**R3G225-RH17-11**

# EC centrifugal fan - RadiCal

backward-curved

**ebm-papst Mulfingen GmbH & Co. KG**
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

| | |
|---|---|
| **Type** | **R3G225-RH17-11** |
| **Motor** | **M3G055-CF** |

| | | |
|---|---|---|
| Phase | | 1~ |
| Nominal voltage | VAC | 230V |
| Nominal voltage range | VAC | 200 .. 240 |
| Frequency | Hz | 50/60 |
| Method of obtaining data | | fa |
| Speed (rpm) | $min^{-1}$ | 2200 |
| Power consumption | W | 60 |
| Current draw | A | 0.42 |
| Min. ambient temperature | °C | -25 |
| Max. ambient temperature | °C | 50 |

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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## Technical description

| | |
|---|---|
| **Weight** | 1.5 kg |
| **Fan size** | 225 mm |
| **Rotor surface** | Thick-film passivated |
| **Electronics housing material** | Die-cast aluminum |
| **Impeller material** | PA plastic |
| **Number of blades** | 7 |
| **Direction of rotation** | Clockwise, viewed toward rotor |
| **Degree of protection** | IP44 |
| **Insulation class** | "B" |
| **Moisture (F) / Environmental (H) protection class** | F3-1 |
| **Max. permitted ambient temp. for motor (transport/storage)** | + 80 °C |
| **Min. permitted ambient temp. for motor (transport/storage)** | - 40 °C |
| **Installation position** | Any |
| **Condensation drainage holes** | On rotor side |
| **Mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Tach output<br>- Motor current limitation<br>- Soft start<br>- PWM control input |
| **EMC immunity to interference** | According to EN 61000-6-2 (industrial environment) |
| **EMC circuit feedback** | According to EN 61000-3-2/3 |
| **EMC interference emission** | According to EN 61000-6-3 (household environment) |
| **Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)** | <= 3.5 mA |
| **Electrical hookup** | With plug |
| **Motor protection** | Thermal overload protector (TOP) internally connected |
| **With cable** | Variable |
| **Protection class** | I (with customer connection of protective earth) |
| **Approval** | CCC; UL 2111; CSA C22.2 No. 77 |

