

D3G180-AB62-01

## EC centrifugal fan

forward curved, dual inlet

with housing (flange)

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## Nominal data

|                          |                   |            |
|--------------------------|-------------------|------------|
| Type                     | D3G180-AB62-01    |            |
| Motor                    | M3G074-CF         |            |
| Phase                    |                   | 1~         |
| Nominal voltage          | VAC               | 230        |
| Nominal voltage range    | VAC               | 200 .. 277 |
| Frequency                | Hz                | 50         |
| Type of data definition  |                   | ml         |
| Speed                    | min <sup>-1</sup> | 1130       |
| Power input              | W                 | 170        |
| Current draw             | A                 | 1.25       |
| Min. ambient temperature | °C                | - 25       |
| Max. ambient temperature | °C                | + 60       |

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

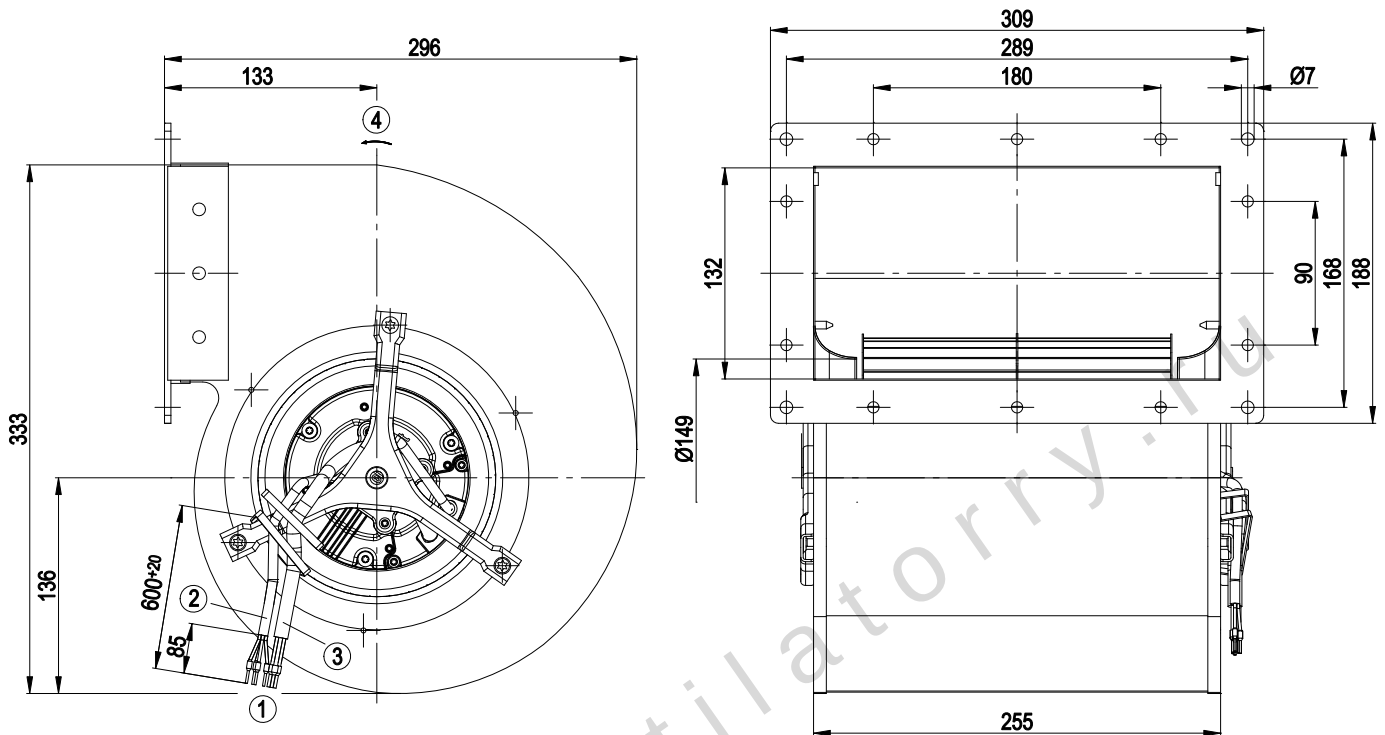
|                                                                    |                                                                                                                                                                                                    |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mass                                                               | 7.0 kg                                                                                                                                                                                             |
| Size                                                               | 180 mm                                                                                                                                                                                             |
| Surface of rotor                                                   | Thick layer passivated                                                                                                                                                                             |
| Material of electronics housing                                    | Die-cast aluminum                                                                                                                                                                                  |
| Material of impeller                                               | Sheet steel, sendzimir galvanized                                                                                                                                                                  |
| Housing material                                                   | Sheet steel, sendzimir galvanized                                                                                                                                                                  |
| Motor suspension                                                   | Motor mounted with anti-vibration on both sides                                                                                                                                                    |
| Direction of rotation                                              | Clockwise, seen on rotor                                                                                                                                                                           |
| Type of protection                                                 | IP 44                                                                                                                                                                                              |
| Insulation class                                                   | "B"                                                                                                                                                                                                |
| Humidity class                                                     | F3-1                                                                                                                                                                                               |
| Max. permissible ambient motor temp. (transp./ storage)            | +80 °C                                                                                                                                                                                             |
| Min. permissible ambient motor temp. (transp./storage)             | -40 °C                                                                                                                                                                                             |
| Mounting position                                                  | Shaft horizontal                                                                                                                                                                                   |
| Condensate discharge holes                                         | None                                                                                                                                                                                               |
| Operation mode                                                     | S1                                                                                                                                                                                                 |
| Motor bearing                                                      | Ball bearing                                                                                                                                                                                       |
| Technical features                                                 | <ul style="list-style-type: none"><li>- Control input 0-10 VDC / PWM</li><li>- Output 10 VDC max. 1.1 mA</li><li>- Speed output</li><li>- Over-temperature protected electronics / motor</li></ul> |
| EMC interference immunity                                          | Acc. to EN 61000-6-1                                                                                                                                                                               |
| EMC harmonics                                                      | Acc. to EN 61000-3-2/3                                                                                                                                                                             |
| EMC interference emission                                          | Acc. to EN 61000-6-3                                                                                                                                                                               |
| Touch current acc. IEC 60990 (measuring network Fig. 4, TN system) | < 3.5 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 60950-1; EN 60335-1; EN 61800-5-1                                                                                                                                                               |

