**G1G146-BA07-52**

# EC centrifugal fan

forward curved, single inlet

with housing (flange)

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## Nominal data

| | | |
|---|---|---|
| **Type** | **G1G146-BA07-52** | |
| **Motor** | **M1G074-BF** | |
| Nominal voltage | VDC | 24 |
| Nominal voltage range | VDC | 16 .. 28 |
| Type of data definition | | fa |
| Speed | min-1 | 2200 |
| Power input | W | 100 |
| Current draw | A | 5.0 |
| 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** | 2.8 kg |
| **Size** | 146 mm |
| **Material of impeller** | Sheet steel, galvanised |
| **Housing material** | Die-cast aluminium |
| **Direction of rotation** | Clockwise, seen on rotor |
| **Type of protection** | IP 42 |
| **Insulation class** | "B" |
| **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 |
| **Technical features** | - Tach output<br>- Motor current limit<br>- Soft start<br>- Control input 0-10 VDC / PWM |
| **EMC interference immunity** | Acc. to EN 61000-6-2 (industrial environment) |
| **EMC interference emission** | Acc. to EN 55022 (Class B) |
| **Motor protection** | Reverse polarity and locked-rotor protection |
| **Cable exit** | Axial |
| **Product conforming to standard** | EN 60950-1 |
| **Approval** | UL 1004-1; GOST; CSA C22.2 Nr.77 |



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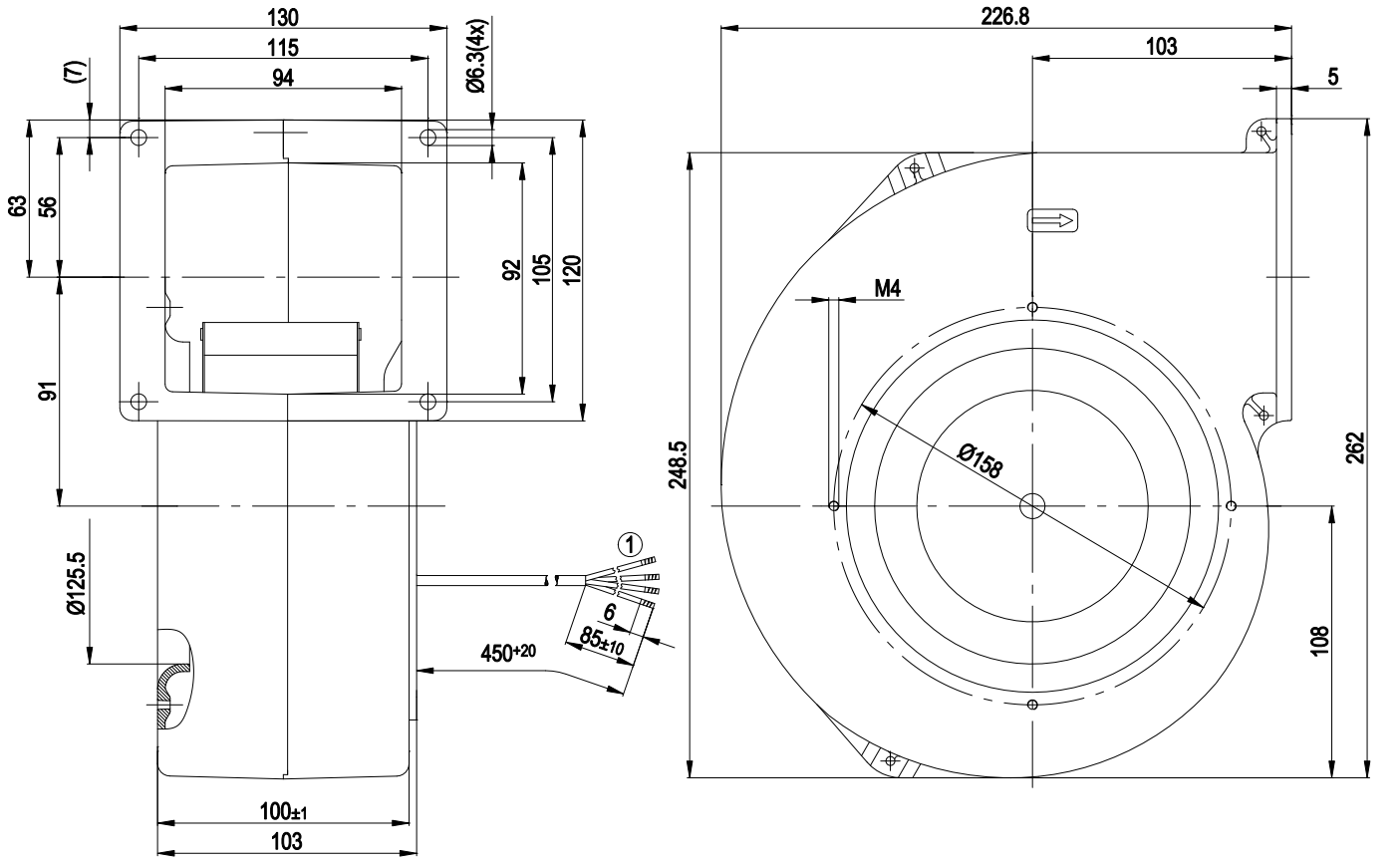
## Product drawing