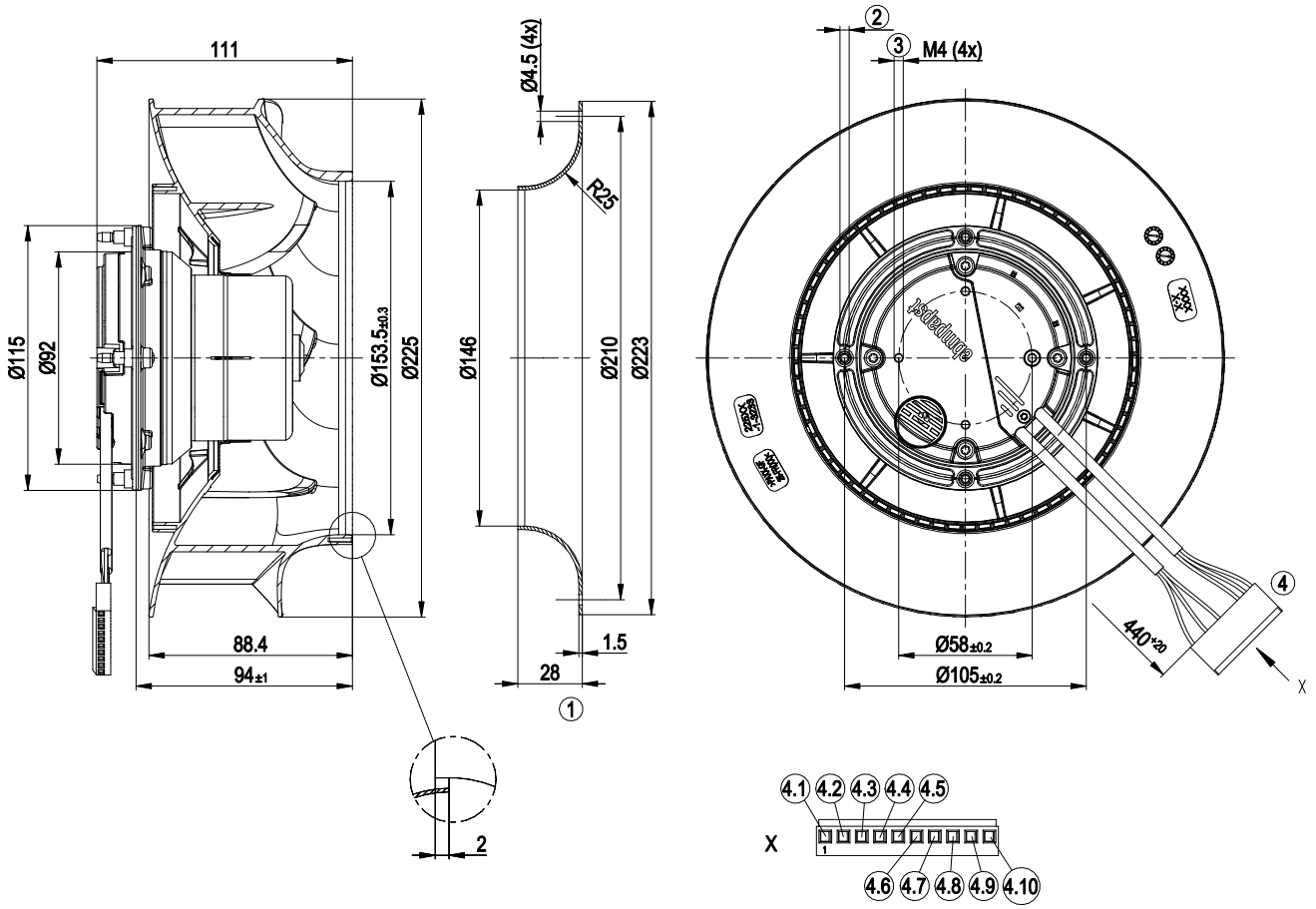


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## Product drawing




| | |
|---|---|
| 1 | Accessory part: inlet ring 96358-2-4013 not included in scope of delivery |
| 2 | Thread on threaded pin: 10-24 UNC |
| 3 | Max. clearance for screw 5 mm |
| 4 | Cable PVC with Molex connector housing 09-93-1000 with 6x plug pin 08-50-0105 |
| 4.1 | PE (green/yellow) |
| 4.2 | not used |
| 4.3 | L (brown) |
| 4.4 | not used |
| 4.5 | N (blue) |
| 4.6 | not used |
| 4.7 | not used |
| 4.8 | Control input (yellow) |
| 4.9 | Tach (white) |
| 4.10 | GND (blue) |

