

R2E225-BD64-25

# AC centrifugal fan

backward curved



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## Nominal data

|                               |                   |         |         |
|-------------------------------|-------------------|---------|---------|
| Type                          | R2E225-BD64-25    |         |         |
| Motor                         | M2E068-DF         |         |         |
| Phase                         |                   | 1~      | 1~      |
| Nominal voltage               | VAC               | 230     | 230     |
| Frequency                     | Hz                | 50      | 60      |
| Type of data definition       |                   | fa      | fa      |
| Valid for approval / standard |                   | -       | -       |
| Speed                         | min <sup>-1</sup> | 2700    | 3050    |
| Power input                   | W                 | 136     | 195     |
| Current draw                  | A                 | 0.6     | 0.86    |
| Motor capacitor               | µF                | 4       | 4       |
| Capacitor voltage             | VDB               | 450     | 450     |
| Capacitor standard            |                   | P2 (CE) | P2 (CE) |
| Min. back pressure            | Pa                | 0       | 0       |
| Min. ambient temperature      | °C                | -25     | -25     |
| Max. ambient temperature      | °C                | 60      | 55      |
| Starting current              | A                 | 1.4     | 1.4     |

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

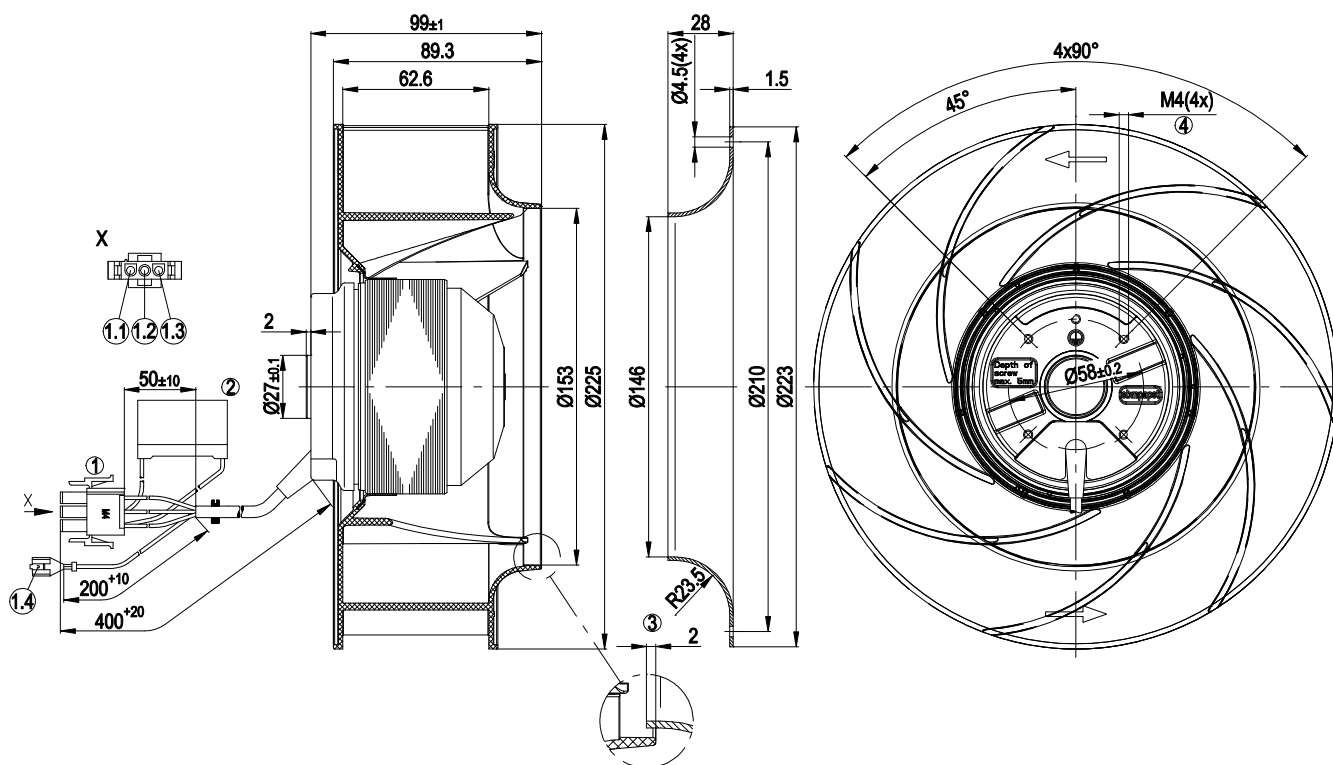


## Technical features

|                                                                    |                                                                 |
|--------------------------------------------------------------------|-----------------------------------------------------------------|
| Mass                                                               | 2.4 kg                                                          |
| Size                                                               | 225 mm                                                          |
| Surface of rotor                                                   | Coated in black                                                 |
| Material of impeller                                               | Plastic PA6, fibreglass-reinforced                              |
| Number of blades                                                   | 7                                                               |
