**R3G140-AW05-12**

# EC centrifugal fan

forward curved, single inlet



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## Nominal data

| | |
|---|---|
| **Type** | **R3G140-AW05-12** |
| **Motor** | **M3G055-CF** |

| | | |
|---|---|---|
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Frequency | Hz | 50/60 |
| Type of data definition | | ml |
| Speed | $min^{-1}$ | 2300 |
| Power input | W | 67 |
| Current draw | A | 0.5 |
| Min. ambient temperature | °C | -25 |
| Max. ambient temperature | °C | 60 |

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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## Technical features

| | |
|---|---|
| **Mass** | 1.2 kg |
| **Size** | 140 mm |
| **Surface of rotor** | Thick layer passivated |
| **Material of electronics housing** | Die-cast aluminium |
| **Material of impeller** | PP plastic |
| **Direction of rotation** | Clockwise, seen on rotor |
| **Type of protection** | IP 44 |
| **Insulation class** | "B" |
| **Humidity class** | F3-1 |
| **Max. permissible ambient motor temp. (transp./ storage)** | + 80 °C |
| **Min. permissible ambient motor temp. (transp./storage)** | - 40 °C |
| **Mounting position** | Any |
| **Condensate discharge holes** | Rotor-side |
| **Operation mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Output 10 VDC, max. 1.1 mA<br>- Tach output<br>- Motor current limit<br>- Soft start<br>- Set value input Lin 0-10 VDC / PWM (1.7 V corresponds to 50 m³/h, 10 V corresponds to 300 m³/h)<br>- Control interface with SELV potential safely disconnected from the mains<br>- Overtemperature protection for motor |
| **EMC interference immunity** | Acc. to EN 61000-6-2 (industrial environment) |
| **EMC harmonics** | Acc. to EN 61000-3-2/3 |
| **EMC interference emission** | Acc. to EN 61000-6-3 (household environment) |
| **Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)** | <= 3.5 mA |
| **Motor protection** | Thermal overload protector (TOP) wired internally |
| **Cable exit** | Variable |
| **Protection class** | I (if protective earth is connected by customer) |
| **Product conforming to standard** | EN 60335-1; CE |
| **Approval** | CCC; GOST |

