

G1G120-AB71-02

## EC centrifugal fan

forward curved, single inlet

with housing (flange)

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## Nominal data

|                          |                      |          |
|--------------------------|----------------------|----------|
| Type                     | G1G120-AB71-02       |          |
| Motor                    | M1G055-BD            |          |
| Nominal voltage          | [VDC]                | 48       |
| Nominal voltage range    | [VDC]                | 36 .. 57 |
| Type of data definition  |                      | rfa      |
| Speed                    | [min <sup>-1</sup> ] | 2200     |
| Power input              | [W]                  | 40       |
| Current draw             | [A]                  | 0.95     |
| 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

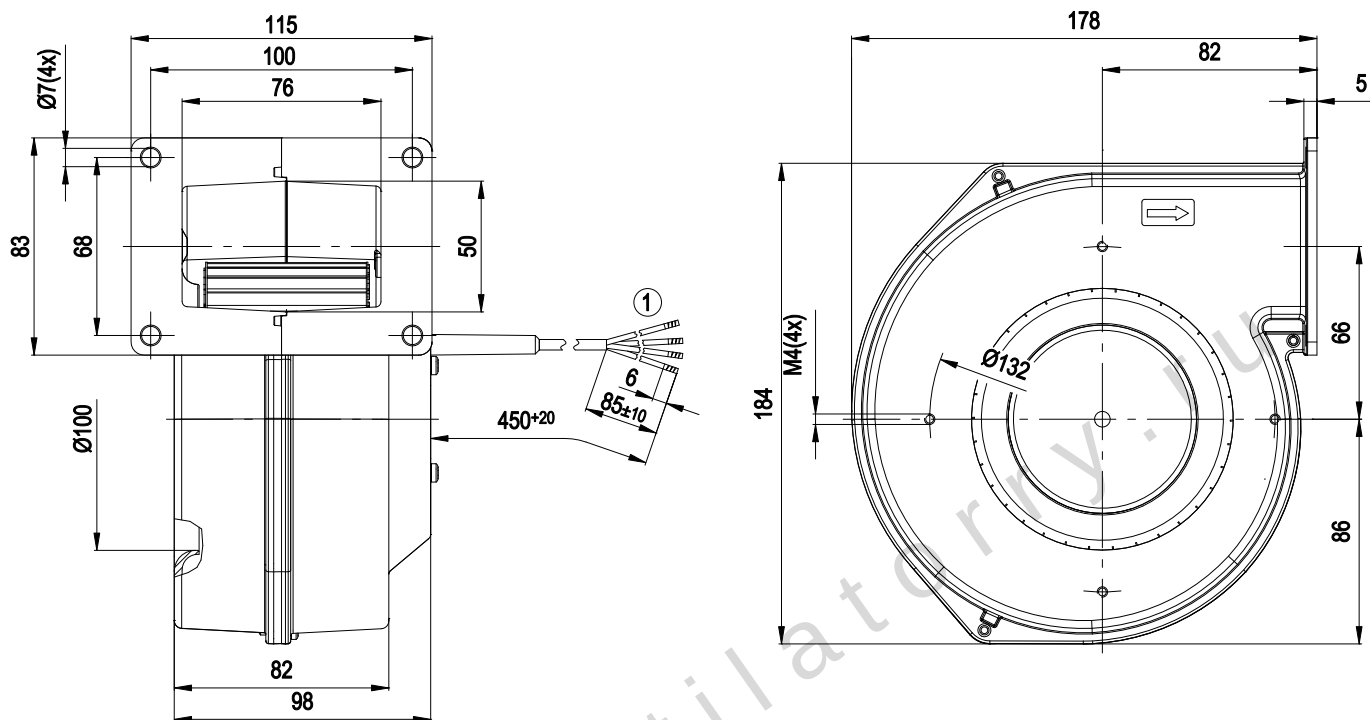
|                                                         |                                                                                                                                                         |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                                    | 120 mm                                                                                                                                                  |
| Operation mode                                          | S1                                                                                                                                                      |
| Direction of rotation                                   | Clockwise, seen on rotor                                                                                                                                |
| Mounting position                                       | Any                                                                                                                                                     |
| EMC interference emission                               | Acc. to EN 61000-6-3 (household environment)                                                                                                            |
| EMC interference immunity                               | Acc. to EN 61000-6-2 (industrial environment)                                                                                                           |
| Insulation class                                        | "B"                                                                                                                                                     |
| Cable exit                                              | Axial                                                                                                                                                   |
| Condensate discharge holes                              | None                                                                                                                                                    |
| Bearing motor                                           | Ball bearing                                                                                                                                            |
| Mass                                                    | 1.57 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                                                                                                                                              |
| Surface of rotor                                        | Thick layer passivated                                                                                                                                  |
| Type of protection                                      | IP 22                                                                                                                                                   |
| Technical features                                      | <ul style="list-style-type: none"><li>- Control input 0-10 VDC / PWM</li><li>- Tach output</li><li>- Motor current limit</li><li>- Soft start</li></ul> |
| Max. permissible ambient motor temp. (transp./ storage) | + 80 °C                                                                                                                                                 |
| Min. permissible ambient motor temp. (transp./storage)  | - 40 °C                                                                                                                                                 |
| Approval                                                | CCC                                                                                                                                                     |

