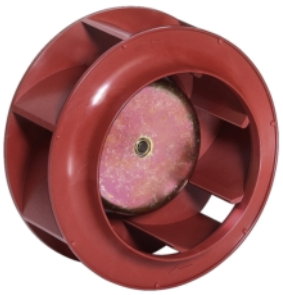
**R1G133-AA17-02**

# EC centrifugal fan

backward curved, single inlet



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## Nominal data

| | | |
|---|---|---|
| **Type** | **R1G133-AA17-02** | |
| **Motor** | **M1G055-BD** | |
| Nominal voltage | [VDC] | 24 |
| Nominal voltage range | [VDC] | 16 .. 28 |
| Type of data definition | | rfa |
| Speed | [min$^{-1}$] | 3900 |
| Power input | [W] | 28 |
| Current draw | [A] | 1.3 |
| 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** | 133 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** | Variable |
| **Condensate discharge holes** | Rotor-side |
| **Bearing motor** | Ball bearing |
| **Mass** | 0.65 kg |
| **Material of electronics housing** | Die-cast aluminium |
| **Material of impeller** | Plastic PA66, fibreglass-reinforced |
| **Motor protection** | Reverse polarity and locked-rotor protection |
| **Surface of rotor** | Thick layer passivated |
| **Number of blades** | 7 |
| **Type of protection** | IP 20 |
| **Technical features** | - Control input 0-10 VDC / PWM<br>- Tach output<br>- Motor current limit<br>- Soft start |
| **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 |



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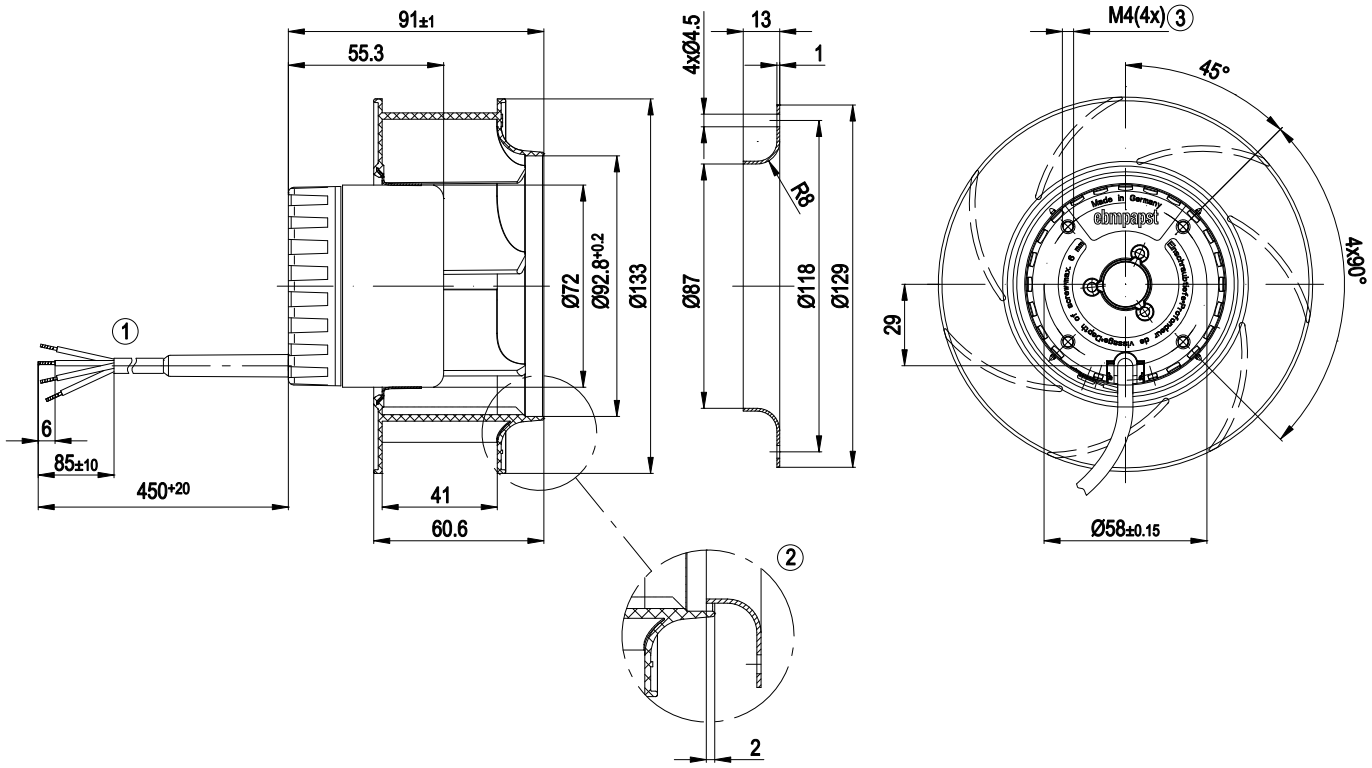
## Product drawing




