

## KARTA KATALOGOWA

# R4D500-AT03-01

Wentylator promieniowy AC, łopatki zakrzywione do tyłu, jednostronnie ssący

Producent: ebm-papst



## Dane znamionowe

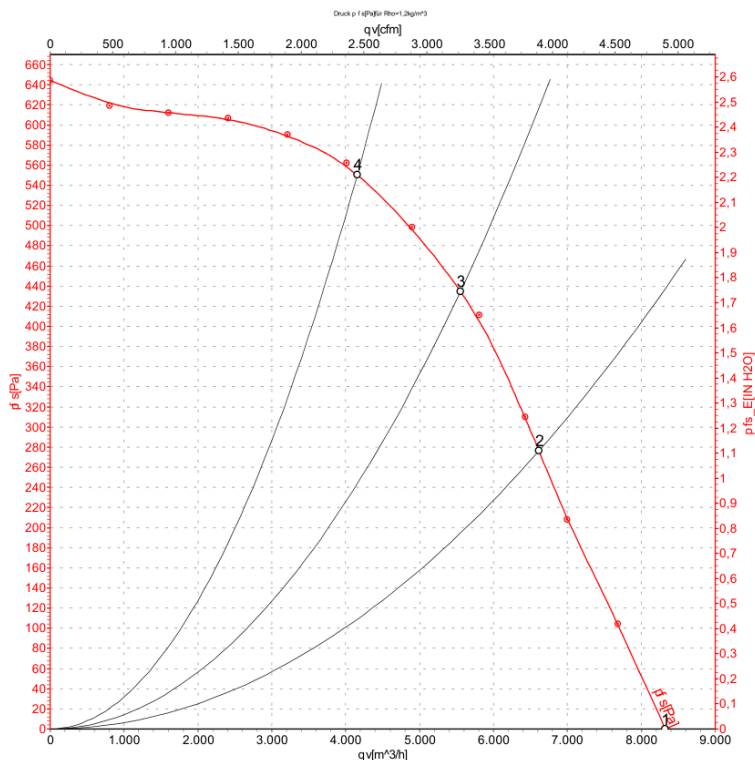
|                           |                      |
|---------------------------|----------------------|
| Napięcie znamionowe       | 3~ 230 V Δ / 400 V Y |
| Częstotliwość             | 50 Hz                |
| Prędkość obrotowa         | 1375 obr/min         |
| Pobór mocy                | 1430 W               |
| Pobór prądu               | 5,2 / 3 A            |
| Maks. wydajność           | 8320 m³/h            |
| Maks. ciśnienie statyczne | 550 Pa               |
| Temperatura otoczenia     | -40...+85 °C         |

## Budowa

|                        |                   |
|------------------------|-------------------|
| Średnica wirnika       | 500 mm            |
| Materiał wirnika       | blacha aluminiowa |
| Liczba łopatek         | 9                 |
| Stopień ochrony        | IP54              |
| Klasa izolacji         | F                 |
| Zabezpieczenie silnika | termik (TOP)      |
| Masa                   | 22,2 kg           |

## Charakterystyka przepływowa

### Curves: Air performance 50 Hz Y



Measurement: LU-70632-1

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).

Dwie wartości odpowiadają połączeniu Δ / Y (kolumny karty producenta); producent zastrzega możliwość zmian.

## Dobór, wycena i dostawa – zapytaj LUFTBERG

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R4D500-AT03-01

# AC centrifugal fan

backward-curved, single-intake



## Nominal data

|                             |                   |      |      |
|-----------------------------|-------------------|------|------|
| Type                        | R4D500-AT03-01    |      |      |
| Motor                       | M4D138-HF         |      |      |
| Phase                       |                   | 3~   | 3~   |
| Nominal voltage             | VAC               | 230  | 400  |
| Wiring                      |                   | Δ    | Y    |
| Frequency                   | Hz                | 50   | 50   |
| Method of obtaining data    |                   | ml   | ml   |
| Valid for approval/standard |                   | -    | -    |
| Speed                       | min <sup>-1</sup> | 1375 | 1375 |
| Power consumption           | W                 | 1430 | 1430 |
| Current draw                | A                 | 5.2  | 3    |
| Min. back pressure          | Pa                | 0    | 0    |
| Min. ambient temperature    | °C                | -40  | -40  |
| Max. ambient temperature    | °C                | 85   | 85   |
| Starting current            | A                 | 24   | 14   |

