

# EC axial fan

sickled blades (S series)

with full round nozzle

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## Nominal data

|                          |                      |          |
|--------------------------|----------------------|----------|
| Type                     | W1G200-CH01-52       |          |
| Motor                    | M1G074-BF            |          |
| Nominal voltage          | [VDC]                | 48       |
| Nominal voltage range    | [VDC]                | 36 .. 57 |
| Frequency                | [Hz]                 | -        |
| Type of data definition  |                      | rfa      |
| Speed                    | [min <sup>-1</sup> ] | 2950     |
| Power input              | [W]                  | 55       |
| Current draw             | [A]                  | 1.3      |
| Max. back pressure       | [Pa]                 | 120      |
| 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

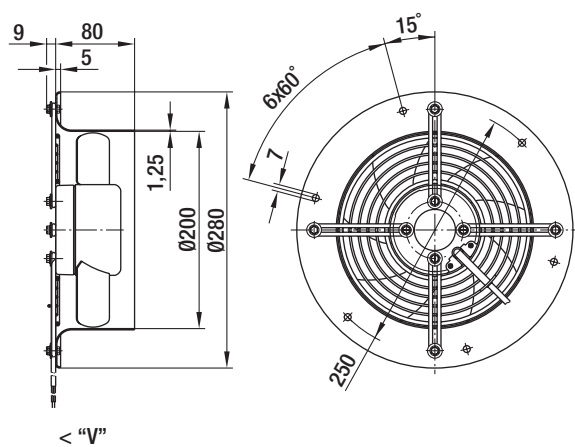
|                                                         |                                                                                                                                                              |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                                    | 200 mm                                                                                                                                                       |
| Operation mode                                          | S1                                                                                                                                                           |
| Direction of rotation                                   | Counter-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)                                                                                                                |
| Direction of air flow                                   | "V"                                                                                                                                                          |
| Insulation class                                        | "B"                                                                                                                                                          |
| Cable exit                                              | Lateral                                                                                                                                                      |
| Condensate discharge holes                              | None                                                                                                                                                         |
| Bearing motor                                           | Ball bearing                                                                                                                                                 |
| Mass                                                    | 2.35 kg                                                                                                                                                      |
| Material of electronics housing                         | Die-cast aluminium, coated in black                                                                                                                          |
| Material of blades                                      | Sheet steel, coated in black                                                                                                                                 |
| Material of guard grille                                | Steel, phosphated and coated in black plastic                                                                                                                |
| Material of wall ring                                   | Sheet steel, pre-galvanised and coated in black plastic                                                                                                      |
| Motor protection                                        | Reverse polarity and locked-rotor protection                                                                                                                 |
| Product conforming to standard                          | EN 60950-1                                                                                                                                                   |
| Surface of rotor                                        | Coated in black                                                                                                                                              |
| Number of blades                                        | 9                                                                                                                                                            |
| Type of protection                                      | IP 42                                                                                                                                                        |
| 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                                                | CSA C22.2 Nr.77; UL 1004-1                                                                                                                                   |

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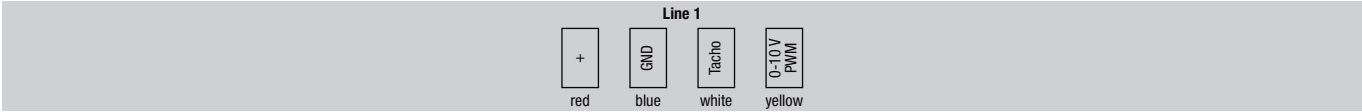
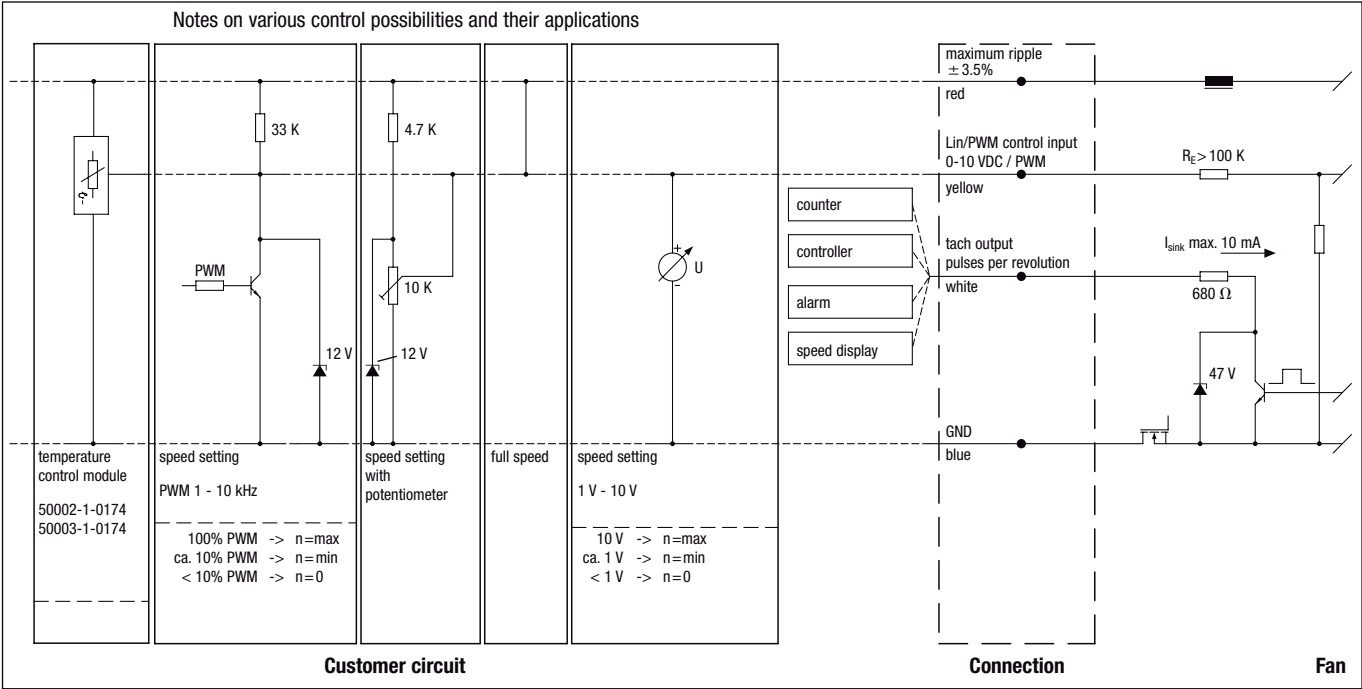
## Product drawing



