

## KARTA KATALOGOWA

# R2E133-RA03-12

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

Producent: ebm-papst

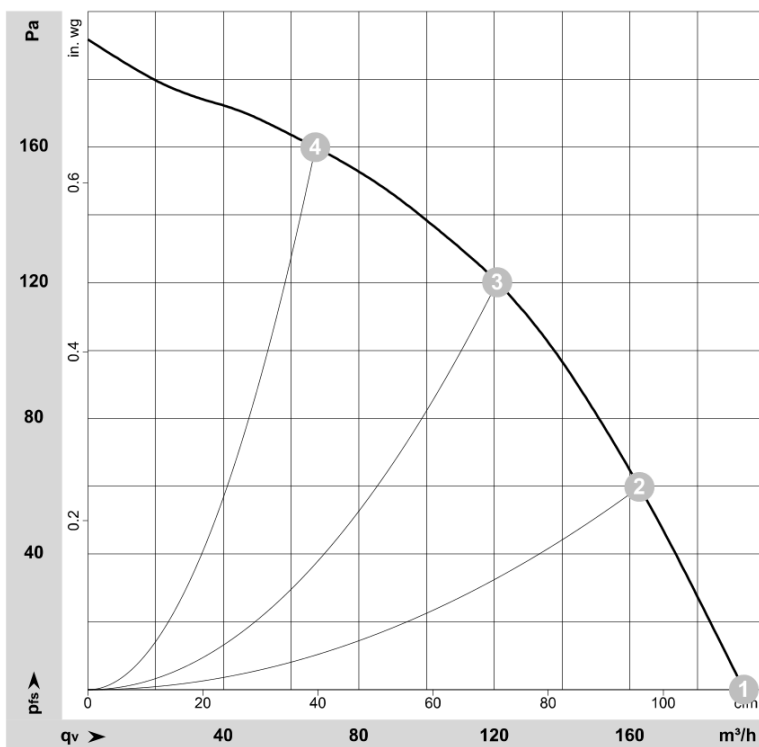


Zdjęcie poglądowe

| Dane znamionowe           |                              | Budowa                 |              |
|---------------------------|------------------------------|------------------------|--------------|
| Napięcie znamionowe       | 1~ 230 V                     | Średnica wirnika       | 133 mm       |
| Częstotliwość             | 50/60 Hz                     | Materiał wirnika       | tworzywo PP  |
| Prędkość obrotowa         | 2700 / 3100 obr/min          | Liczba łopatek         | 7            |
| Pobór mocy                | 26 / 28 W                    | Stopień ochrony        | IP42         |
| Pobór prądu               | 0,12 / 0,15 A                | Klasa izolacji         | B            |
| Maks. wydajność           | 195 m³/h                     | Zabezpieczenie silnika | termik (TOP) |
| Maks. ciśnienie statyczne | 160 Pa                       | Masa                   | 0,58 kg      |
| Temperatura otoczenia     | -25...+45 °C (60 Hz: +60 °C) |                        |              |

