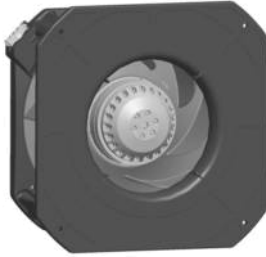


K2E220-RB06-01

# AC centrifugal module - RadiCal®

backward curved, single inlet  
with housing



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## Nominal data

|                               |                   |         |         |
|-------------------------------|-------------------|---------|---------|
| Type                          | K2E220-RB06-01    |         |         |
| Motor                         | M2E068-CF         |         |         |
| Phase                         |                   | 1~      | 1~      |
| Nominal voltage               | VAC               | 230     | 230     |
| Frequency                     | Hz                | 50      | 60      |
| Type of data definition       |                   | ml      | ml      |
| Valid for approval / standard |                   | CE      | CE      |
| Speed                         | min <sup>-1</sup> | 2500    | 2650    |
| Power input                   | W                 | 102     | 135     |
| Current draw                  | A                 | 0.45    | 0.60    |
| Motor capacitor               | µF                | 2.5     | 2.5     |
| Capacitor voltage             | VDB               | 400     | 400     |
| Capacitor standard            |                   | P0 (CE) | P0 (CE) |
| Min. back pressure            | Pa                | 0       | 0       |
| Min. ambient temperature      | °C                | -25     | -25     |
| Max. ambient temperature      | °C                | 60      | 75      |
| Starting current              | A                 | 0.85    | 0.82    |

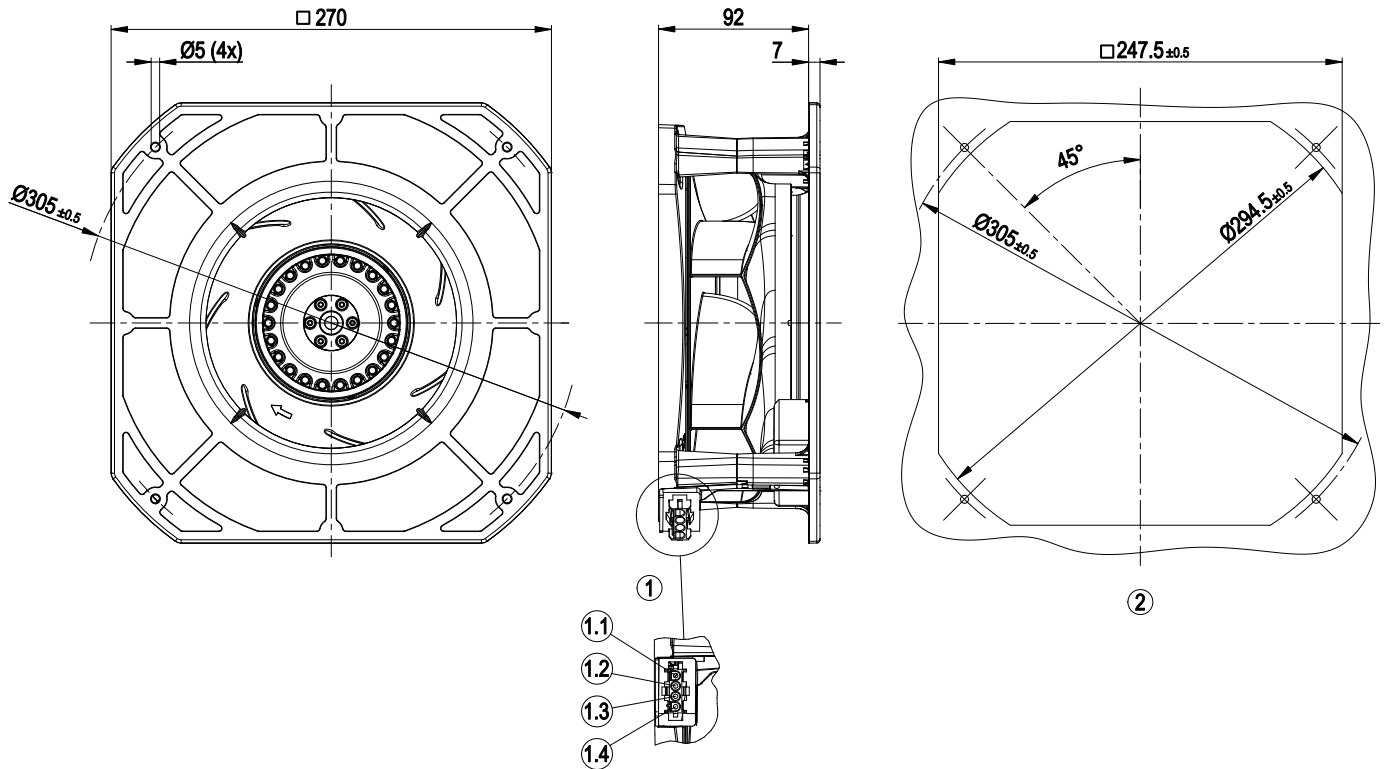
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit  
Subject to alterations