| | |
|---|---|
| 1 | Connection line AWG20; 4 x brass lead tips crimped |



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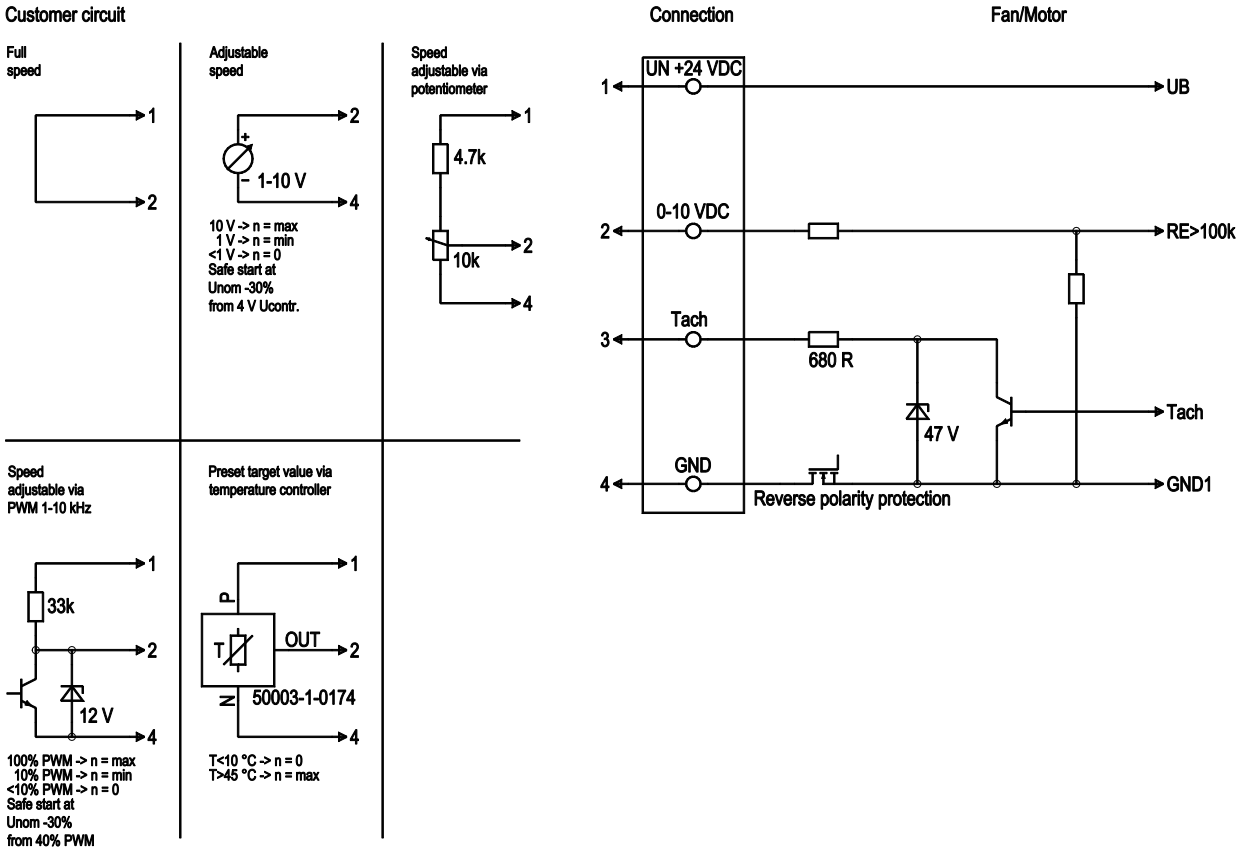
## Connection screen