## Charakterystyka przepływowa

### Curves: Air performance 50 Hz



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

Measurement: LU-131804-1

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

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**R2E133-RA03-12**

# AC centrifugal fan - RadiCal

backward-curved, single-intake

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## Nominal data

|                             |                       |         |           |         |
|-----------------------------|-----------------------|---------|-----------|---------|
| <b>Type</b>                 | <b>R2E133-RA03-12</b> |         |           |         |
| <b>Motor</b>                | <b>M2E042-CA</b>      |         |           |         |
| Phase                       |                       | 1~      | 1~        | 1~      |
| Nominal voltage             | VAC                   | 230     | 230       | 230     |
| Frequency                   | Hz                    | 50      | 60        | 60      |
| Method of obtaining data    |                       | ml      | ml        | ml      |
| Valid for approval/standard |                       | CE      | UL 1004-3 | CE      |
| Speed (rpm)                 | min <sup>-1</sup>     | 2700    | 3100      | 3100    |
| Power consumption           | W                     | 26      | 28        | 27      |
| Current draw                | A                     | 0.12    | 0.15      | 0.14    |
| Capacitor                   | µF                    | 1.5     | 1.5       | 1.5     |
| Capacitor voltage           | VDB                   | 400     | 400       | 400     |
| Capacitor standard          |                       | S2 (CE) | UL        | S2 (CE) |
| Min. back pressure          | Pa                    | 0       | 0         | 0       |
| Min. back pressure          | in. wg                | 0       | 0         | 0       |
| Min. ambient temperature    | °C                    | -25     | -25       | -25     |
| Max. ambient temperature    | °C                    | 45      | 60        | 60      |
| Starting current            | A                     | 0.2     | 0.21      | 0.21    |

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



R2E133-RA03-12

# AC centrifugal fan - RadiCal

backward-curved, single-intake

## Technical description

|                                                                            |                                                                                                                |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Weight                                                                     | 0.58 kg                                                                                                        |
| Size                                                                       | 133 mm                                                                                                         |
| Motor size                                                                 | 42                                                                                                             |
| Rotor surface                                                              | Painted black                                                                                                  |
| Impeller material                                                          | PP plastic, galvanized sheet-metal plate                                                                       |
| Number of blades                                                           | 7                                                                                                              |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                                                                                 |
| Degree of protection                                                       | IP42                                                                                                           |
| Insulation class                                                           | "B"                                                                                                            |
| 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                                                           | Built-in component with basic insulation, protection class results from installation according to intended use |
| Conformity with standards                                                  | EN 60335-1; EN 60034-1; EN 60204-1; CE                                                                         |
| Approval                                                                   | CSA C22.2 No. 77; UL 1004-3                                                                                    |

