo PP  |
| Prędkość obrotowa         | 2500 / 2850 obr/min          | Liczba łopatek         | 7            |
| Pobór mocy                | 55 / 59 W                    | Stopień ochrony        | IP44         |
| Pobór prądu               | 0,27 / 0,26 A                | Klasa izolacji         | F            |
| Maks. wydajność           | 440 m³/h                     | Zabezpieczenie silnika | termik (TOP) |
| Maks. ciśnienie statyczne | 200 Pa                       | Masa                   | 0,9 kg       |
| Temperatura otoczenia     | -25...+40 °C (60 Hz: +65 °C) |                        |              |

## Charakterystyka przepływowa

### Curves: Air performance 50 Hz



$$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-170177-1

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.

Dane na podstawie karty producenta ebm-papst (oryginał na kolejnych stronach).  
Wartości dla 50 Hz / 60 Hz; producent zastrzega możliwość zmian.

## Dobór, wycena i dostawa – zapytaj LUFTBERG

tel. +48 600 100 371 · tel. +48 604 959 199  
biuro@luftberg.pl · www.luftberg.pl

R2E175-RA72-13

AC centrifugal fan - RadiCal

backward-curved

**ebm-papst Mulfingen GmbH & Co. KG**

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

[info1@de.ebmpapst.com](mailto:info1@de.ebmpapst.com)

[www.ebmpapst.com](http://www.ebmpapst.com)

Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

|                             |                   |         |         |
|-----------------------------|-------------------|---------|---------|
| Type                        | R2E175-RA72-13    |         |         |
| Motor                       | M2E052-CA         |         |         |
| Phase                       |                   | 1~      | 1~      |
| Nominal voltage             | VAC               | 230     | 230     |
| Frequency                   | Hz                | 50      | 60      |
| Method of obtaining data    |                   | ml      | ml      |
| Valid for approval/standard |                   | CE      | CE      |
| Speed (rpm)                 | min <sup>-1</sup> | 2500    | 2850    |
| Power consumption           | W                 | 55      | 59      |
| Current draw                | A                 | 0.27    | 0.26    |
| Capacitor                   | µF                | 1.5     | 1.5     |
| Capacitor voltage           | VDB               | 400     | 400     |
| Capacitor standard          |                   | S2 (CE) | S2 (CE) |
| Min. ambient temperature    | °C                | -25     | -25     |
| Max. ambient temperature    | °C                | 40      | 65      |

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



R2E175-RA72-13

# AC centrifugal fan - RadiCal

backward-curved

## Technical description

|                                                                            |                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Weight                                                                     | 0.9 kg                                                                                                                                                                                                                                                                                         |
| Size                                                                       | 175 mm                                                                                                                                                                                                                                                                                         |
| Motor size                                                                 | 52                                                                                                                                                                                                                                                                                             |
| Rotor surface                                                              | Painted black                                                                                                                                                                                                                                                                                  |
| Impeller material                                                          | PP plastic                                                                                                                                                                                                                                                                                     |
| Number of blades                                                           | 7                                                                                                                                                                                                                                                                                              |
| 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                          | H0+                                                                                                                                                                                                                                                                                            |
| Max. permitted ambient temp. for motor (transport/storage)                 | + 80 °C                                                                                                                                                                                                                                                                                        |
| Min. permitted ambient temp. for motor (transport/storage)                 | - 40 °C                                                                                                                                                                                                                                                                                        |
| Installation position                                                      | Shaft horizontal or rotor on bottom; rotor on top on request                                                                                                                                                                                                                                   |
| Condensation drainage holes                                                | On rotor side                                                                                                                                                                                                                                                                                  |
| Mode                                                                       | S1                                                                                                                                                                                                                                                                                             |
| Motor bearing                                                              | Ball bearing                                                                                                                                                                                                                                                                                   |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | < 0.75 mA                                                                                                                                                                                                                                                                                      |
| Motor protection                                                           | Thermal overload protector (TOP) internally connected                                                                                                                                                                                                                                          |
| With cable                                                                 | Variable                                                                                                                                                                                                                                                                                       |
| Protection class assignment                                                | I; If a protective earth is connected by the customer<br>This component for installation may have several local protection classes. This information relates to this component's basic design.<br>The final protection class is based on the component's intended installation and connection. |
| Conformity with standards                                                  | EN 60034-1; EN 60204-1; EN 60335-1; CE                                                                                                                                                                                                                                                         |
| Approval                                                                   | EAC                                                                                                                                                                                                                                                                                            |