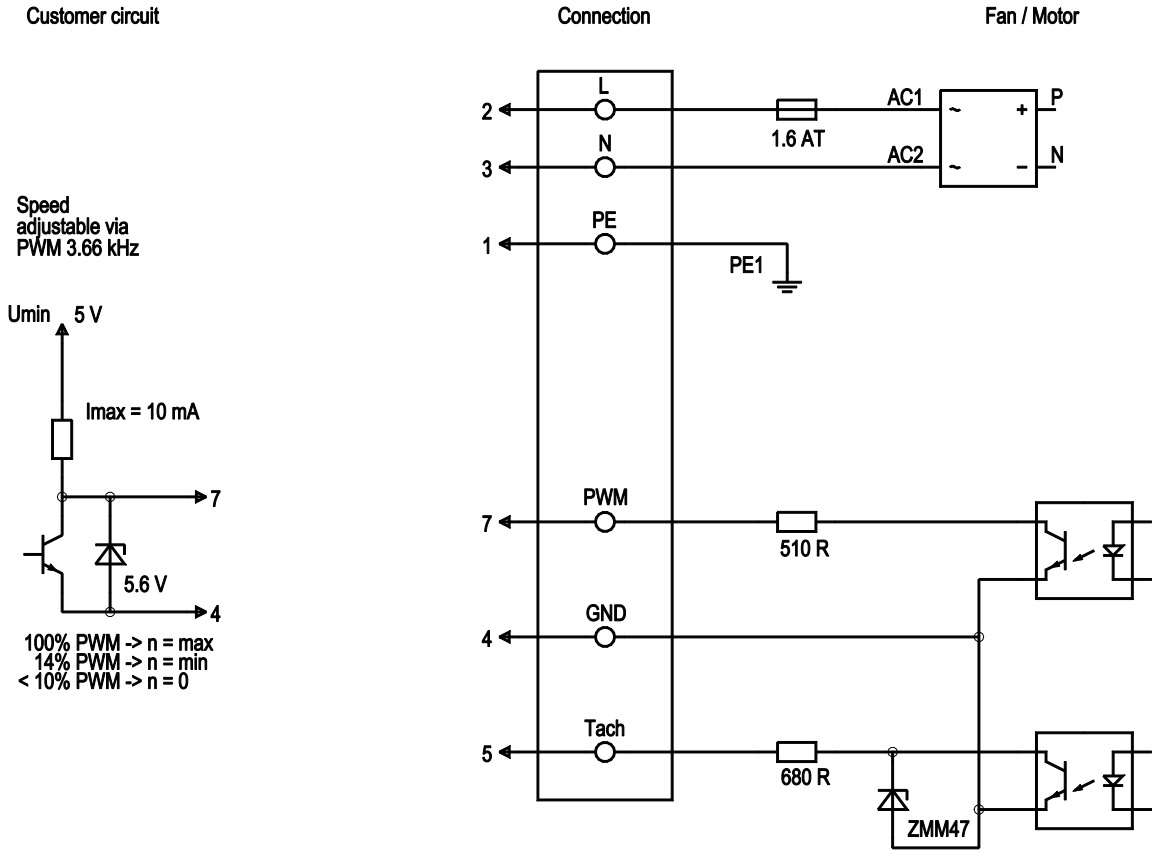


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## Connection diagram




| No. | Conn. | Designation | Color | Function/assignment |
|---|---|---|---|---|
| | 1 | PE | green/yellow | Protective earth |
| | 2 | L | brown | Power supply 230 VAC, 50 - 60 Hz |
| | 3 | N | blue | Neutral conductor |
| | 4 | GND | blue | GND connection for control interface |
| | 5 | Tach | white | Tach output: Open collector, 1 pulse per revolution, electrically isolated |
| | 7 | PWM | yellow | Control input PWM, electrically isolated |

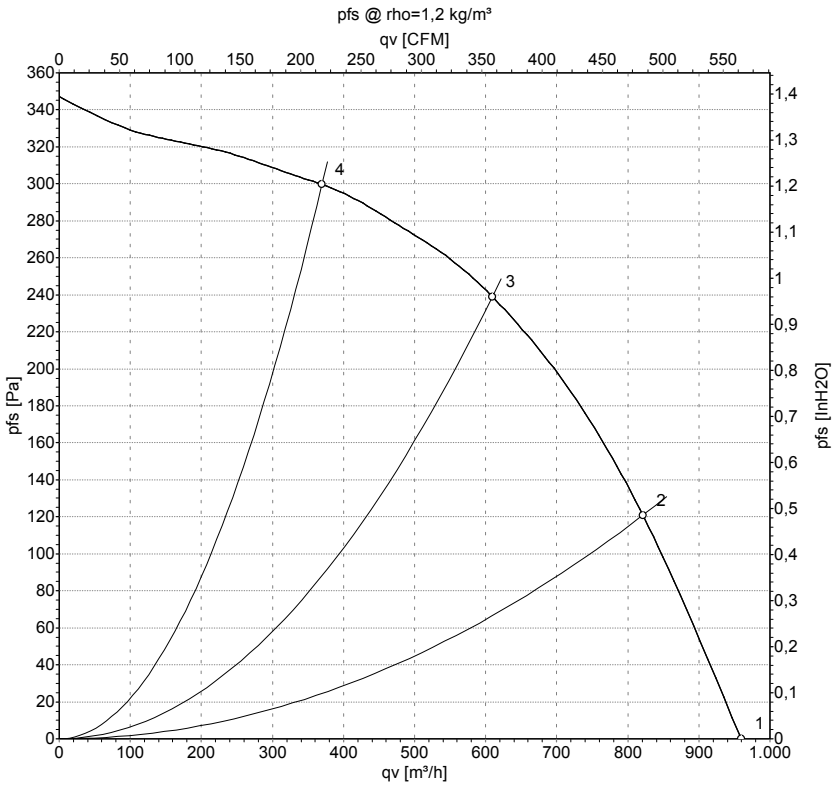


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## Curves: Air performance 50 Hz




Measurement: LU-144891-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## Measured values

| | U | f | n | $P_{ed}$ | I | qv | $p_{fs}$ | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa | CFM | inH2O |
| 1 | 230 | 50 | 2200 | 60 | 0.42 | 960 | 0 | 565 | 0.00 |
| 2 | 230 | 50 | 2205 | 79 | 0.63 | 820 | 120 | 485 | 0.48 |
| 3 | 230 | 50 | 2200 | 81 | 0.64 | 610 | 240 | 360 | 0.96 |
| 4 | 230 | 50 | 2200 | 69 | 0.56 | 370 | 300 | 220 | 1.20 |

U = Power supply · f = Frequency · n = Speed (rpm) · $P_{ed}$ = Power consumption · I = Current draw · qv = Air flow · $p_{fs}$ = Pressure increase



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