

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  |                      | rfa      |
| Speed                    | [min <sup>-1</sup> ] | 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 · rfa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations

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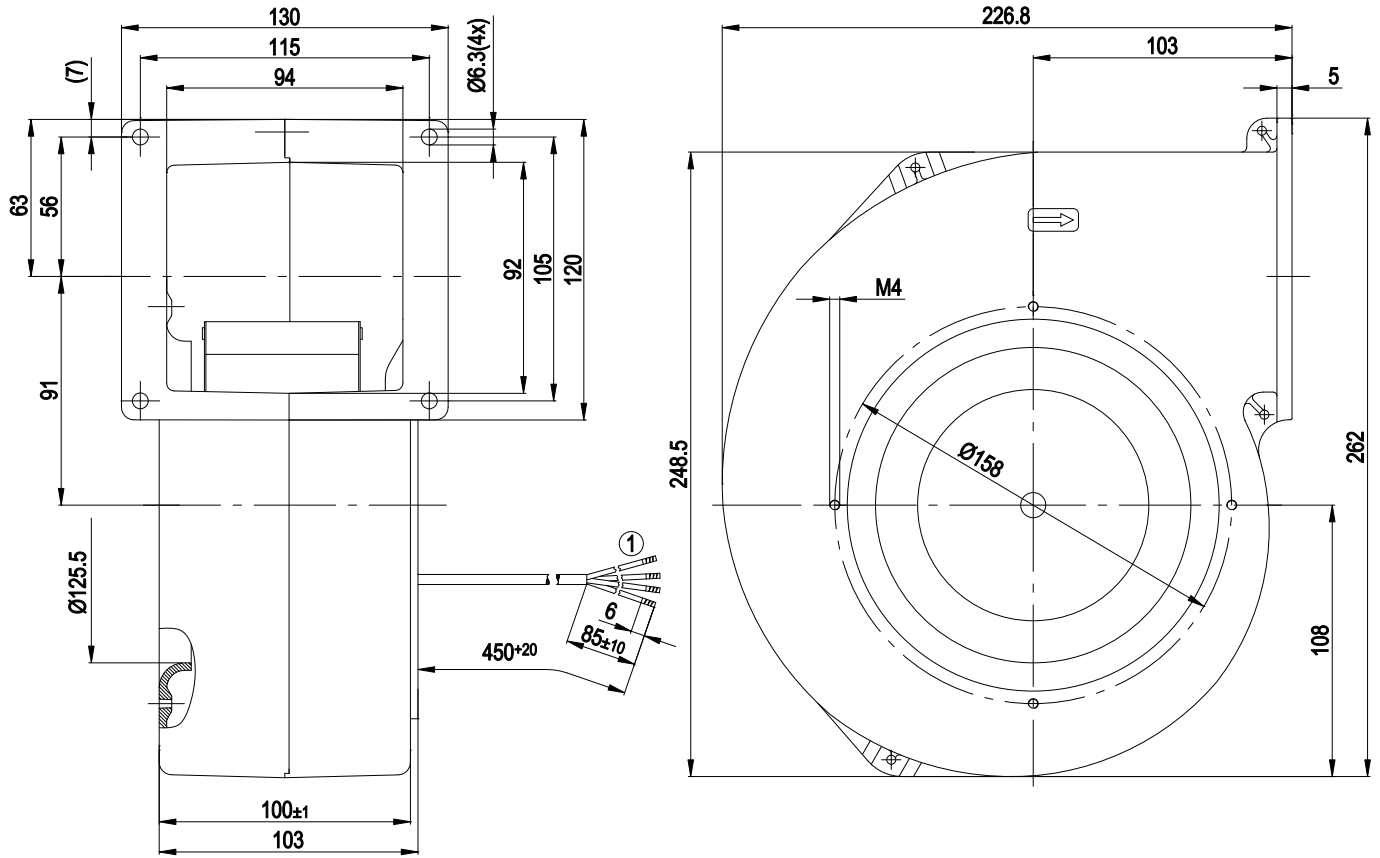
## Technical features

