

# AC centrifugal fan

backward curved, single inlet

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## Nominal data

|                               |                   |      |      |
|-------------------------------|-------------------|------|------|
| Type                          | R2E225-BA47-09    |      |      |
| Motor                         | M2E068-EC         |      |      |
| 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> | 2650 | 3000 |
| Power input                   | W                 | 145  | 205  |
| Current draw                  | A                 | 0.63 | 0.9  |
| Motor capacitor               | µF                | 5    | 5    |
| Capacitor voltage             | VDB               | 400  | 400  |
| Min. back pressure            | Pa                | 0    | 0    |
| Min. ambient temperature      | °C                | -25  | -25  |
| Max. ambient temperature      | °C                | 75   | 75   |

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



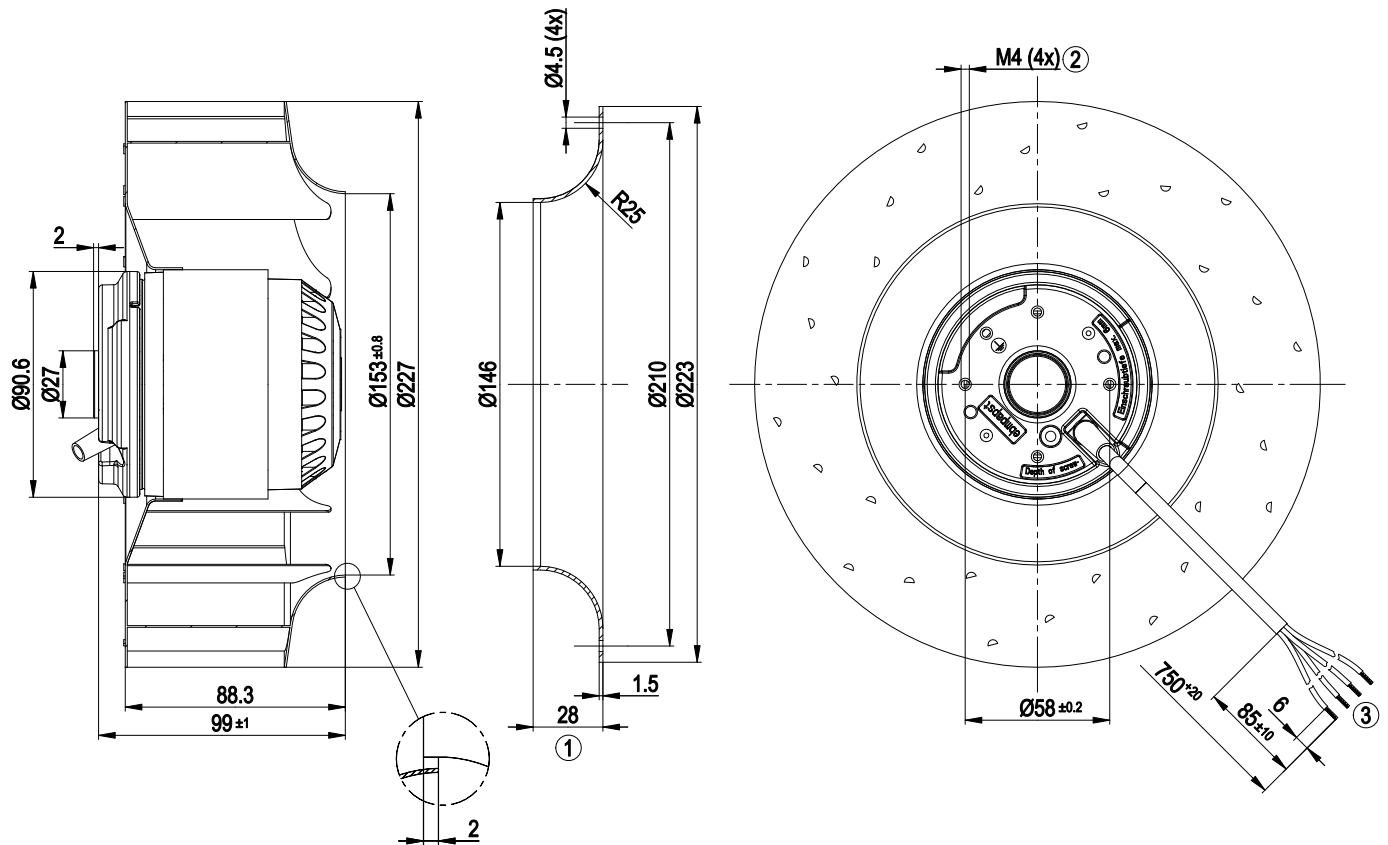
## Technical features

|                                                                    |                                                   |
|--------------------------------------------------------------------|---------------------------------------------------|
| Mass                                                               | 3.2 kg                                            |
| Size                                                               | 225 mm                                            |
| Surface of rotor                                                   | Uncoated                                          |
| Material of impeller                                               | Sheet steel, galvanised                           |
| Number of blades                                                   | 11                                                |
| Direction of rotation                                              | Clockwise, seen on rotor                          |
| Type of protection                                                 | IP 44; Depending on installation and position     |
| Insulation class                                                   | "F"                                               |
| Humidity class                                                     | F0                                                |
| Max. permissible ambient motor temp. (transp./ storage)            | + 80 °C                                           |
| Min. permissible ambient motor temp. (transp./storage)             | - 40 °C                                           |
| Mounting position                                                  | Any                                               |
| Condensate discharge holes                                         | None                                              |
| 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                                        |

