

R2D225-RA26-23 ebmpapst Datasheet

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## Nominal data

| Type                          | R2D225-RA26-23    |      |      |      |      |
|-------------------------------|-------------------|------|------|------|------|
| Motor                         | M2D068-DF         |      |      |      |      |
| Phase                         |                   | 3~   | 3~   | 3~   | 3~   |
| Nominal voltage               | VAC               | 400  | 400  | 415  | 415  |
| Connection                    |                   | Y    | Y    | Y    | Y    |
| Frequency                     | Hz                | 50   | 60   | 50   | 60   |
| Type of data definition       |                   | ml   | ml   | ml   | ml   |
| Valid for approval / standard |                   | CE   | CE   | CE   | CE   |
| Speed (rpm)                   | min <sup>-1</sup> | 2530 | 2700 | 2550 | 2720 |
| Power input                   | W                 | 150  | 200  | 155  | 210  |
| Current draw                  | A                 | 0.27 | 0.33 | 0.28 | 0.35 |
| Min. back pressure            | Pa                | 0    | 0    | 0    | 0    |
| Min. ambient temperature      | °C                | -25  | -25  | -25  | -25  |
| Max. ambient temperature      | °C                | 80   | 55   | 80   | 55   |
| Starting current              | A                 | 0.74 | 0.72 |      |      |

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

## Data in accordance with ecodesign regulation EU 327/2011 (EN 17166)

|                                   |   | Actual | Request 2015 |                               |                   |      |
|-----------------------------------|---|--------|--------------|-------------------------------|-------------------|------|
| 01 Overall efficiency $\eta_{es}$ | % | 43.6   | 42.6         | 09 Power input $P_e$          | kW                | 0.14 |
| 02 Measurement category           |   | A      |              | 09 Air flow $q_v$             | m <sup>3</sup> /h | 705  |
| 03 Efficiency category            |   | Static |              | 09 Pressure increase $p_{fs}$ | Pa                | 318  |
| 04 Efficiency grade N             |   | 63     | 62           | 10 Speed (rpm) n              | min <sup>-1</sup> | 2555 |
| 05 Variable speed drive           |   | No     |              | 11 Specific ratio*            |                   | 1.00 |

Data definition with optimum efficiency.  
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.\* Specific ratio =  $1 + p_g / 100\,000\text{ Pa}$ 