### Technical features

|   |   |
|---|---|
| <b>Mass</b>   | 2.4 kg  |
| <b>Size</b>   | 220 mm  |
| <b>Surface of rotor</b>   | Coated in black   |
| <b>Material of impeller</b>   | PA plastic  |
| <b>Housing material</b>   | PA plastic  |
| <b>Number of blades</b>   | 7   |
| <b>Direction of rotation</b>  | Clockwise, seen on rotor  |
| <b>Type of protection</b>   | IP 44; Depending on installation and position as per EN 60034-5 |
| <b>Insulation class</b>   | "F"   |
| <b>Humidity class</b>   | F1-2  |
| <b>Max. permissible ambient motor temp. (transp./ storage)</b>            | + 80 °C   |
| <b>Min. permissible ambient motor temp. (transp./storage)</b>             | - 40 °C   |
| <b>Mounting position</b>  | Shaft horizontal or rotor on bottom; rotor on top on request    |
| <b>Condensate discharge holes</b>   | Rotor-side  |
| <b>Operation mode</b>   | S1  |
| <b>Motor bearing</b>  | Ball bearing  |
| <b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b> | < 0.75 mA   |
| <b>Electrical leads</b>   | With plug   |
| <b>Motor protection</b>   | Thermal overload protector (TOP) wired internally               |
| <b>Cable exit</b>   | Variable  |
| <b>Protection class</b>   | I (if protective earth is connected by customer)                |
| <b>Product conforming to standard</b>                                     | EN 60335-1; CE  |
| <b>Approval</b>   | CCC   |

## Product drawing



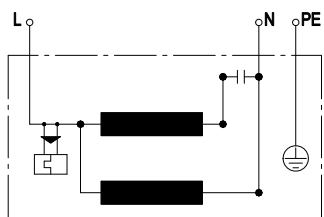
|     |  |
|-----|--|
| 1   | Coded plug system AMP Universal-Mate-N-Lok                     |
|     | Connector housing: AMP 350 780-1                               |
|     | 4 x plug pin: AMP 926 885-1                                    |
|     | Mating connector (not included in standard scope of delivery): |
|     | Connector housing: AMP 350 779-4                               |
|     | 4 x female terminal: AMP 926 884-1                             |
| 1.1 | PE   |
| 1.2 | L  |
| 1.3 | N + capacitor  |
| 1.4 | Capacitor  |
|     | (Capacitor wired internally)                                   |
| 2   | Mounting dimensions  |

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## Connection screen



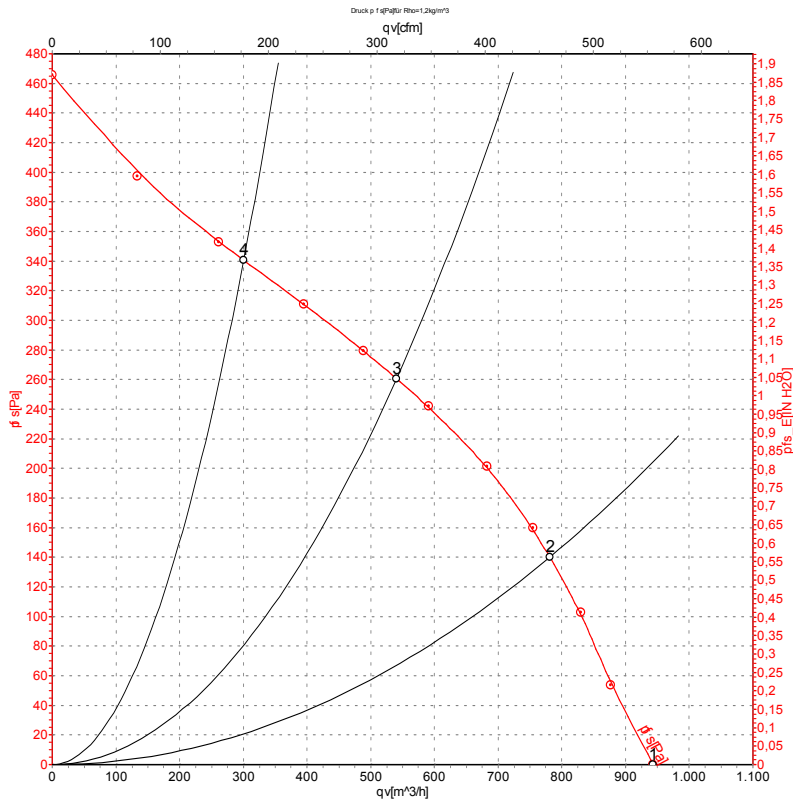
L blue

N black

PE green/yellow



## Charts: Air flow 50 Hz



Measurement: LU-129486

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.

