

R2E280-AE52-17

# AC centrifugal fan

backward curved, single inlet



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## Nominal data

|                               |                   |         |
|-------------------------------|-------------------|---------|
| Type                          | R2E280-AE52-17    |         |
| Motor                         | M2E068-EC         |         |
| Phase                         |                   | 1~      |
| Nominal voltage               | VAC               | 230     |
| Frequency                     | Hz                | 50      |
| Type of data definition       |                   | fa      |
| Valid for approval / standard |                   | CE      |
| Speed                         | min <sup>-1</sup> | 2700    |
| Power input                   | W                 | 225     |
| Current draw                  | A                 | 1.0     |
| Motor capacitor               | µF                | 7       |
| Capacitor voltage             | VDB               | 400     |
| Capacitor standard            |                   | P0 (CE) |
| Min. back pressure            | Pa                | 0       |
| Max. ambient temperature      | °C                | 40      |
| Starting current              | A                 | 2.5     |

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



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## Technical features

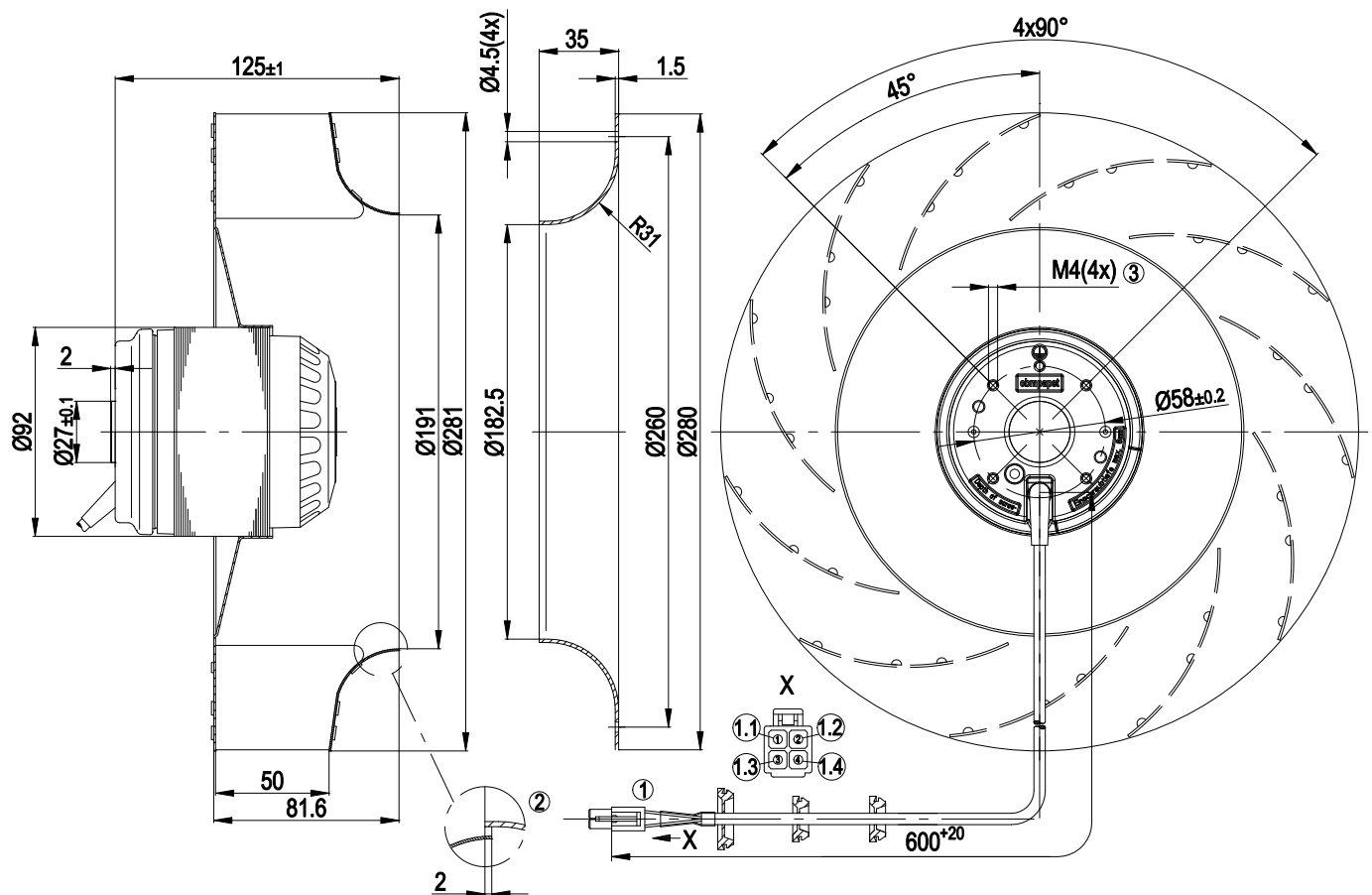
|                                                                    |                                                                 |
|--------------------------------------------------------------------|-----------------------------------------------------------------|
| Mass                                                               | 3.5 kg                                                          |
| Size                                                               | 280 mm                                                          |
| Surface of rotor                                                   | Coated in black                                                 |
| Material of impeller                                               | Sheet steel, coated in black                                    |
| Number of blades                                                   | 11                                                              |
| 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                                                     | F2-2                                                            |
| 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                                                       |
| Electrical leads                                                   | With plug                                                       |
| 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; CE                                                  |