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



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## Technical description

|                                                                            |                                                        |
|----------------------------------------------------------------------------|--------------------------------------------------------|
| Weight                                                                     | 22.2 kg                                                |
| Fan size                                                                   | 500 mm                                                 |
| Rotor surface                                                              | Cast in aluminum                                       |
| Impeller material                                                          | Sheet aluminum                                         |
| Number of blades                                                           | 9                                                      |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                         |
| Degree of protection                                                       | IP54                                                   |
| Insulation class                                                           | "F"                                                    |
| Moisture (F) / Environmental (H) protection class                          | F3-1                                                   |
| Max. permitted ambient temp. for motor (transport/storage)                 | + 80 °C                                                |
| Min. permitted ambient temp. for motor (transport/storage)                 | - 40 °C                                                |
| Installation position                                                      | Any                                                    |
| Condensation drainage holes                                                | On rotor and stator sides                              |
| Mode                                                                       | S1                                                     |
| Motor bearing                                                              | Ball bearing                                           |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | <= 3.5 mA                                              |
| Motor protection                                                           | Thermal overload protector (TOP) with basic insulation |
| With cable                                                                 | Lateral                                                |
| Protection class                                                           | I (with customer connection of protective earth)       |
| Conformity with standards                                                  | EN 61800-5-1; EN 60034                                 |
| Approval                                                                   | EAC; VDE                                               |