| | |
|---|---|
| 1 | Connection line AWG20; 4 x brass lead tips crimped |
| 2 | Accessory part: Inlet nozzle 09566-2-4013, not included in the standard scope of delivery |
| 3 | Depth of screw max. 6 mm |



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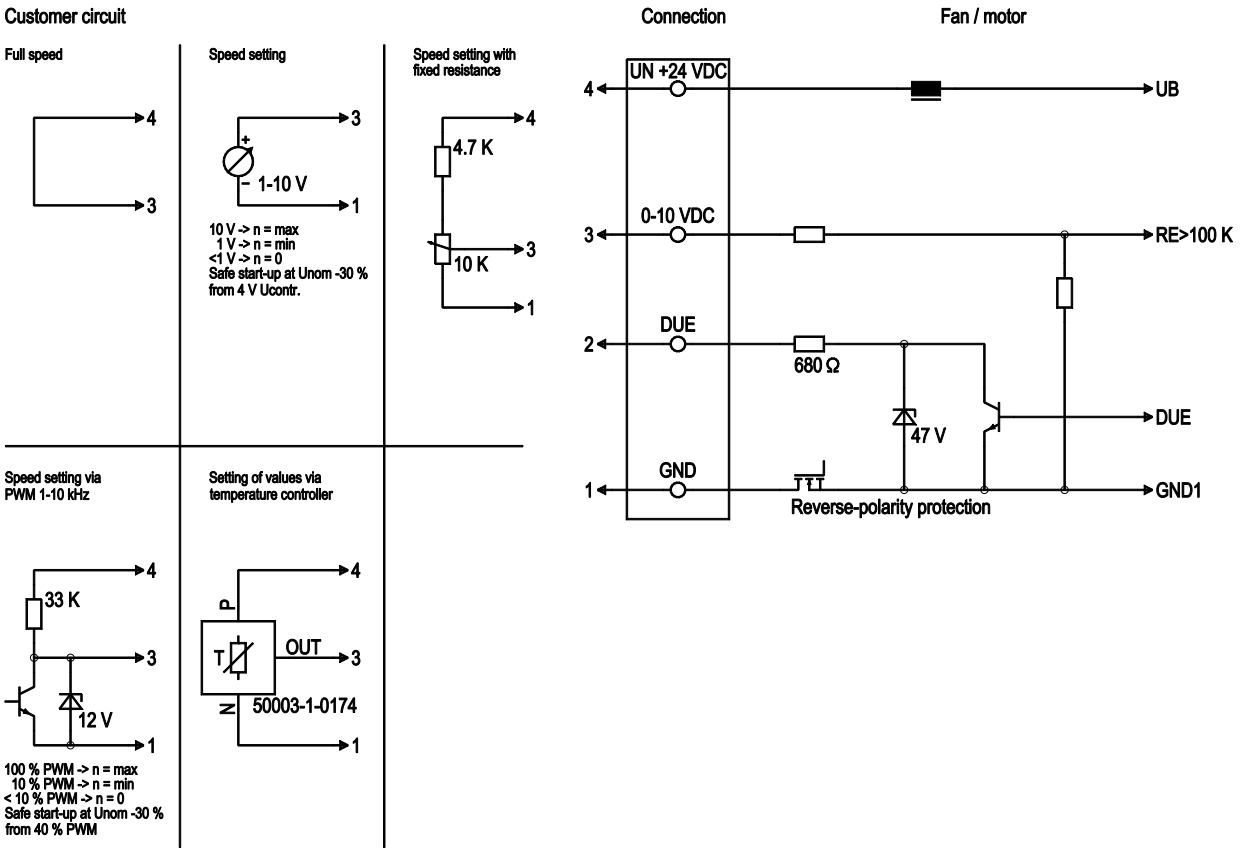
## Connection screen