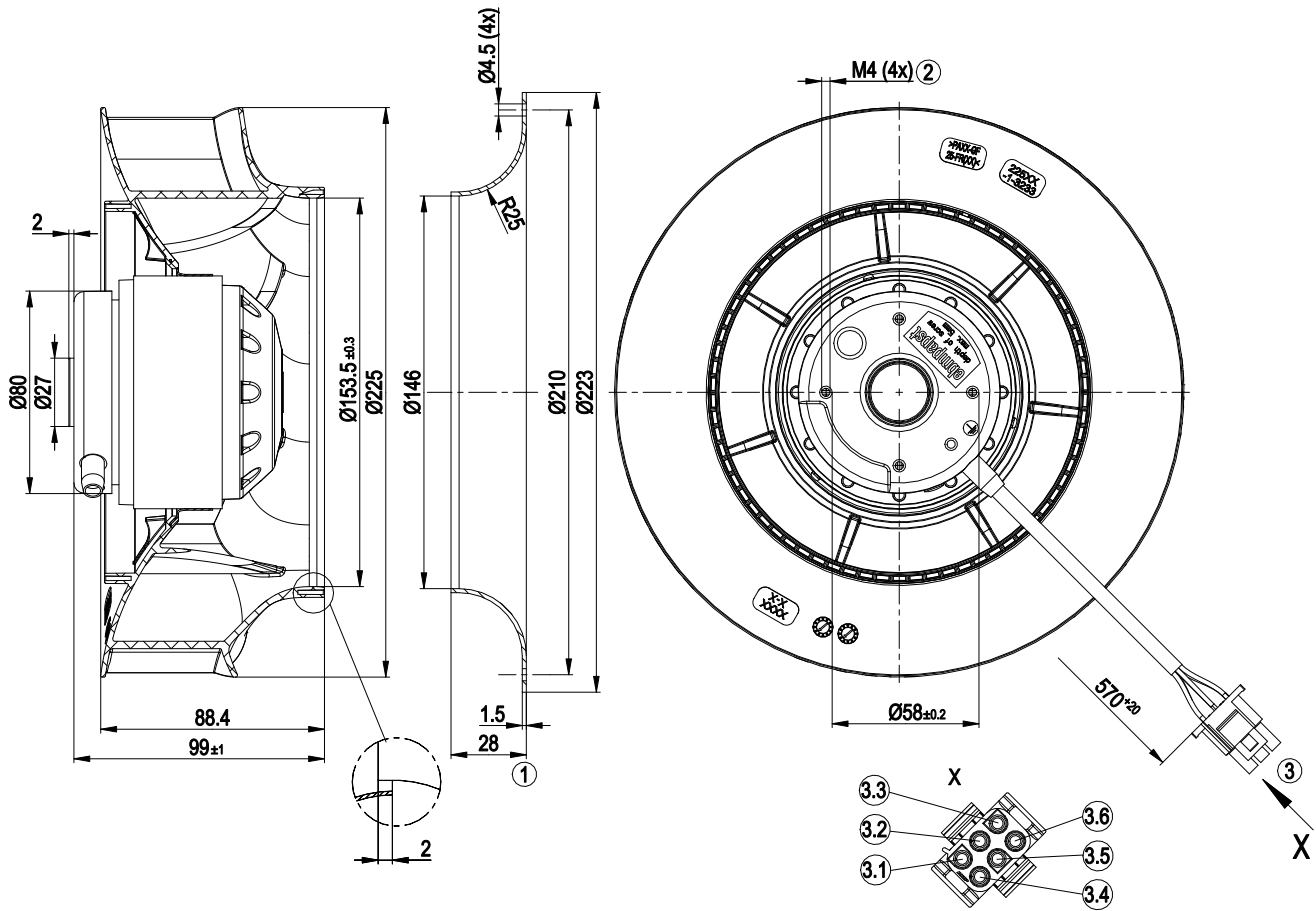
LU-140430



### Technical features

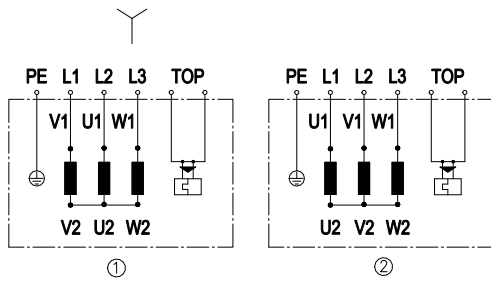
|  |  |
|--|--|
| Mass   | 2.2 kg   |
| Size   | 225 mm   |
| Motor size   | 68   |
| Surface of rotor   | Coated in black  |
| Material of impeller   | PA plastic   |
| Number of blades   | 7  |
| Direction of rotation  | Clockwise, seen on rotor                                       |
| Type of protection   | IP44; Depending on installation and position                   |
| Insulation class   | "F"  |
| Humidity (F) / environmental protection class (H)                  | H1+  |
| Max. permissible ambient motor temp. (transp./ storage)            | + 80 °C  |
| Min. permissible ambient motor temp. (transp./storage)             | - 40 °C  |
| Mounting position  | Any  |
| Condensation drainage holes  | None   |
| Operation mode   | S1   |
| Motor bearing  | Ball bearing   |
| Touch current acc. IEC 60990 (measuring network Fig. 4, TN system) | < 0.75 mA  |
| Electrical connection  | Connector with connection line                                 |
| Motor protection   | Thermal overload protector (TOP) brought out, basic insulation |
| Cable exit   | Lateral  |
| Protection class   | I (if protective earth is connected by customer)               |
| Product conforming to standard                                     | EN 60335-1; CE   |
| Approval   | UL 1004-1; CSA C22.2 no. 100                                   |

Product drawing



|     |  |
|-----|--|
| 1   | Accessory part: Inlet nozzle 96358-2-4013 not included in scope of delivery  |
| 2   | Thread reach max. 5 mm   |
| 3   | Connection line PFA AWG20 (green/yellow AWG18), connector housing 6-pole tyco 1586846-1, 6x plug pin tyco 926885-1 |
| 3.1 | black  |
| 3.2 | blue   |
| 3.3 | brown  |
| 3.4 | green/yellow   |
| 3.5 | grey (TOP)   |
| 3.6 | grey (TOP)   |