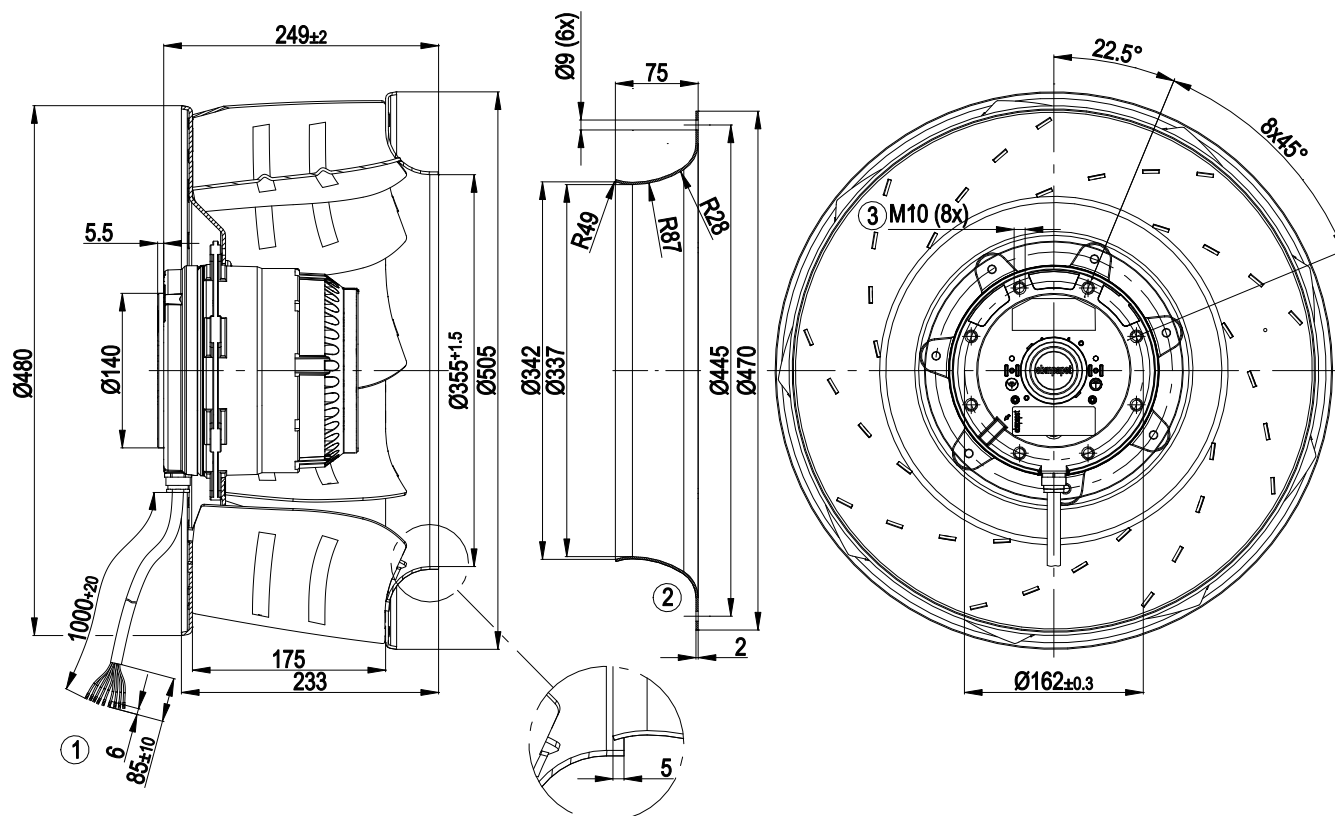


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## Product drawing



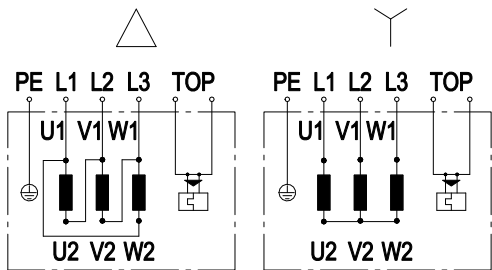
- |   |                                                                            |
|---|----------------------------------------------------------------------------|
| 1 | Cable halogen-free, 9 x 0.75 mm <sup>2</sup> , 9 x crimped splices         |
| 2 | Accessory part: Inlet ring 63072-2-4013 not included in scope of delivery. |
| 3 | Max. clearance for screw 18 mm                                             |

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Connection diagram



Note: Change of rotation direction by reversing two phases

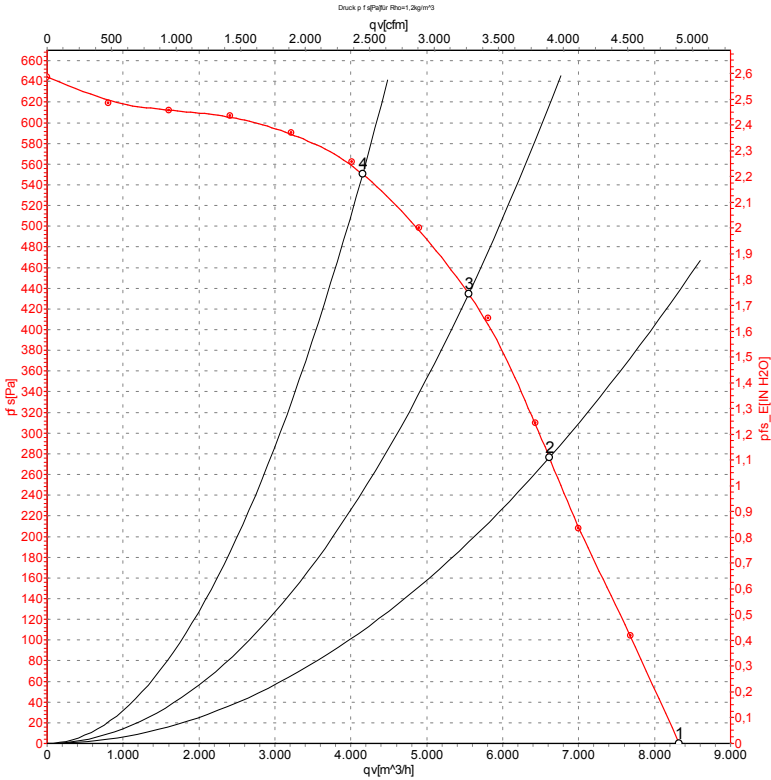
|    |                  |    |                 |     |         |
|----|------------------|----|-----------------|-----|---------|
| Δ  | Delta connection | Y  | Star connection | L1  | black   |
| L2 | blue             | L3 | brown           | U1  | black   |
| V1 | blue             | W1 | brown           | U2  | green   |
| V2 | white            | W2 | yellow          | TOP | 2x gray |
| PE | green/yellow     |    |                 |     |         |



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Measured values

|   | Wired | U   | f  | n                 | P <sub>e</sub> | I    | qv   | p <sub>fs</sub> |
|---|-------|-----|----|-------------------|----------------|------|------|-----------------|
|   |       | V   | Hz | min <sup>-1</sup> | W              | A    | m³/h | Pa              |
| 1 | Y     | 400 | 50 | 1405              | 1157           | 2.64 | 8320 | 0               |
| 2 | Y     | 400 | 50 | 1380              | 1358           | 2.88 | 6615 | 275             |
| 3 | Y     | 400 | 50 | 1375              | 1430           | 3.00 | 5550 | 435             |
| 4 | Y     | 400 | 50 | 1380              | 1334           | 2.86 | 4155 | 550             |

Wired = Wiring · U = Power supply · f = Frequency · n = Speed · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