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## Product drawing



1 Connection line AWG20, 4x brass lead tips crimped

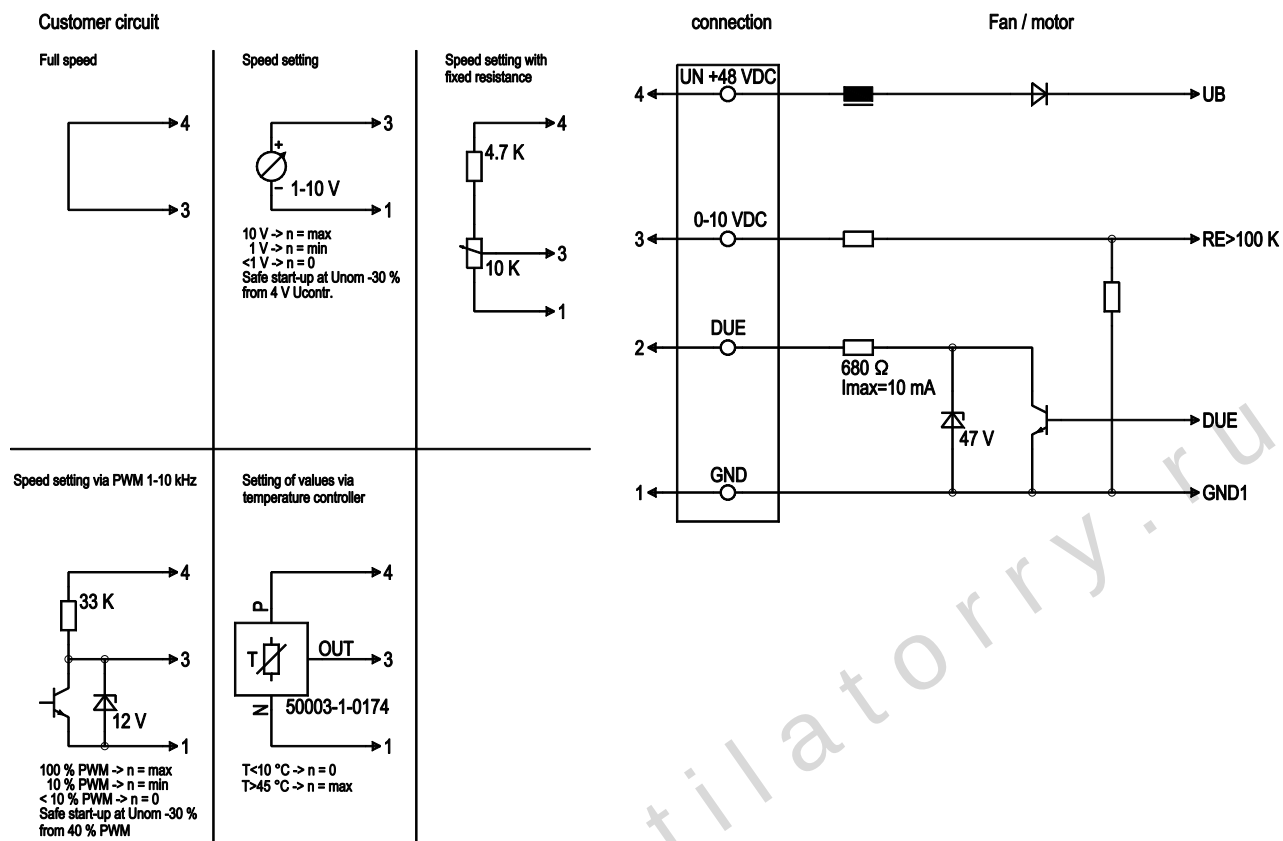
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## Connection screen