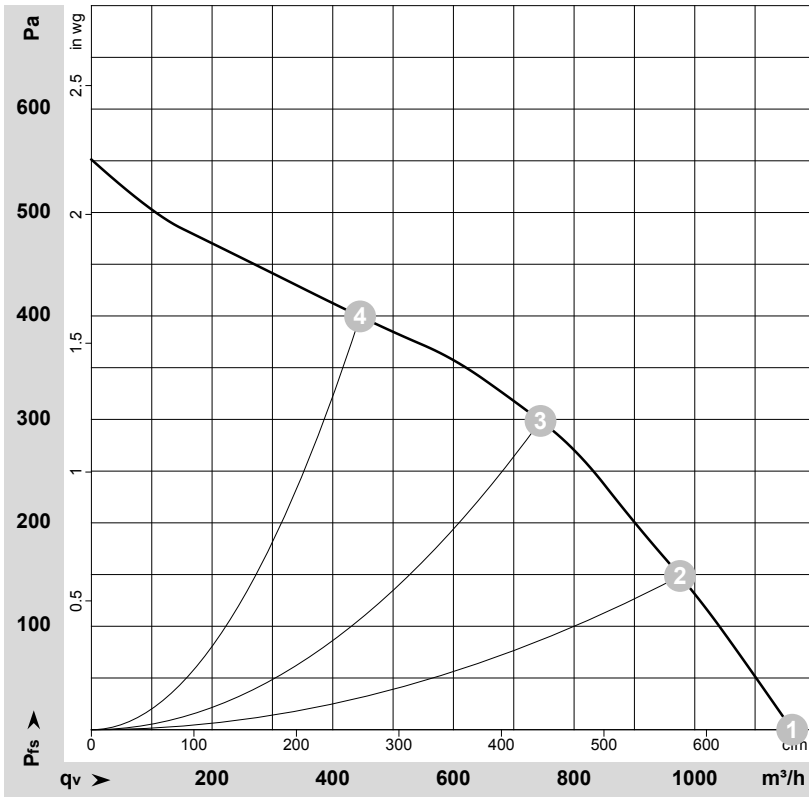
## Connection screen



Change direction of rotation by reversing two phases

|     |                          |
|-----|--------------------------|
|     | Three-phase motor        |
| Y   | Star connection          |
| 1   | Anti-clockwise 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 grey                  |

## Charts: Air flow 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-140430-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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.

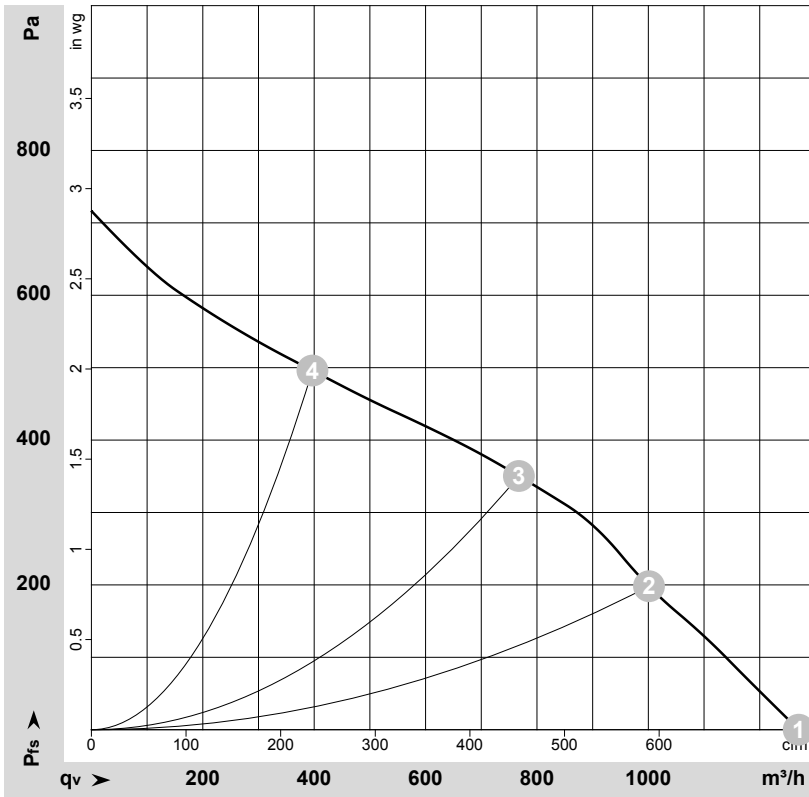
## Measured values

|   | Conn. | U   | f  | n                 | P <sub>e</sub> | I    | LpA <sub>in</sub> | LwA <sub>in</sub> | q <sub>v</sub>    | P <sub>fs</sub> | q <sub>v</sub> | P <sub>fs</sub> |
|---|-------|-----|----|-------------------|----------------|------|-------------------|-------------------|-------------------|-----------------|----------------|-----------------|
|   |       | V   | Hz | min <sup>-1</sup> | W              | A    | dB(A)             | dB(A)             | m <sup>3</sup> /h | Pa              | cfm            | in. wg          |
| 1 | Y     | 400 | 50 | 2645              | 122            | 0.24 | 66                | 74                | 1160              | 0               | 685            | 0.00            |
| 2 | Y     | 400 | 50 | 2560              | 142            | 0.26 | 62                | 69                | 975               | 150             | 575            | 0.60            |
| 3 | Y     | 400 | 50 | 2530              | 150            | 0.27 | 57                | 65                | 745               | 300             | 440            | 1.20            |
| 4 | Y     | 400 | 50 | 2595              | 130            | 0.24 | 61                | 69                | 445               | 400             | 260            | 1.61            |

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side  
 q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase



## Charts: Air flow 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-140433-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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

|   | Conn. | 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    | m <sup>3</sup> /h | Pa              | cfm            | in. wg          |
| 1 | Y     | 400 | 60 | 2880              | 171            | 0.28 | 1270              | 0               | 745            | 0.00            |
| 2 | Y     | 400 | 60 | 2700              | 201            | 0.32 | 1000              | 200             | 590            | 0.80            |
| 3 | Y     | 400 | 60 | 2700              | 200            | 0.33 | 770               | 350             | 450            | 1.41            |
| 4 | Y     | 400 | 60 | 2845              | 174            | 0.28 | 395               | 500             | 235            | 2.01            |

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power input · I = Current draw · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase