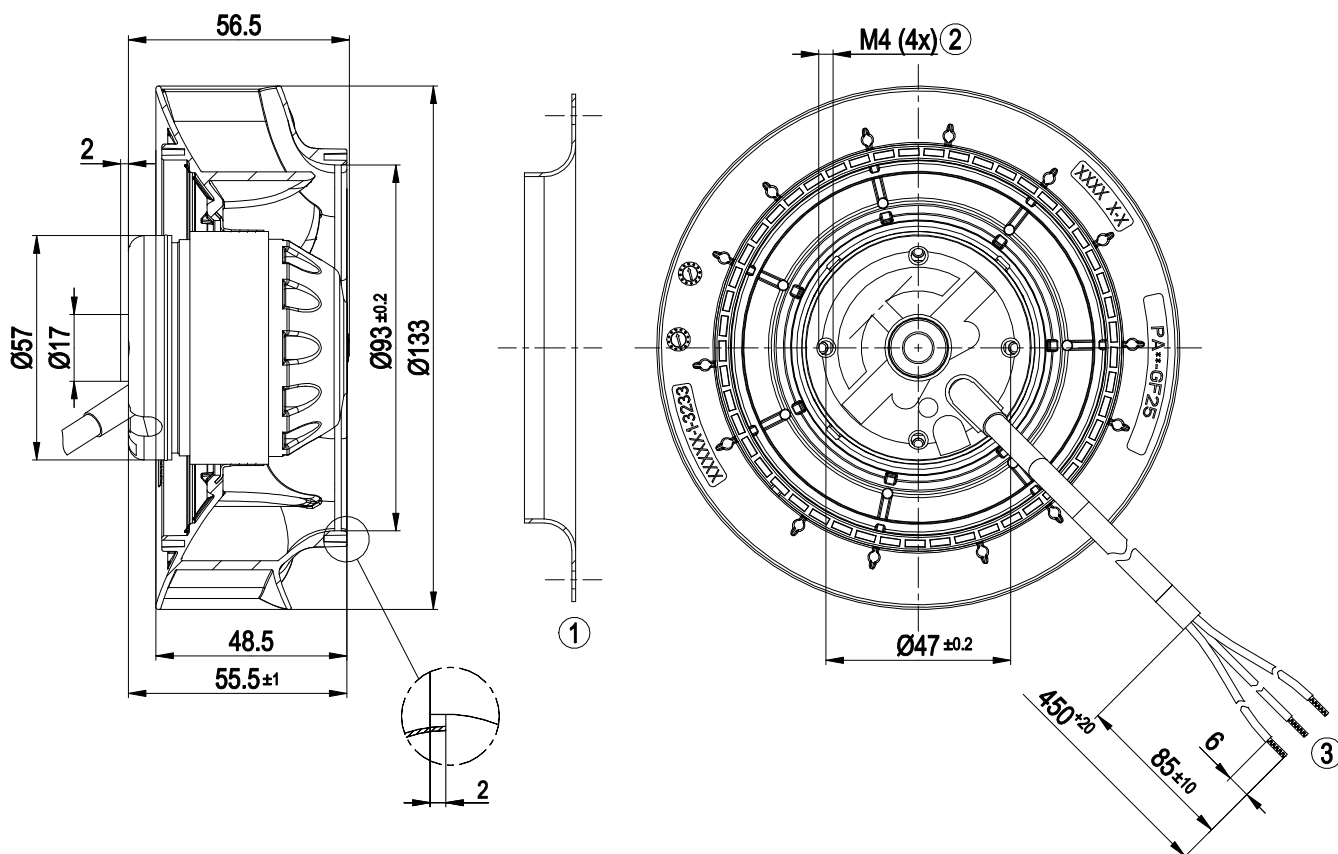


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# AC centrifugal fan - RadiCal

backward-curved, single-intake

## Product drawing



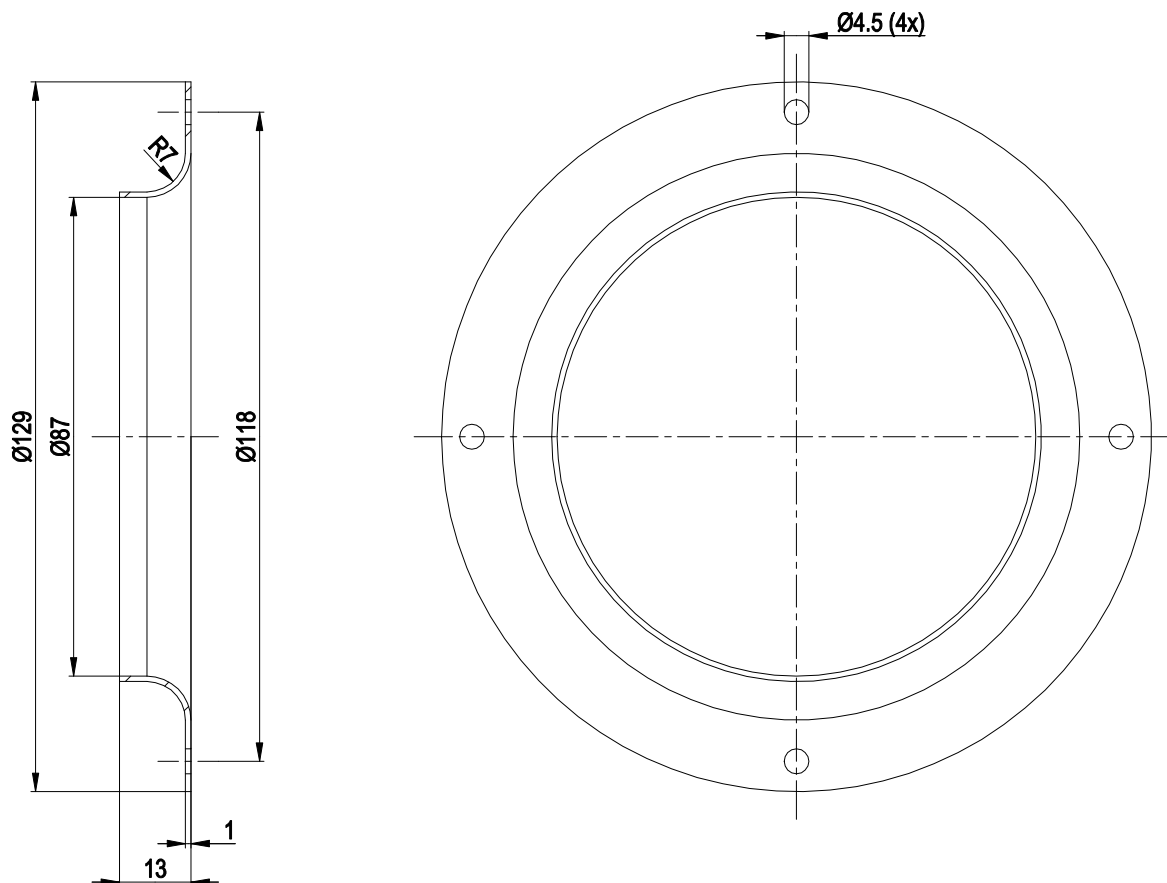
- |   |                                                                            |
|---|----------------------------------------------------------------------------|
| 1 | Accessory part: Inlet ring 09566-2-4013, not included in scope of delivery |
| 2 | Max. clearance for screw 4 mm                                              |
| 3 | Cable AWG20, 3x crimped splices                                            |