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## Product drawing



|   |                                                |
|---|------------------------------------------------|
| 1 | Core-end sleeves                               |
| 2 | Connection line 4 x AWG22                      |
| 3 | Connection line 3 x AWG18                      |
| 4 | Direction of rotation clockwise, seen on rotor |

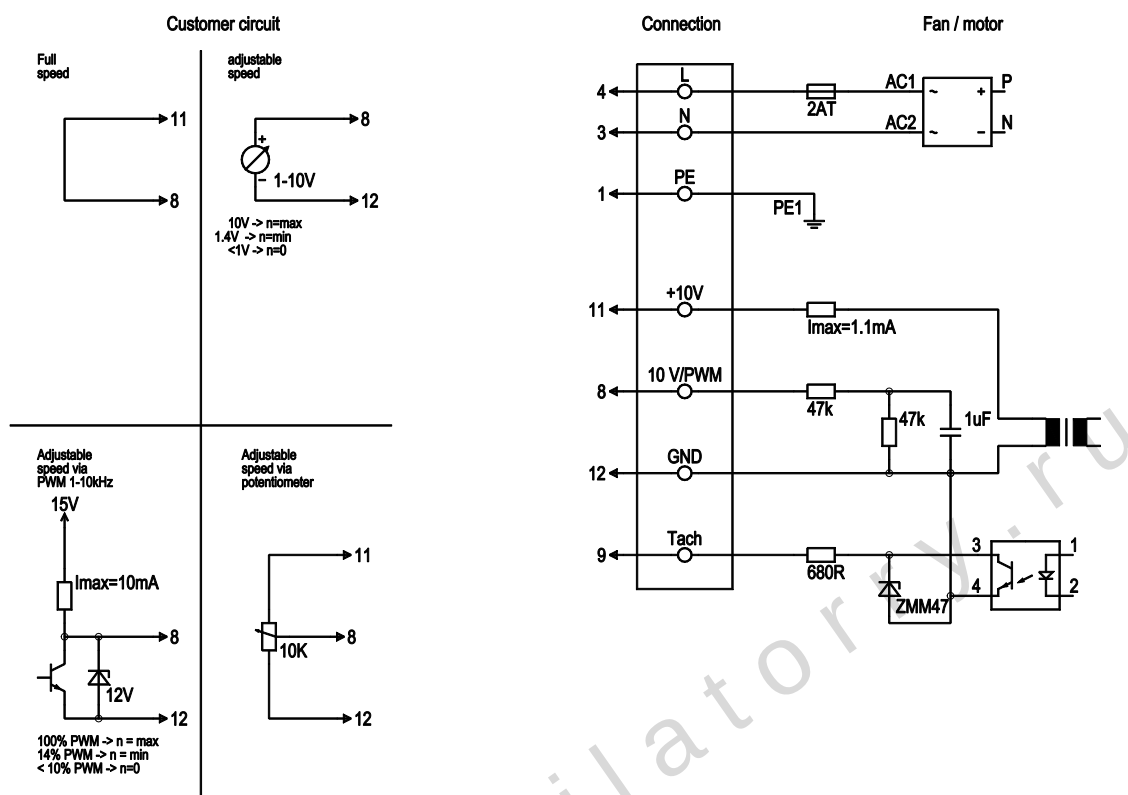
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## Connection screen