| Line | No. | Signal | Colour | Function / assignment |
|---|---|---|---|---|
| 1 | 1 | Un +24 VDC | red | Power supply 24 VDC, residual ripple 3.5 % |
| 1 | 2 | 0-10 VDC | yellow | Control input Re > 100 K |
| 1 | 3 | Tach | white | Speed monitoring output, 3 pulses per revolution, Isink max = 10 mA |
| 1 | 4 | GND | blue | Reference mass |



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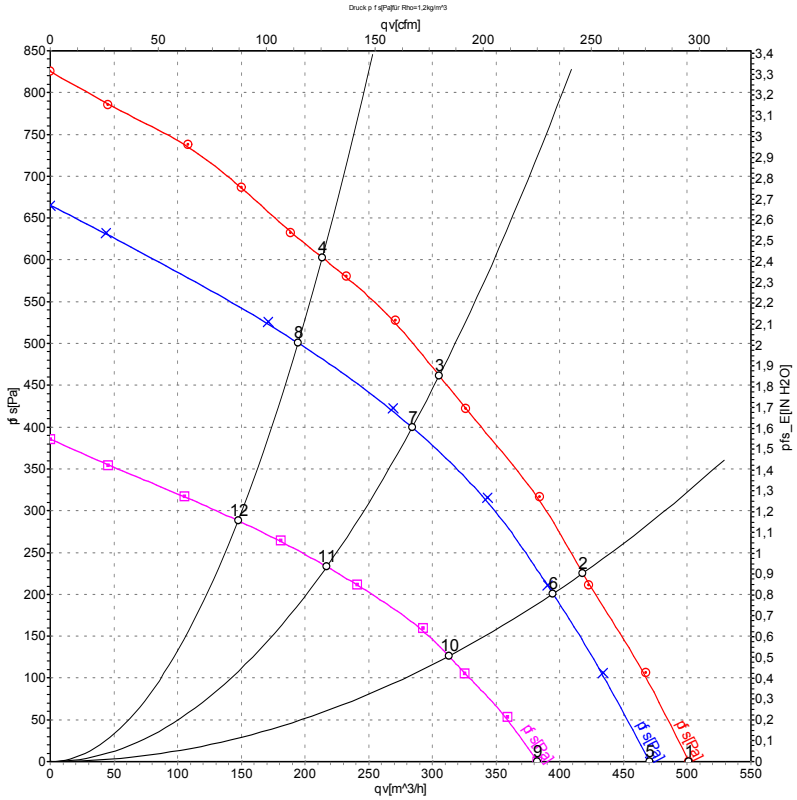
## Charts: Air flow




Measurement: LU-49675
Measurement: LU-49674
Measurement: LU-49676

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: 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

| | U | n | $P_{ed}$ | I | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|
| | V | $min^{-1}$ | W | A | $m^3/h$ | Pa |
| 1 | 28 | 2350 | 124 | 5.54 | 500 | 0 |
| 2 | 28 | 2585 | 118 | 5.03 | 420 | 224 |
| 3 | 28 | 2955 | 110 | 4.48 | 305 | 461 |
| 4 | 28 | 3275 | 101 | 4.00 | 215 | 603 |
| 5 | 24 | 2200 | 100 | 5.00 | 470 | 0 |
| 6 | 24 | 2425 | 98 | 4.67 | 395 | 200 |
| 7 | 24 | 2745 | 88 | 4.09 | 285 | 400 |
| 8 | 24 | 3000 | 76 | 3.49 | 195 | 500 |
| 9 | 16 | 1810 | 56 | 3.90 | 380 | 0 |
| 10 | 16 | 1950 | 50 | 3.45 | 315 | 126 |
| 11 | 16 | 2140 | 42 | 2.90 | 215 | 233 |
| 12 | 16 | 2295 | 36 | 2.55 | 150 | 288 |

U = Supply voltage · n = Speed · $P_{ed}$ = Power input · I = Current draw · qv = Air flow · $p_{fs}$ = Pressure increase



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