| 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 +24 VDC | red | Power supply 24 VDC, residual ripple 3.5 % |



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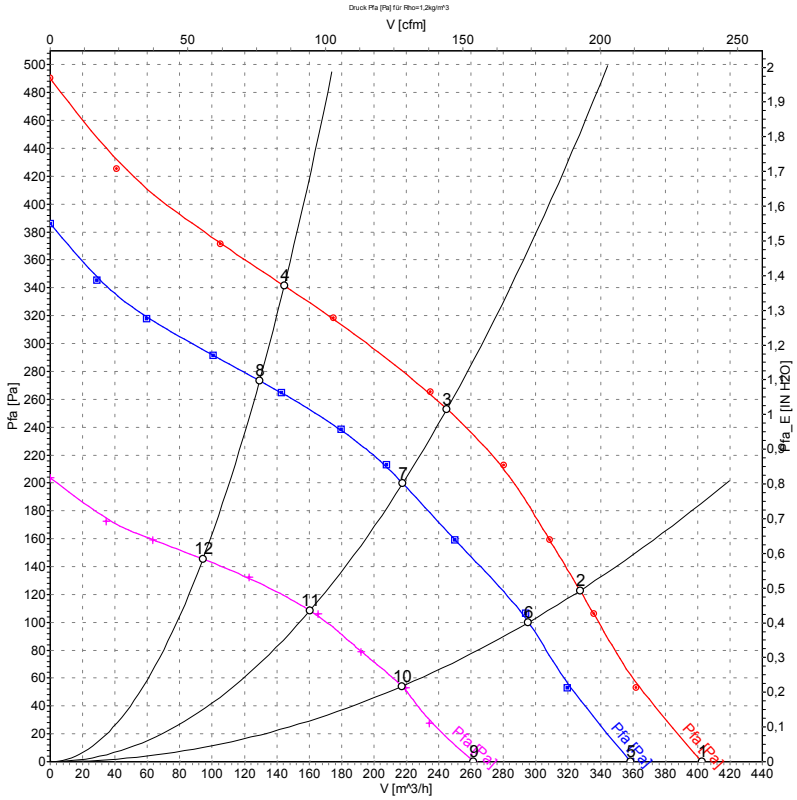
## Charts: Air flow




Measurement: LU-54690
Measurement: LU-54689
Measurement: LU-54691

## Measured values

| | U | n | $P_1$ | I | $\dot{V}$ | $p_{fa}$ |
|---|---|---|---|---|---|---|
| | [V] | [min$^{-1}$] | [W] | [A] | [m$^3$/h] | [Pa] |
| 1 | 28 | 4345 | 36 | 1.43 | 405 | 0 |
| 2 | 28 | 4170 | 40 | 1.60 | 325 | 123 |
| 3 | 28 | 4155 | 41 | 1.61 | 245 | 253 |
| 4 | 28 | 4255 | 38 | 1.51 | 145 | 342 |
| 5 | 24 | 3900 | 28 | 1.30 | 360 | 0 |
| 6 | 24 | 3725 | 30 | 1.39 | 295 | 103 |
| 7 | 24 | 3710 | 30 | 1.40 | 220 | 200 |
| 8 | 24 | 3800 | 28 | 1.32 | 130 | 274 |
| 9 | 16 | 2830 | 11 | 0.88 | 260 | 0 |
| 10 | 16 | 2750 | 13 | 0.95 | 215 | 55 |
| 11 | 16 | 2745 | 13 | 0.95 | 160 | 109 |
| 12 | 16 | 2795 | 12 | 0.91 | 95 | 145 |



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