EC axial fan

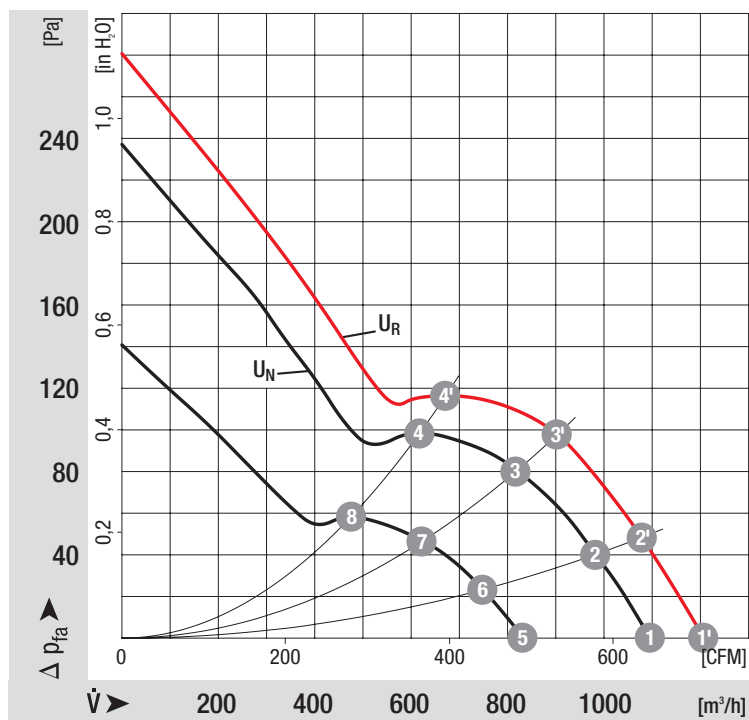
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Connection screen



| Line | Signal | Colour | Assignment / function      | Line | Signal       | Colour | Assignment / function              |
|------|--------|--------|----------------------------|------|--------------|--------|------------------------------------|
| 1    | +      | red    | maximum ripple $\pm 3.5\%$ | 1    | Tacho        | white  | Tach output: pulses per revolution |
|      | GND    | blue   | GND                        |      | 0-10 V / PWM | yellow | Control input                      |

## Charts: Air flow



## Measured values

|    | $n$                  | $P_1$ | $\eta_{TL}$ |
|----|----------------------|-------|-------------|
|    | [min <sup>-1</sup> ] | [W]   | [%]         |
| 1' | 2300                 | 73    |             |
| 2' | 2970                 | 77    | 67          |
| 3' | 3100                 | 80    | 64          |
| 4' | 2970                 | 80    | 54          |
| 1  | 2950                 | 55    |             |
| 2  | 2890                 | 58    | 67          |
| 3  | 2800                 | 61    | 64          |
| 4  | 2780                 | 63    | 54          |
| 5  | 2270                 | 27    |             |
| 6  | 2230                 | 28    | 67          |
| 7  | 2170                 | 29    | 64          |
| 8  | 2130                 | 30    | 54          |