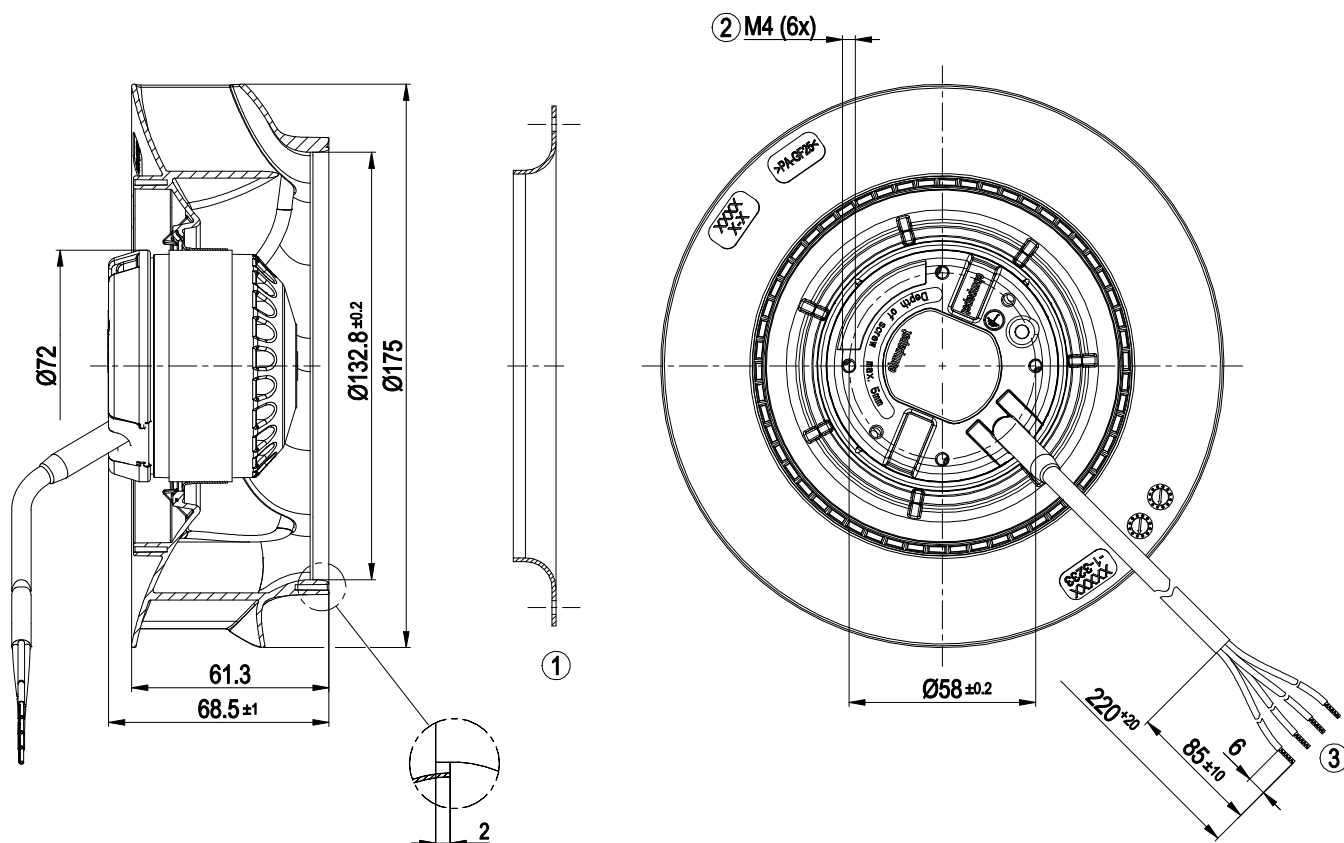


R2E175-RA72-13

# AC centrifugal fan - RadiCal

backward-curved

## Product drawing



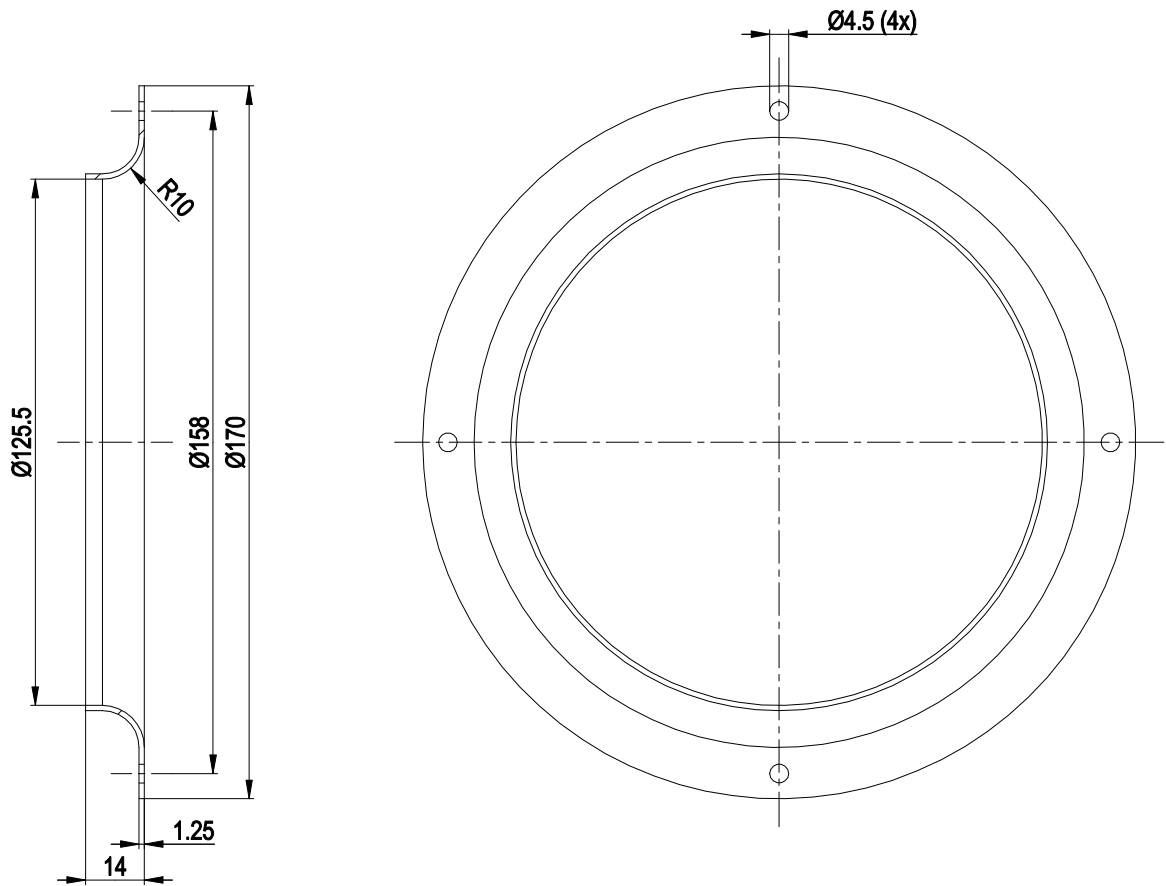
- |   |                                                                           |
|---|---------------------------------------------------------------------------|
| 1 | Accessory part: inlet ring 09576-2-4013 not included in scope of delivery |
| 2 | Max. clearance for screw 5 mm                                             |