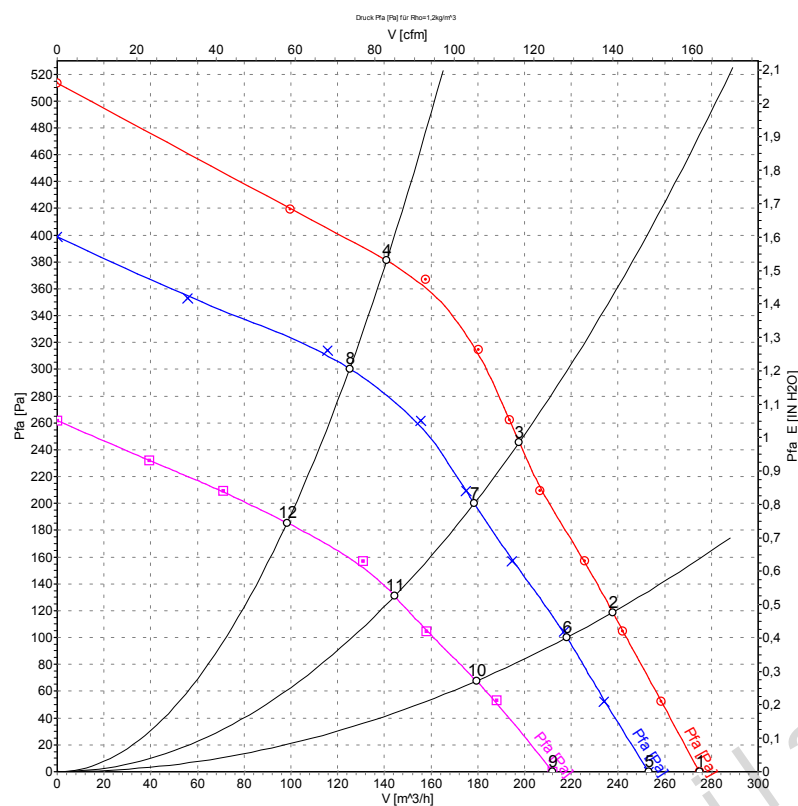
| Line | No. | Signal     | Colour | Function / assignment                                             |
|------|-----|------------|--------|-------------------------------------------------------------------|
| 1    | 1   | GND        | blue   | Reference mass                                                    |
| 1    | 2   | DUE        | white  | Speed monitoring output, 2 pulses per rotation, Isink max = 10 mA |
| 1    | 3   | 0-10 VDC   | yellow | Control input Re > 100 K                                          |
| 1    | 4   | Un +48 VDC | red    | Power supply 48 VDC, residual ripple 3.5 %                        |

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## Charts: Air flow



Measurement: LU-50544  
Measurement: LU-50545  
Measurement: LU-50542

## Measured values

|    | U   | n                    | P <sub>1</sub> | I    | $\dot{V}$           | p <sub>fa</sub> |
|----|-----|----------------------|----------------|------|---------------------|-----------------|
|    | [V] | [min <sup>-1</sup> ] | [W]            | [A]  | [m <sup>3</sup> /h] | [Pa]            |
| 1  | 57  | 2420                 | 51             | 1.05 | 275                 | 0               |
| 2  | 57  | 2615                 | 48             | 0.95 | 240                 | 119             |
| 3  | 57  | 2855                 | 45             | 0.87 | 200                 | 246             |
| 4  | 57  | 3155                 | 38             | 0.74 | 140                 | 382             |
| 5  | 48  | 2200                 | 40             | 0.95 | 255                 | 0               |
| 6  | 48  | 2410                 | 37             | 0.85 | 220                 | 100             |
| 7  | 48  | 2580                 | 33             | 0.75 | 180                 | 200             |
| 8  | 48  | 2815                 | 27             | 0.62 | 125                 | 300             |
| 9  | 36  | 1885                 | 24             | 0.74 | 210                 | 0               |
| 10 | 36  | 1985                 | 21             | 0.66 | 180                 | 68              |
| 11 | 36  | 2100                 | 19             | 0.58 | 145                 | 131             |
| 12 | 36  | 2275                 | 15             | 0.48 | 100                 | 186             |