| Direction of rotation                                              | Clockwise, seen on rotor                                        |
| Type of protection                                                 | IP 44; Depending on installation and position as per EN 60034-5 |
| Insulation class                                                   | "F"                                                             |
| Humidity class                                                     | F1-2                                                            |
| Max. permissible ambient motor temp. (transp./ storage)            | + 80 °C                                                         |
| Min. permissible ambient motor temp. (transp./storage)             | - 40 °C                                                         |
| Mounting position                                                  | Shaft horizontal or rotor on bottom; rotor on top on request    |
| Condensate discharge holes                                         | Rotor-side                                                      |
| 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                                                      |
| Approval                                                           | CSA; CCC; UL                                                    |



## Product drawing



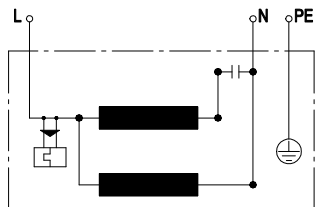
|     |                                                                                                               |
|-----|---------------------------------------------------------------------------------------------------------------|
| 1   | Connection line PFA 4G AWG20, AMP connector shell 350766-4 with 2x plug pin 350538-1 and 1x plug pin 926885-1 |
| 1.1 | Blue                                                                                                          |
| 1.2 | brown + capacitor                                                                                             |
| 1.3 | black + capacitor                                                                                             |
| 1.4 | Receptacle for tabs 160389-3 6.3-0.8 (green/yellow)                                                           |
| 2   | Capacitor with adhesive foil                                                                                  |
| 3   | Accessory part: Inlet nozzle 96358-2-4013, not included in the standard scope of delivery                     |
| 4   | Depth of screw max. 5 mm                                                                                      |

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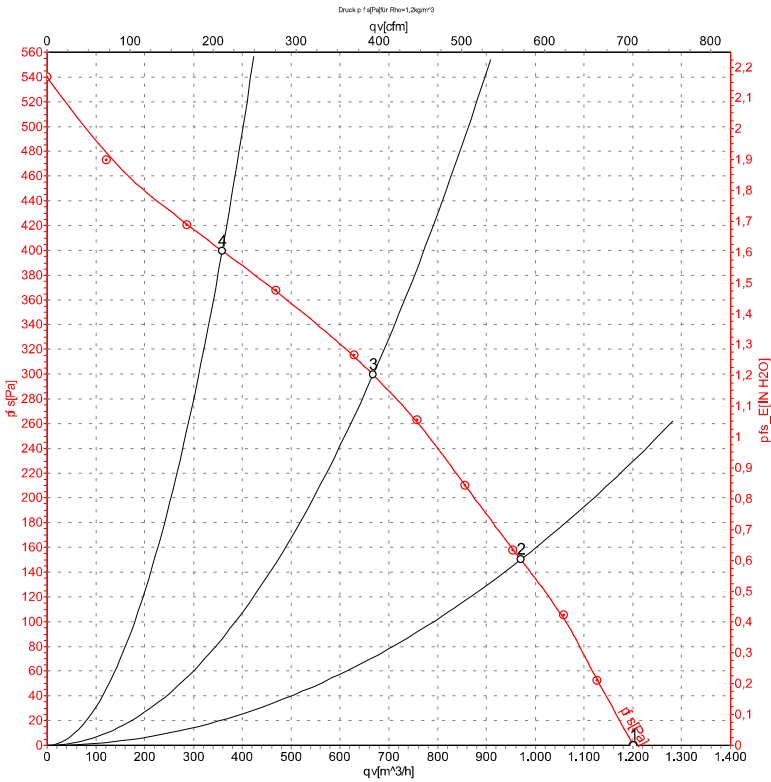
## Connection screen



