

R1G190-AB27-02

## EC centrifugal fan

backward curved, single inlet



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## Nominal data

|                          |                   |          |
|--------------------------|-------------------|----------|
| Type                     | R1G190-AB27-02    |          |
| Motor                    | M1G055-CF         |          |
| Nominal voltage          | VDC               | 24       |
| Nominal voltage range    | VDC               | 16 .. 28 |
| Type of data definition  |                   | rfa      |
| Speed                    | min <sup>-1</sup> | 2950     |
| Power input              | W                 | 51       |
| Current draw             | A                 | 2.3      |
| Max. ambient temperature | °C                | 40       |

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

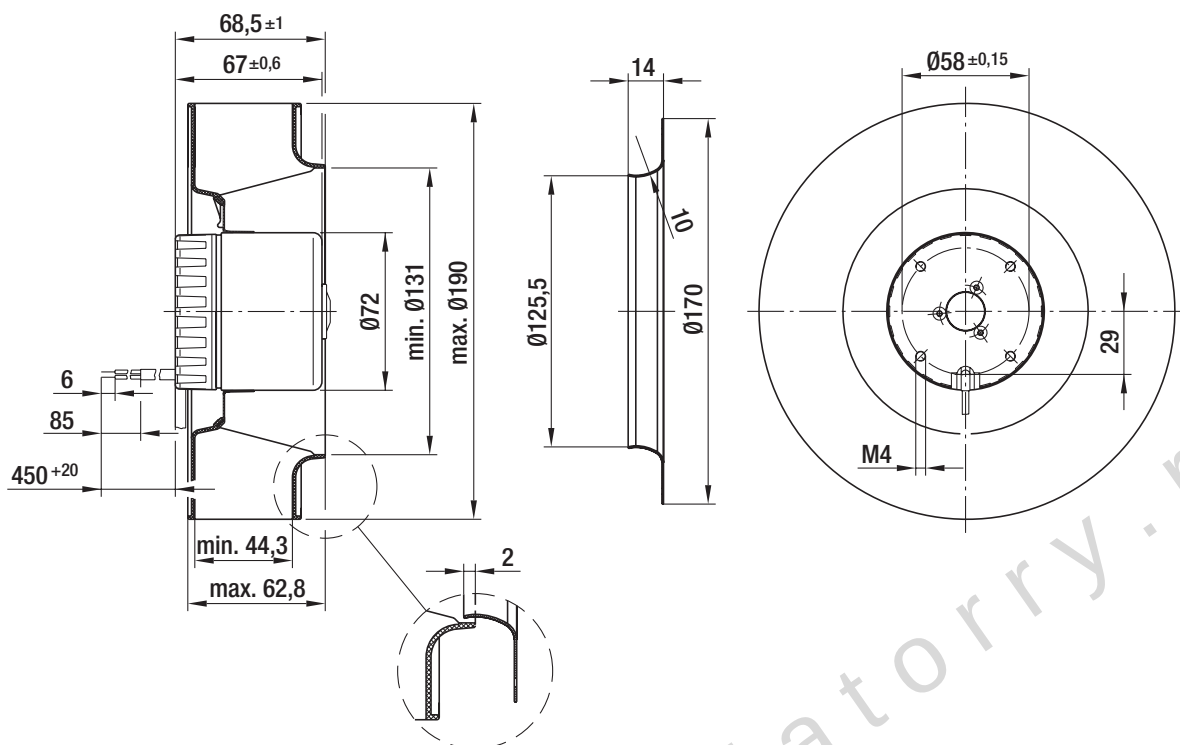
|                                 |                                                                                 |
|---------------------------------|---------------------------------------------------------------------------------|
| Size                            | 190 mm                                                                          |
| Operation mode                  | Continuous operation (S1)                                                       |
| Direction of rotation           | Clockwise, seen on rotor                                                        |
| Mounting position               | Any                                                                             |
| Humidity class                  | F0                                                                              |
| Insulation class                | "B"                                                                             |
| Cable exit                      | Variable                                                                        |
| Motor bearing                   | Ball bearing                                                                    |
| Mass                            | 1.0 kg                                                                          |
| Material of electronics housing | Rotor: Coated in black                                                          |
| Material of impeller            | PA plastic 6.6, fiberglass-reinforced                                           |
| Motor protection                | Reverse polarity and locked-rotor protection                                    |
| Number of blades                | 7                                                                               |
| Type of protection              | IP 20                                                                           |
| Protection class                | I                                                                               |
| Technical features              | Control input 0-10 VDC / PWM, tach output, polarity and locked rotor protection |