|                                                         |                                                                                                                                                         |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                                    | 146 mm                                                                                                                                                  |
| Operation mode                                          | S1                                                                                                                                                      |
| Direction of rotation                                   | Clockwise, seen on rotor                                                                                                                                |
| Mounting position                                       | Any                                                                                                                                                     |
| EMC interference emission                               | Acc. to EN 55022 (Class B)                                                                                                                              |
| EMC interference immunity                               | Acc. to EN 61000-6-2 (industrial environment)                                                                                                           |
| Humidity class                                          | F0                                                                                                                                                      |
| Insulation class                                        | "B"                                                                                                                                                     |
| Cable exit                                              | Axial                                                                                                                                                   |
| Condensate discharge holes                              | None                                                                                                                                                    |
| Motor bearing                                           | Ball bearing                                                                                                                                            |
| Mass                                                    | 2.8 kg                                                                                                                                                  |
| Housing material                                        | Die-cast aluminium                                                                                                                                      |
| Material of impeller                                    | Sheet steel, hot-galvanised                                                                                                                             |
| Motor protection                                        | Reverse polarity and locked-rotor protection                                                                                                            |
| Product conforming to standard                          | EN 60950-1                                                                                                                                              |
| Type of protection                                      | IP 42                                                                                                                                                   |
| Technical features                                      | <ul style="list-style-type: none"><li>- Tach output</li><li>- Motor current limit</li><li>- Soft start</li><li>- Control input 0-10 VDC / PWM</li></ul> |
| Max. permissible ambient motor temp. (transp./ storage) | +80 °C                                                                                                                                                  |
| Min. permissible ambient motor temp. (transp./storage)  | -40 °C                                                                                                                                                  |
| Approval                                                | CSA C22.2 Nr.77; UL 1004-1                                                                                                                              |