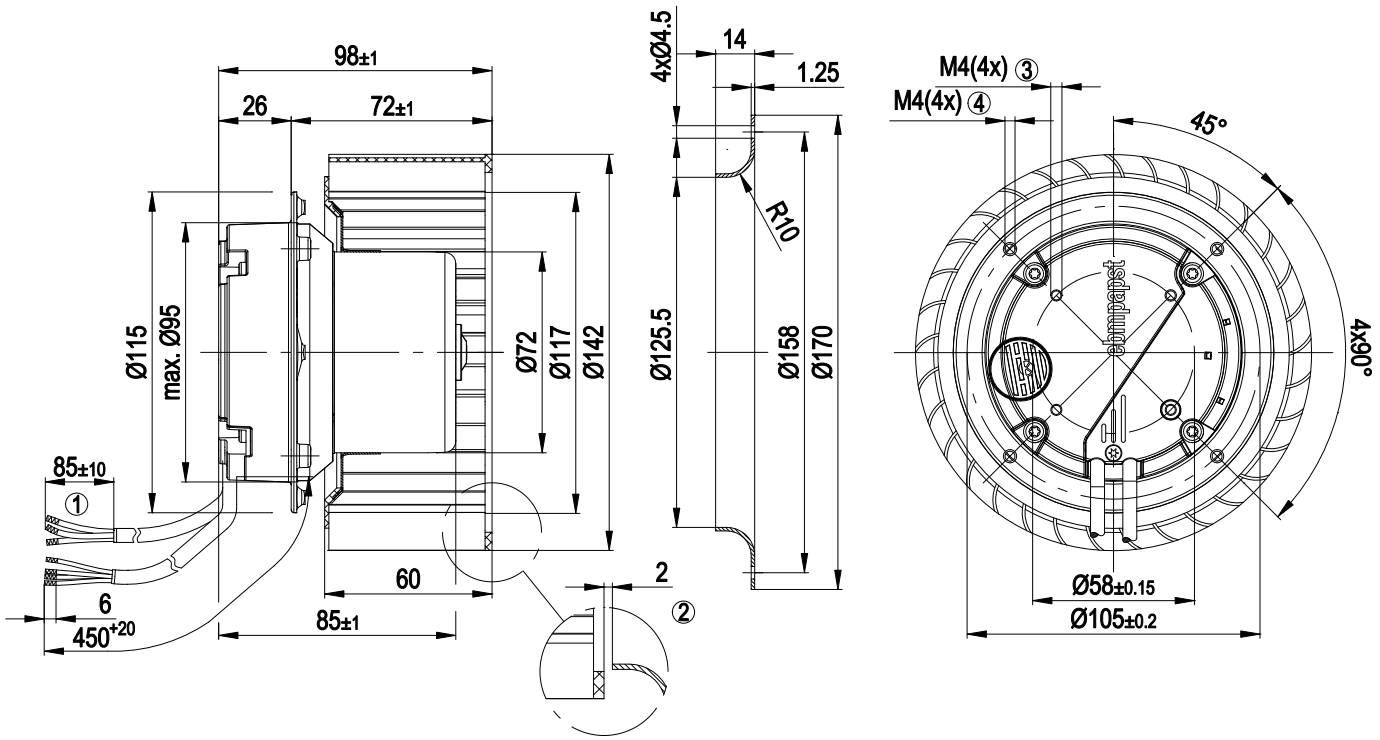


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## Product drawing




| | |
|---|---|
| 1 | Connection line, 7x brass lead tips crimped |
| 2 | Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery |
| 3 | Depth of screw max. 6 mm |
| 4 | Depth of screw max. 6 mm |

