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## Nominal data

|                             |                   |            |            |
|-----------------------------|-------------------|------------|------------|
| Type                        | R2D225-AV02-12    |            |            |
| Motor                       | M2D068-DF         |            |            |
| Phase                       |                   | 3~         | 3~         |
| Nominal voltage             | VAC               | 415        | 415        |
| Nominal voltage range       | VAC               | 400 .. 415 | 400 .. 415 |
| Wiring                      |                   | Y          | Y          |
| Frequency                   | Hz                | 50         | 60         |
| Method of obtaining data    |                   | fa         | fa         |
| Valid for approval/standard |                   | -          | -          |
| Speed (rpm)                 | min <sup>-1</sup> | 2700       | 3000       |
| Power consumption           | W                 | 120        | 165        |
| Current draw                | A                 | 0.26       | 0.27       |
| Min. back pressure          | Pa                | 0          | 0          |
| Min. back pressure          | in. wg            | 0          | 0          |
| Min. ambient temperature    | °C                | -25        | -25        |
| Max. ambient temperature    | °C                | 60         | 55         |

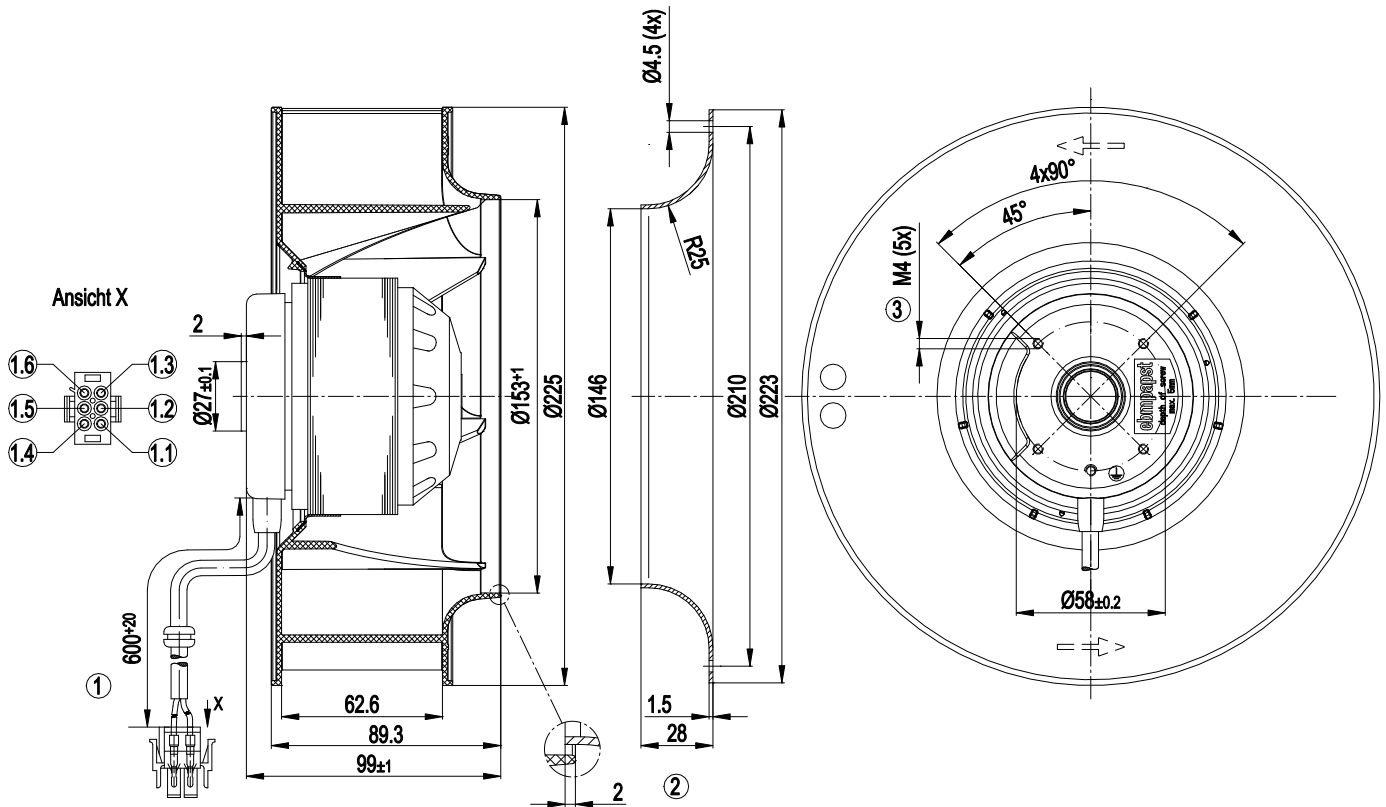
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