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## Product drawing

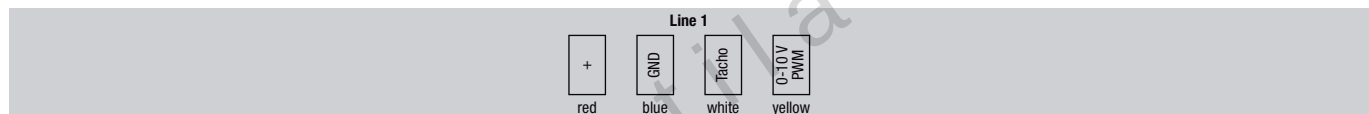
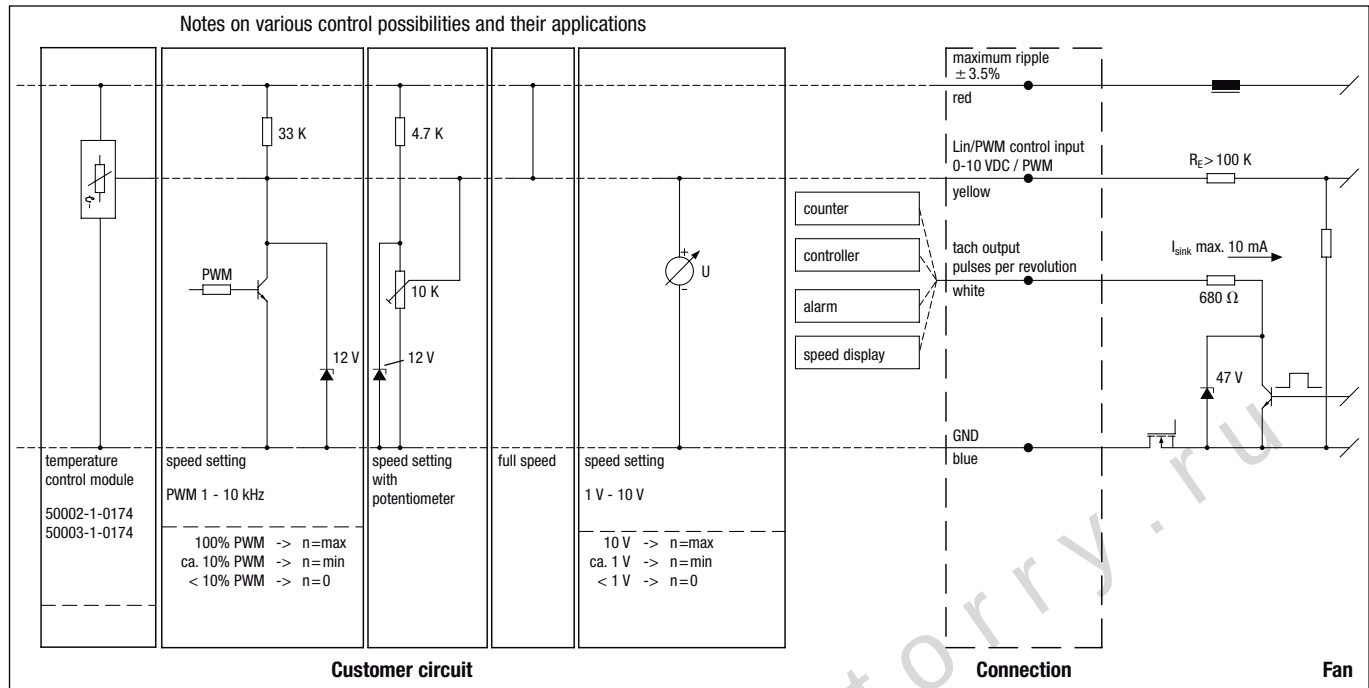


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## Connection screen



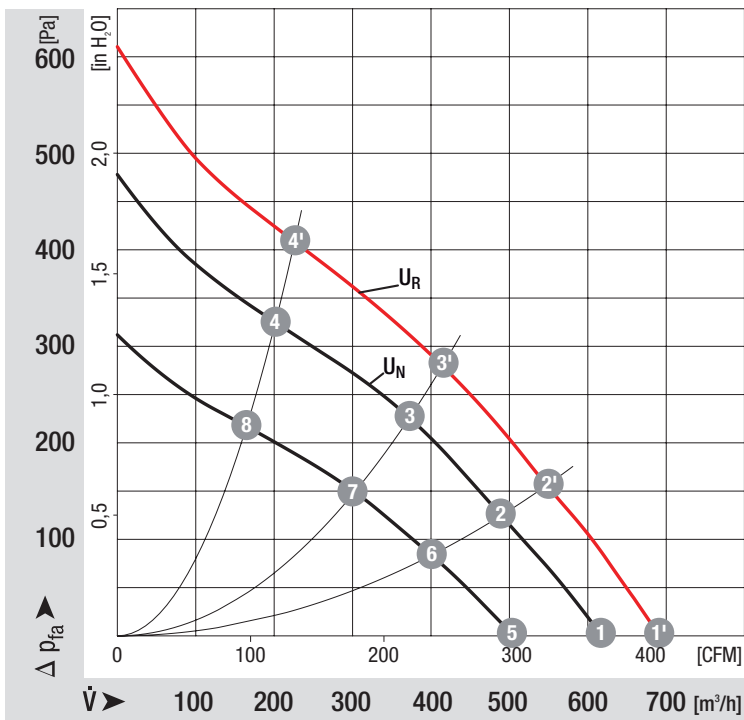
| Line | Signal | Colour | Assignment / function       | Line | Signal       | Colour | Assignment / function              |
|------|--------|--------|-----------------------------|------|--------------|--------|------------------------------------|
| 1    | +      | red    | maximum ripple $\pm 3.5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

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## Charts: Air flow



## Measured values

|    | n                 | P <sub>e</sub> |
|----|-------------------|----------------|
|    | min <sup>-1</sup> | W              |
| 1' | 3300              | 71             |
| 2' | 3200              | 75             |
| 3' | 3160              | 77             |
| 4' | 3290              | 72             |
| 1  | 2950              | 51             |
| 2  | 2870              | 54             |
| 3  | 2830              | 56             |
| 4  | 2940              | 51             |
| 5  | 2390              | 28             |
| 6  | 2340              | 30             |
| 7  | 2320              | 31             |
| 8  | 2390              | 28             |