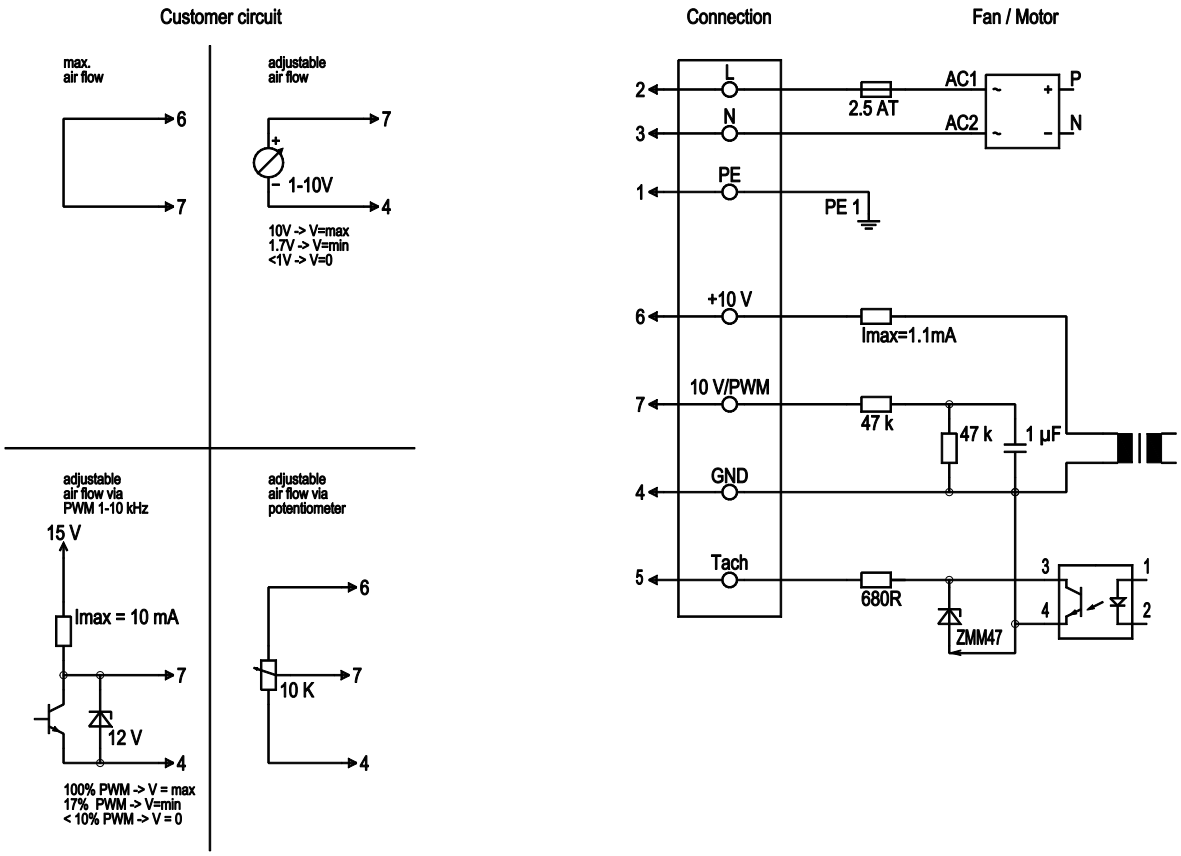


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## Connection screen




| Line | No. | Signal | Colour | Function / assignment |
|---|---|---|---|---|
| | 2 | L | brown | Power supply 230 VAC, 50-60 Hz, see type plate for voltage range |
| | 3 | N | blue | Neutral conductor |
| | 1 | PE | green/yellow | Protective earth |
| | 7 | 0-10 V PWM | yellow | Control input 0 - 10 V or PWM, electrically isolated |
| | 5 | Tach | white | Tach output: Open Collector, 1 pulse per revolution, electrically isolated |
| | 6 | 10V | red | max. 1.1 mA, voltage output 10 V/1.1 mA, electrically isolated, not short-circuit-proof |
| | 4 | GND | blue | GND - Connection for control interface |

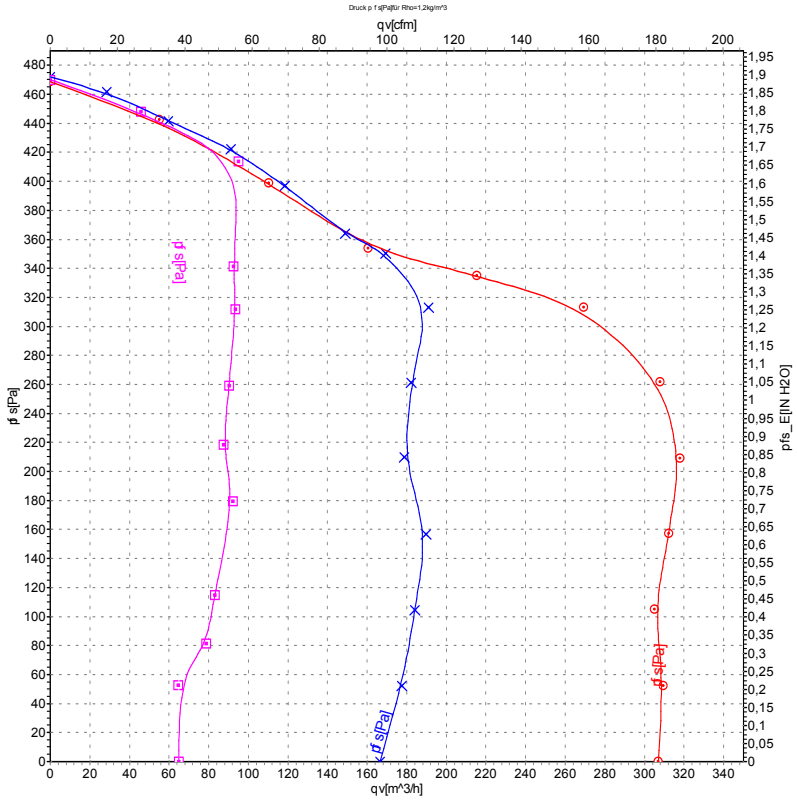


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## Charts: Air flow 50 Hz




Measurement: LU-65489
Measurement: LU-65490
Measurement: LU-65492

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.



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