## Technical description

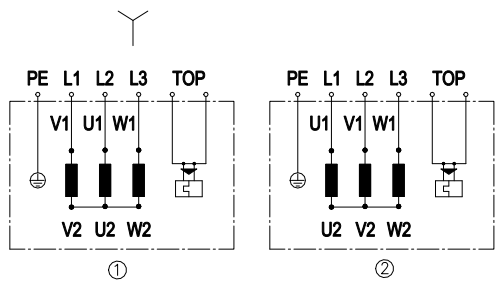
|                                                                            |                                                        |
|----------------------------------------------------------------------------|--------------------------------------------------------|
| Weight                                                                     | 2.2 kg                                                 |
| Size                                                                       | 225 mm                                                 |
| Motor size                                                                 | 68                                                     |
| Rotor surface                                                              | Painted black                                          |
| Impeller material                                                          | PA6 plastic, glass-fiber reinforced                    |
| Number of blades                                                           | 7                                                      |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                         |
| Degree of protection                                                       | IP44; installation- and position-dependent             |
| Insulation class                                                           | "B"                                                    |
| Moisture (F) / Environmental (H) protection class                          | H1+; F2-2                                              |
| 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                                                | None                                                   |
| Mode                                                                       | S1                                                     |
| Motor bearing                                                              | Ball bearing                                           |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | < 0.75 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 60335-1                                             |
| Approval                                                                   | CSA C22.2 No. 100; UL 1004-1                           |

## Product drawing



|     |                                                                                                            |
|-----|------------------------------------------------------------------------------------------------------------|
| 1   | Cable PFA AWG20 (green/yellow AWG18), 6-pole connector housing tyco 1-1644055-3, 6x plug pin tyco 926885-1 |
| 1.1 | gray                                                                                                       |
| 1.2 | gray                                                                                                       |
| 1.3 | green/yellow                                                                                               |
| 1.4 | brown                                                                                                      |
| 1.5 | blue                                                                                                       |
| 1.6 | black                                                                                                      |
| 2   | Accessory part: inlet ring 96358-2-41013 not included in scope of delivery.                                |
| 3   | Max. clearance for screw 5 mm                                                                              |