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## Product drawing

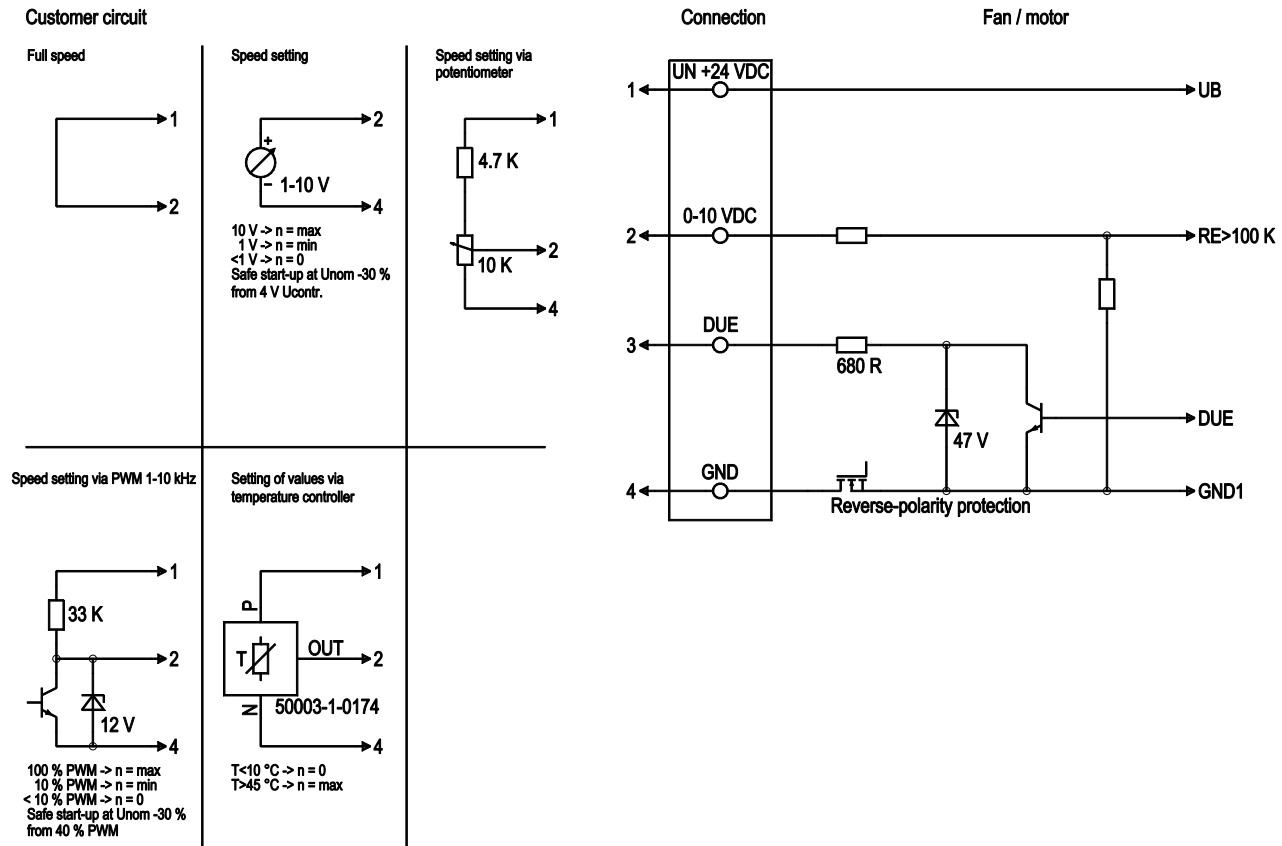


|   |                                                    |
|---|----------------------------------------------------|
| 1 | Connection line AWG20; 4 x brass lead tips crimped |
|---|----------------------------------------------------|

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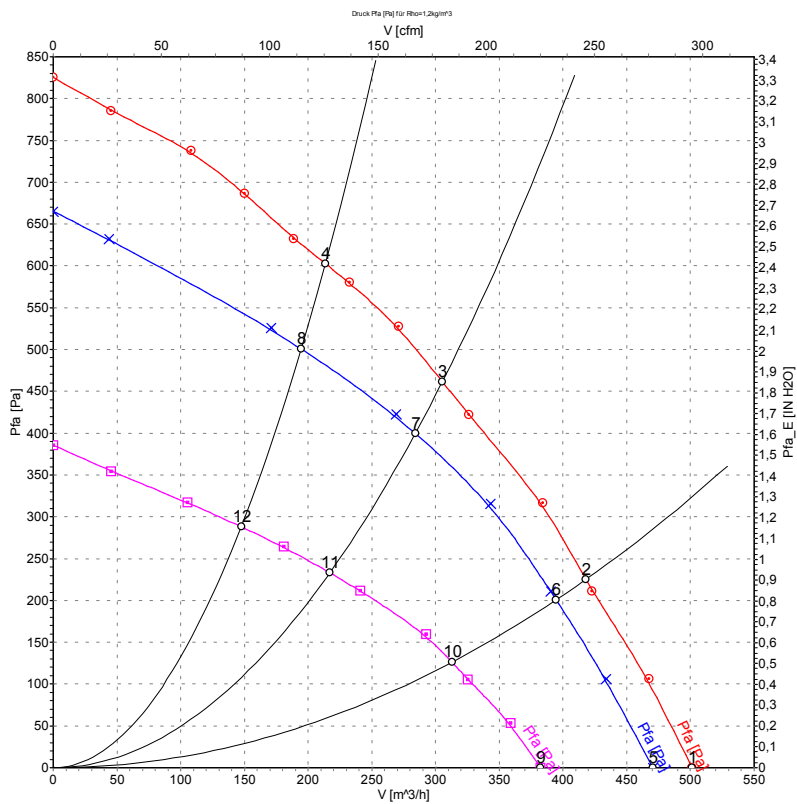
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## Connection screen



| 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   | DUE        | white  | Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA |
| 1    | 4   | GND        | blue   | Reference mass                                                    |

## Charts: Air flow



## Measured values

|    | U   | n                    | P <sub>1</sub> | I    | $\hat{V}$ | p <sub>fa</sub> |
|----|-----|----------------------|----------------|------|-----------|-----------------|
|    | [V] | [min <sup>-1</sup> ] | [W]            | [A]  | [m³/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             |