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# AC centrifugal fan - RadiCal

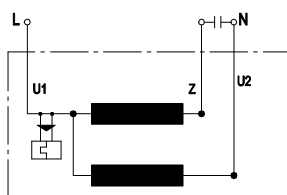
backward-curved, single-intake

## Accessory part



Inlet ring 09566-2-4013

## Connection diagram



U1 blue

Z brown

U2 black

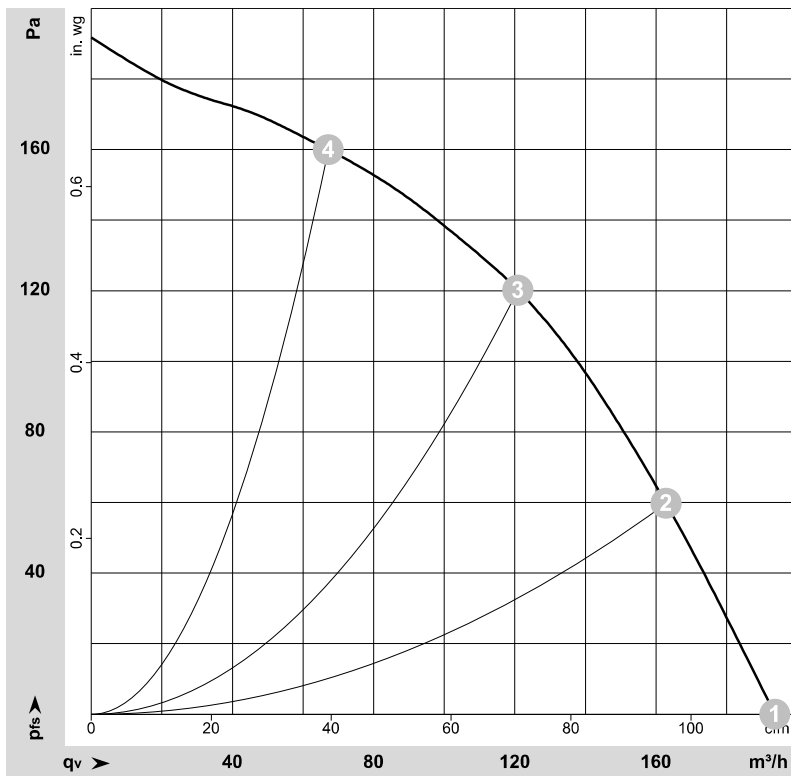


R2E133-RA03-12

# AC centrifugal fan - RadiCal

backward-curved, single-intake

## Curves: Air performance 50 Hz



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

Measurement: LU-131804-1

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

|   | Wired | 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 | 1~    | 230 | 50 | 2765              | 24             | 0.11 | 49                | 58                | 195            | 0               | 115            | 0.00            |
| 2 | 1~    | 230 | 50 | 2725              | 25             | 0.11 | 47                | 56                | 165            | 60              | 95             | 0.24            |
| 3 | 1~    | 230 | 50 | 2700              | 26             | 0.12 | 44                | 53                | 120            | 120             | 70             | 0.48            |
| 4 | 1~    | 230 | 50 | 2735              | 24             | 0.11 | 49                | 58                | 65             | 160             | 40             | 0.64            |

Wired = Wiring · 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

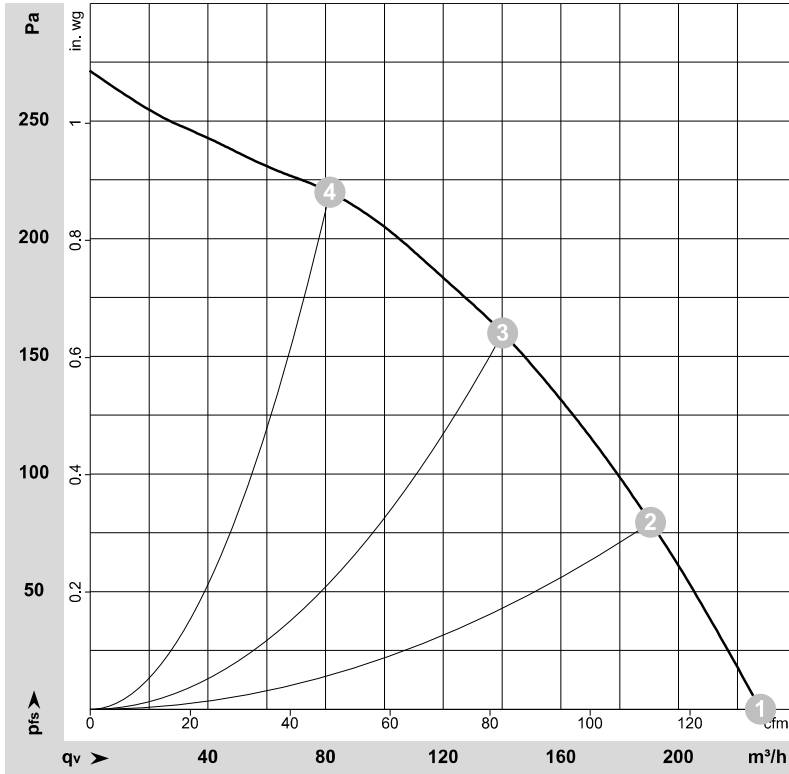


R2E133-RA03-12

# AC centrifugal fan - RadiCal

backward-curved, single-intake

## Curves: Air performance 60 Hz



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

Measurement: LU-131805-1

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

|   | Wired | 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 | 1~    | 230 | 60 | 3240              | 25             | 0.13 | 53                | 62                | 230            | 0               | 135            | 0.00            |
| 2 | 1~    | 230 | 60 | 3170              | 26             | 0.13 | 51                | 59                | 190            | 80              | 110            | 0.32            |
| 3 | 1~    | 230 | 60 | 3100              | 27             | 0.14 | 48                | 57                | 140            | 160             | 80             | 0.64            |
| 4 | 1~    | 230 | 60 | 3195              | 25             | 0.13 | 51                | 60                | 80             | 220             | 50             | 0.88            |

Wired = Wiring · 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