Connection diagram

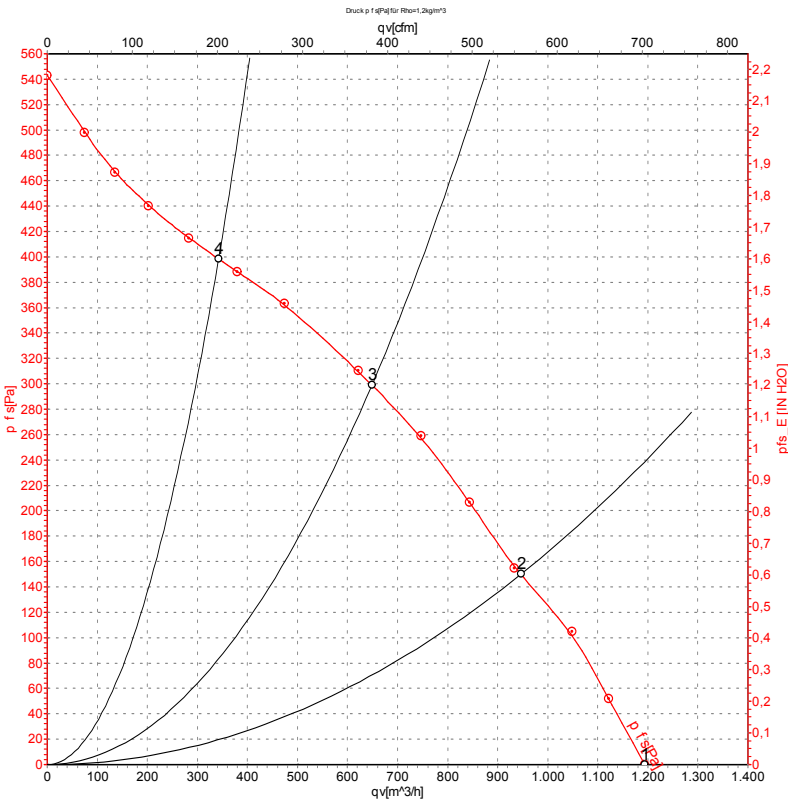


Change of rotation direction by reversing two phases

|     |                            |
|-----|----------------------------|
|     | Three-phase motor          |
| Y   | Star connection            |
| 1   | Counterclockwise operation |
| L1  | = V1 = blue                |
| L2  | = U1 = black               |
| L3  | = W1 = brown               |
| 2   | Clockwise operation        |
| L1  | = U1 = black               |
| L2  | = V1 = blue                |
| L3  | = W1 = brown               |
| PE  | green/yellow               |
| TOP | 2x gray                    |



Curves: Air performance 50 Hz



Measurement: LU-52653-1

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.

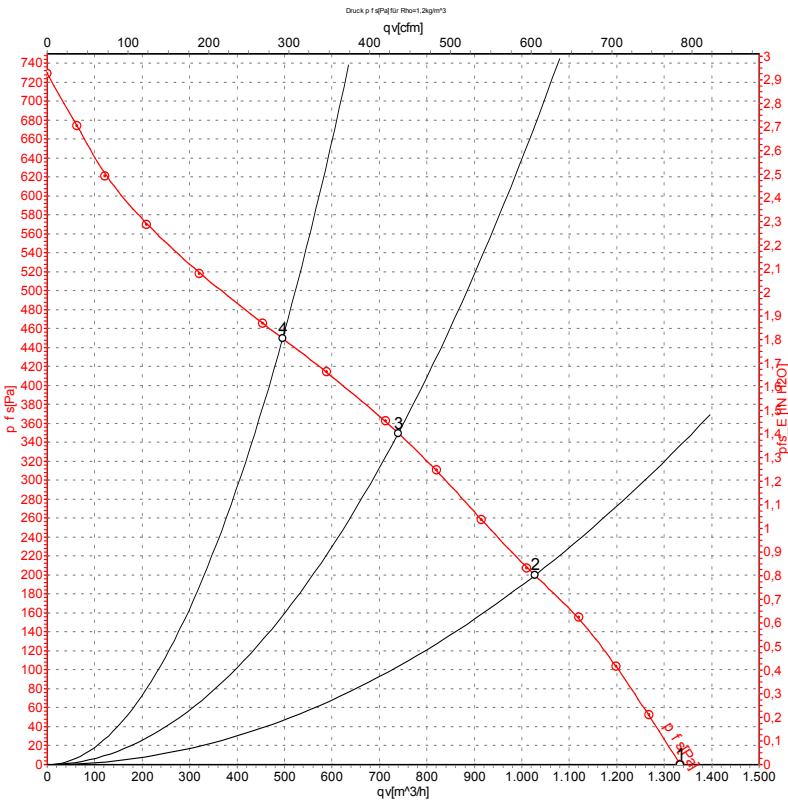
Measured values

|   | U   | f  | n                 | P <sub>e</sub> | I    | q <sub>v</sub> | P <sub>fs</sub> | q <sub>v</sub> | P <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|----------------|-----------------|----------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m³/h           | Pa              | cfm            | in. wg          |
| 1 | 400 | 50 | 2650              | 115            | 0.24 | 1195           | 0               | 705            | 0.00            |
| 2 | 400 | 50 | 2630              | 126            | 0.25 | 945            | 150             | 555            | 0.60            |
| 3 | 400 | 50 | 2575              | 140            | 0.26 | 650            | 300             | 380            | 1.20            |
| 4 | 400 | 50 | 2630              | 124            | 0.25 | 340            | 400             | 200            | 1.61            |

U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase



Curves: Air performance 60 Hz



Measurement: LU-52655-1

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.

Measured values

|   | U   | f  | n                 | P <sub>e</sub> | I    | q <sub>v</sub> | p <sub>fs</sub> | q <sub>v</sub> | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|----------------|-----------------|----------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m³/h           | Pa              | cfm            | in. wg          |
| 1 | 415 | 60 | 3000              | 165            | 0.27 | 1335           | 0               | 785            | 0.00            |
| 2 | 415 | 60 | 2910              | 183            | 0.29 | 1025           | 200             | 605            | 0.80            |
| 3 | 415 | 60 | 2820              | 200            | 0.31 | 740            | 350             | 435            | 1.41            |
| 4 | 415 | 60 | 2865              | 191            | 0.30 | 495            | 450             | 290            | 1.81            |

U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