|   |      |   |       |    |              |
|---|------|---|-------|----|--------------|
| L | blue | N | black | PE | green/yellow |
|---|------|---|-------|----|--------------|



Charts: Air flow 50 Hz



Measurement: LU-53801

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.

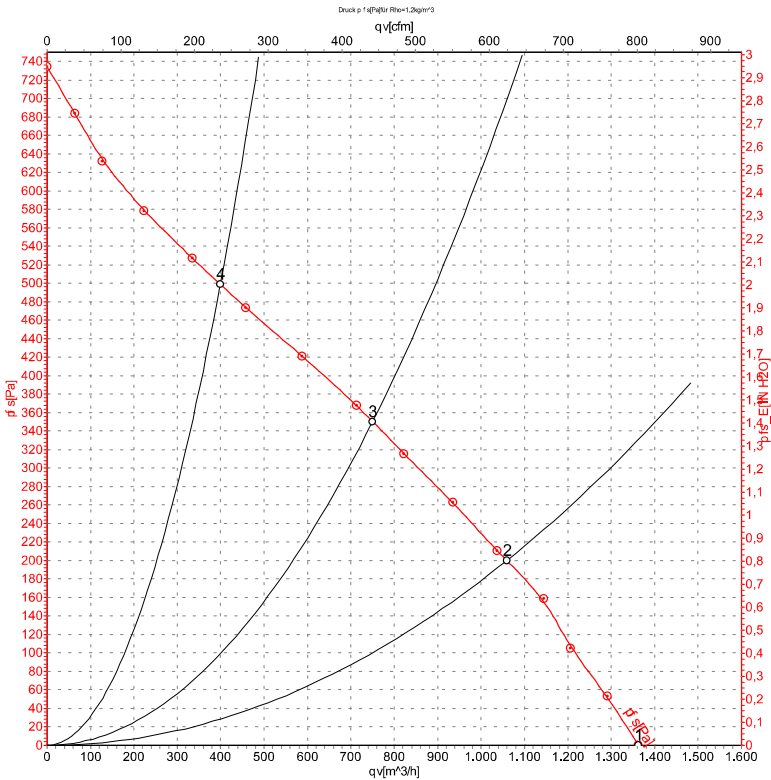
Measured values

|   | U   | f  | n                 | P <sub>e</sub> | I    | qv   | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m³/h | Pa              |
| 1 | 230 | 50 | 2700              | 136            | 0.60 | 1200 | 0               |
| 2 | 230 | 50 | 2660              | 148            | 0.67 | 970  | 150             |
| 3 | 230 | 50 | 2615              | 158            | 0.70 | 670  | 300             |
| 4 | 230 | 50 | 2670              | 146            | 0.66 | 360  | 400             |

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-53802

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: LwA measured as per ISO 13347 / LpA 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 | 3050              | 195            | 0.86 | 1365              | 0               |
| 2 | 230 | 60 | 2970              | 208            | 0.91 | 1060              | 200             |
| 3 | 230 | 60 | 2865              | 221            | 0.96 | 750               | 350             |
| 4 | 230 | 60 | 2980              | 206            | 0.90 | 400               | 500             |

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