| 3 | Cable silicone 4G 0.5 mm <sup>2</sup> , 4x crimped splices                |

R2E175-RA72-13

# AC centrifugal fan - RadiCal

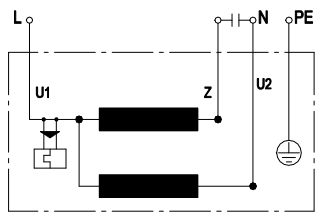
backward-curved

Accessory part



1    Accessory part: inlet ring 09576-2-4013 not included in scope of delivery

Connection diagram



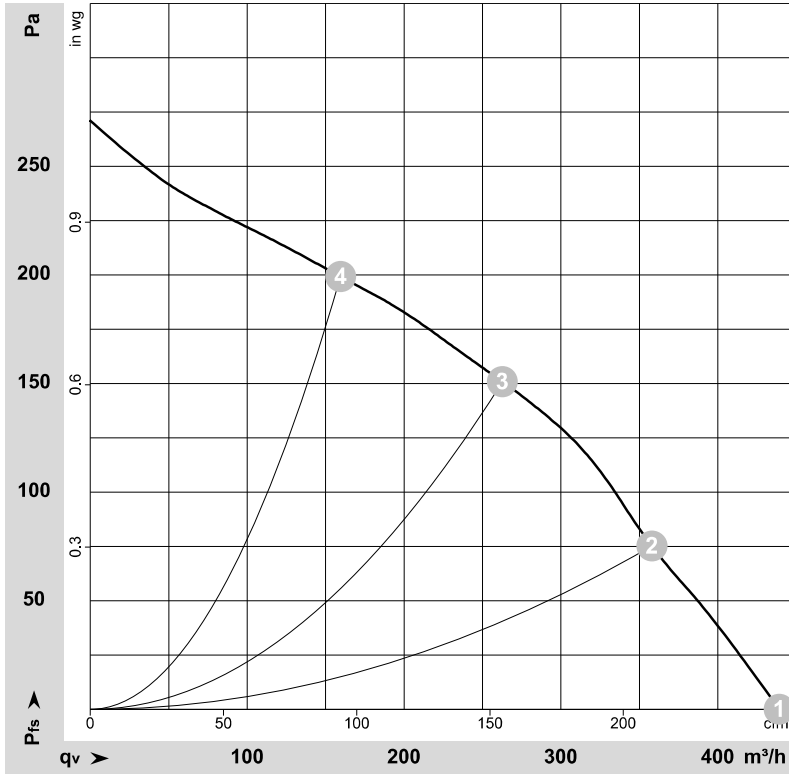
|    |              |   |       |    |       |
|----|--------------|---|-------|----|-------|
| U1 | blue         | Z | brown | U2 | black |
| PE | green/yellow |   |       |    |       |