## AC centrifugal fan

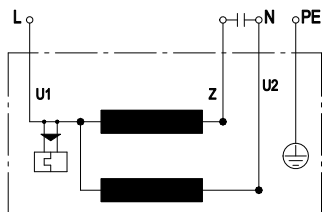
backward curved, single inlet

## Product drawing



- |   |                                                                             |
|---|-----------------------------------------------------------------------------|
| 1 | Accessory part: Inlet nozzle 96358-2-4013 not included in scope of delivery |
| 2 | Thread reach max. 6 mm                                                      |
| 3 | Connection line silicone 4G 0.5 mm <sup>2</sup> , 4x lead tips crimped      |

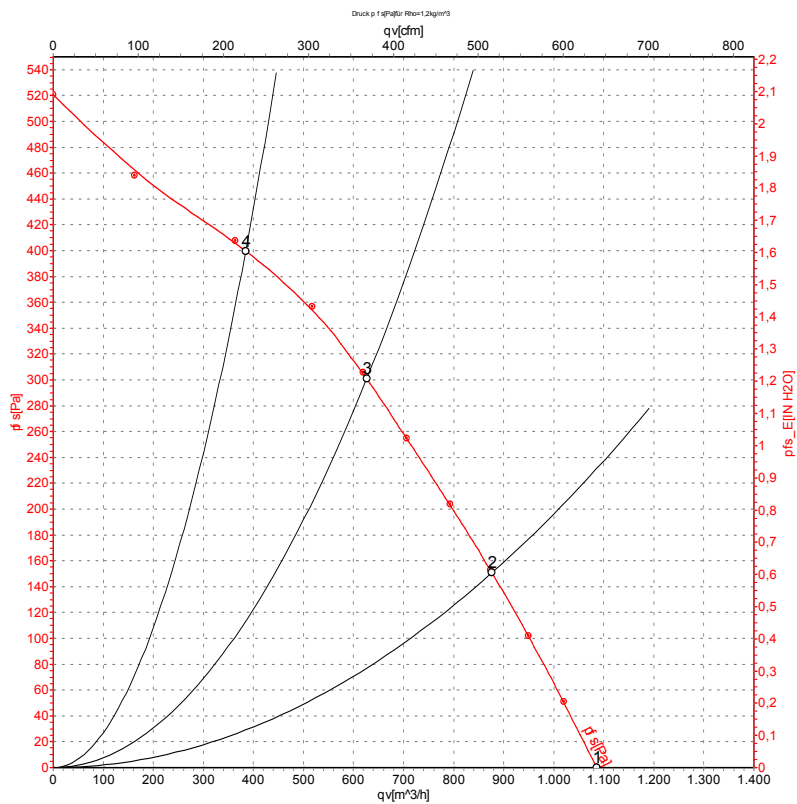
## Connection screen



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



## Charts: Air flow 50 Hz



Measurement: LU-30832

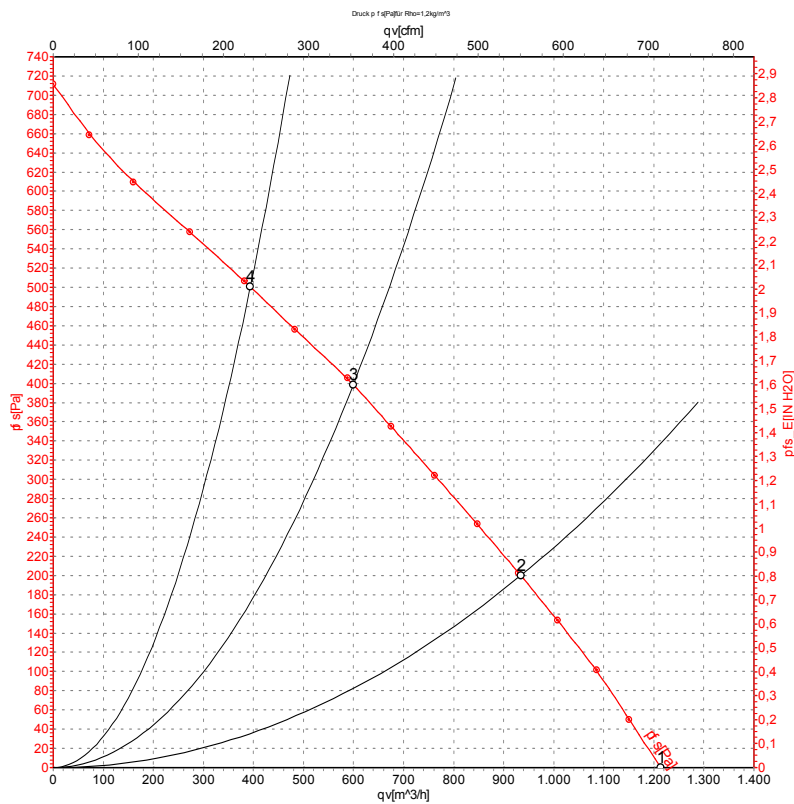
Air performance measured as per ISO 5801  
 Installation category A. For detailed  
 information on the measuring set-up, please  
 contact ebm-papst. Suction-side noise  
 levels: L<sub>WA</sub> measured as per ISO 13347 /  
 L<sub>pA</sub> measured with 1m distance to fan axis.  
 The values given 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 | 2650              | 145            | 0.63 | 1085 | 0               |
| 2 | 230 | 50 | 2630              | 156            | 0.67 | 875  | 150             |
| 3 | 230 | 50 | 2595              | 164            | 0.71 | 625  | 300             |
| 4 | 230 | 50 | 2645              | 152            | 0.66 | 385  | 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-30833

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 | 60 | 3000              | 205            | 0.90 | 1215 | 0               |
| 2 | 230 | 60 | 2870              | 221            | 0.97 | 935  | 200             |
| 3 | 230 | 60 | 2820              | 228            | 1.00 | 600  | 400             |
| 4 | 230 | 60 | 2935              | 211            | 0.93 | 395  | 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