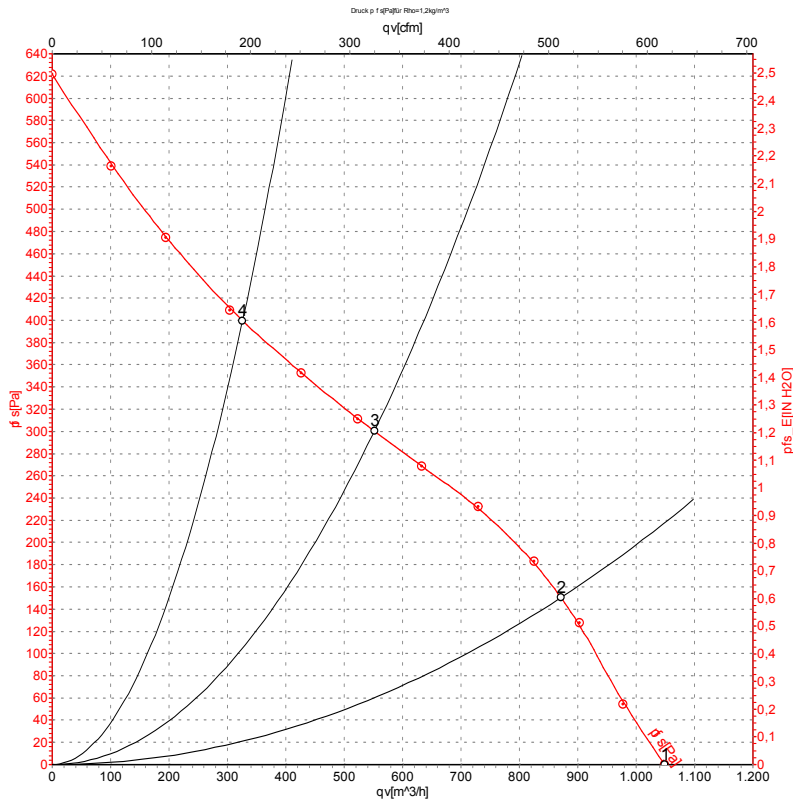
## Measured values

|   | U   | f  | n                 | P <sub>e</sub> | I    | L <sub>pA<sub>in</sub></sub> | L <sub>wA<sub>in</sub></sub> | qv                | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|------------------------------|------------------------------|-------------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | dB(A)                        | dB(A)                        | m <sup>3</sup> /h | Pa              |
| 1 | 230 | 50 | 2600              | 90             | 0.40 | 63                           | 70                           | 945               | 0               |
| 2 | 230 | 50 | 2575              | 95             | 0.43 | 59                           | 66                           | 780               | 140             |
| 3 | 230 | 50 | 2500              | 102            | 0.45 | 56                           | 64                           | 540               | 260             |
| 4 | 230 | 50 | 2580              | 95             | 0.42 | 59                           | 67                           | 300               | 340             |

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · L<sub>pA<sub>in</sub></sub> = Sound pressure level inlet side · L<sub>wA<sub>in</sub></sub> = Sound power level inlet side · qv = Air flow  
 p<sub>fs</sub> = Pressure increase



## Charts: Air flow 60 Hz



Measurement: LU-129487

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    | L <sub>pA<sub>in</sub></sub> | L <sub>wA<sub>in</sub></sub> | qv                | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|------------------------------|------------------------------|-------------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | dB(A)                        | dB(A)                        | m <sup>3</sup> /h | Pa              |
| 1 | 230 | 60 | 2900              | 120            | 0.53 | 65                           | 73                           | 1050              | 0               |
| 2 | 230 | 60 | 2805              | 127            | 0.55 | 61                           | 68                           | 870               | 150             |
| 3 | 230 | 60 | 2650              | 135            | 0.60 | 58                           | 66                           | 550               | 300             |
| 4 | 230 | 60 | 2795              | 126            | 0.55 | 61                           | 69                           | 325               | 400             |

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · L<sub>pA<sub>in</sub></sub> = Sound pressure level inlet side · L<sub>wA<sub>in</sub></sub> = Sound power level inlet side · qv = Air flow  
p<sub>fs</sub> = Pressure increase