R2E175-RA72-13

# AC centrifugal fan - RadiCal

backward-curved

## Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-170177-1

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    | LpA <sub>in</sub> | LwA <sub>in</sub> | q <sub>v</sub> | p <sub>fs</sub> | q <sub>v</sub> | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|-------------------|-------------------|----------------|-----------------|----------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | dB(A)             | dB(A)             | m³/h           | Pa              | cfm            | in. wg          |
| 1 | 230 | 50 | 2590              | 53             | 0.26 | 58                | 66                | 440            | 0               | 260            | 0.00            |
| 2 | 230 | 50 | 2525              | 55             | 0.26 | 53                | 62                | 360            | 75              | 210            | 0.30            |
| 3 | 230 | 50 | 2500              | 55             | 0.27 | 52                | 60                | 265            | 150             | 155            | 0.60            |
| 4 | 230 | 50 | 2535              | 54             | 0.26 | 54                | 61                | 160            | 200             | 95             | 0.80            |

U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

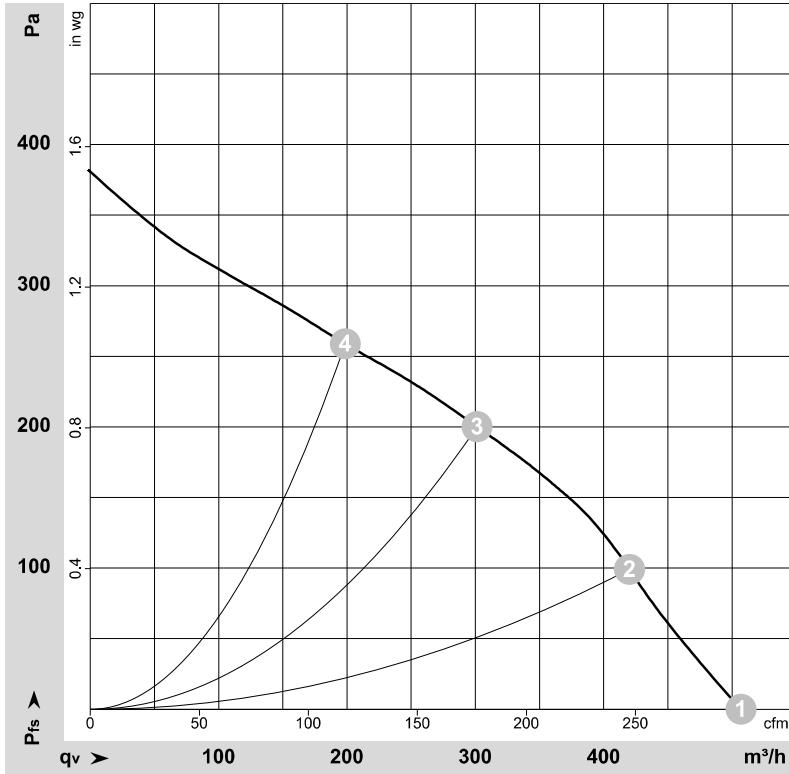


R2E175-RA72-13

# AC centrifugal fan - RadiCal

backward-curved

## Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-170268-1

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    | LpA <sub>in</sub> | LwA <sub>in</sub> | q <sub>v</sub> | P <sub>fs</sub> | q <sub>v</sub> | P <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|-------------------|-------------------|----------------|-----------------|----------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | dB(A)             | dB(A)             | m³/h           | Pa              | cfm            | in. wg          |
| 1 | 230 | 60 | 3015              | 53             | 0.23 | 61                | 69                | 505            | 0               | 300            | 0.00            |
| 2 | 230 | 60 | 2925              | 56             | 0.25 | 56                | 65                | 420            | 100             | 245            | 0.40            |
| 3 | 230 | 60 | 2850              | 59             | 0.26 | 55                | 63                | 300            | 200             | 175            | 0.80            |
| 4 | 230 | 60 | 2900              | 57             | 0.25 | 58                | 66                | 200            | 260             | 115            | 1.04            |

U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase