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## Product drawing



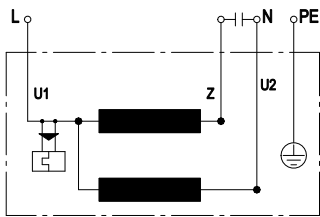
|     |                                                                                           |
|-----|-------------------------------------------------------------------------------------------|
| 1   | Connection line PFA 4G AWG20, connector housing JST No. ELP-04NV crimped                  |
|     | Plug assignment:                                                                          |
| 1.1 | brown                                                                                     |
| 1.2 | Blue                                                                                      |
| 1.3 | black                                                                                     |
| 1.4 | green/yellow                                                                              |
| 2   | Accessory part: Inlet nozzle 96360-2-4013, not included in the standard scope of delivery |
| 3   | Depth of screw max. 6 mm                                                                  |



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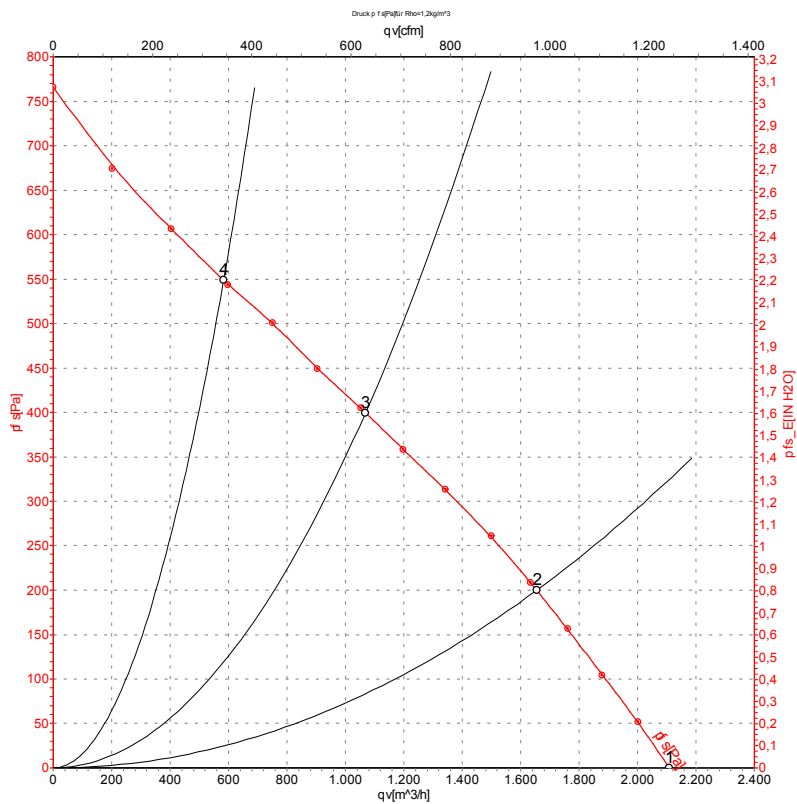
Connection screen



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



## Charts: Air flow 50 Hz



Measurement: LU-107236

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              | 225            | 1.00 | 2110 | 0               |
| 2 | 230 | 50 | 2510              | 289            | 1.26 | 1655 | 200             |
| 3 | 230 | 50 | 2365              | 324            | 1.42 | 1070 | 400             |
| 4 | 230 | 50 | 2490              | 291            | 1.27 | 585  | 550             |

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