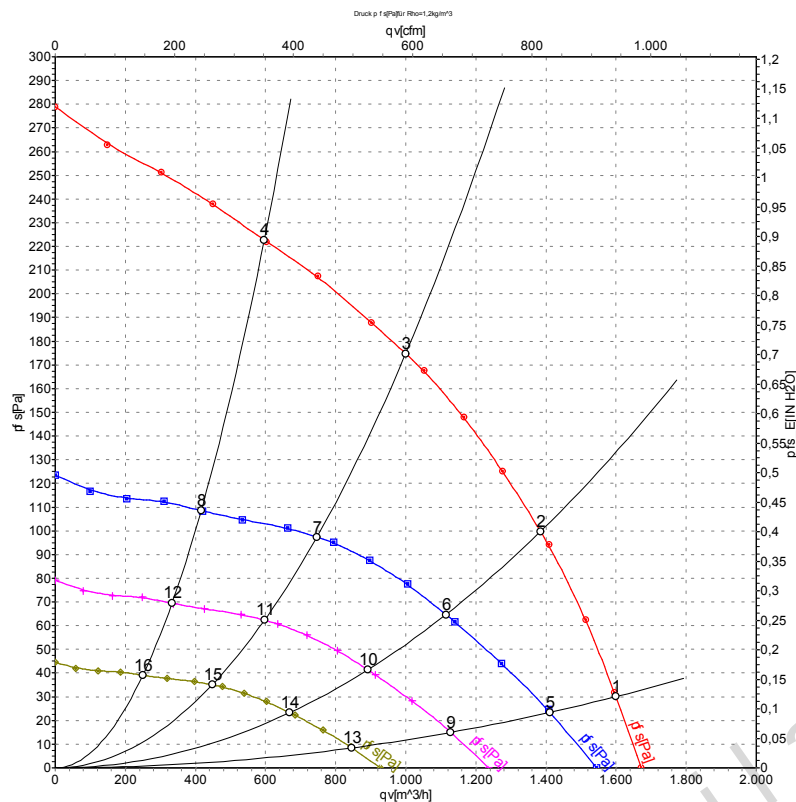
| Line | No. | Signal           | Colour       | Function / assignment                                                      |
|------|-----|------------------|--------------|----------------------------------------------------------------------------|
|      | 4   | L                | black        | Power supply 230 VAC, 50-60 Hz, see type plate for voltage range           |
|      | 3   | N                | blue         | Neutral conductor                                                          |
|      | 1   | PE               | green/yellow | Protective earth                                                           |
|      | 8   | 0-10 V PWM       | yellow       | Control input 0 - 10 V or PWM, electrically isolated                       |
|      | 9   | Tach             | white        | Tach output: open collector, 1 pulse per revolution, electrically isolated |
|      | 11  | 10V / max 1.1 mA | red          | Voltage output 10 V / max. 1.1 mA, electrically isolated                   |
|      | 12  | GND              | blue         | GND - Connection for control interface                                     |

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## Charts: Air flow 50 Hz



Measurement: LU-109566

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>ed</sub> | I    | qv   | P <sub>fs</sub> |
|----|-----|----|-------------------|-----------------|------|------|-----------------|
|    | V   | Hz | min <sup>-1</sup> | W               | A    | m³/h | Pa              |
| 1  | 230 | 50 | 1130              | 170             | 1.25 | 1600 | 30              |
| 2  | 230 | 50 | 1245              | 160             | 1.19 | 1385 | 100             |
| 3  | 230 | 50 | 1340              | 123             | 0.92 | 1000 | 175             |
| 4  | 230 | 50 | 1435              | 86              | 0.65 | 595  | 225             |
| 5  | 230 | 50 | 1000              | 117             | 0.87 | 1410 | 24              |
| 6  | 230 | 50 | 1000              | 83              | 0.62 | 1115 | 65              |
| 7  | 230 | 50 | 1000              | 51              | 0.38 | 745  | 97              |
| 8  | 230 | 50 | 1000              | 29              | 0.22 | 415  | 108             |
| 9  | 230 | 50 | 800               | 60              | 0.44 | 1130 | 16              |
| 10 | 230 | 50 | 800               | 43              | 0.32 | 890  | 41              |
| 11 | 230 | 50 | 800               | 26              | 0.20 | 595  | 62              |
| 12 | 230 | 50 | 800               | 15              | 0.11 | 335  | 69              |
| 13 | 230 | 50 | 600               | 25              | 0.19 | 845  | 9               |
| 14 | 230 | 50 | 600               | 18              | 0.13 | 670  | 23              |
| 15 | 230 | 50 | 600               | 11              | 0.08 | 450  | 35              |
| 16 | 230 | 50 | 600               | 6.3             | 0.05 | 250  | 39              |

U = Supply voltage · f = Frequency · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase