

R3G225-RH17-12 ebmpapst Datasheet

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Nominal data

| | | |
|--------------------------|-------------------|------------|
| Type | R3G225-RH17-12 | |
| Motor | M3G055-CF | |
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Nominal voltage range | VAC | 200 .. 240 |
| Frequency | Hz | 50/60 |
| Method of obtaining data | | ml |
| Speed (rpm) | min ⁻¹ | 2200 |
| Power consumption | W | 81 |
| Current draw | A | 0.64 |
| Min. ambient temperature | °C | -25 |
| Max. ambient temperature | °C | 50 |

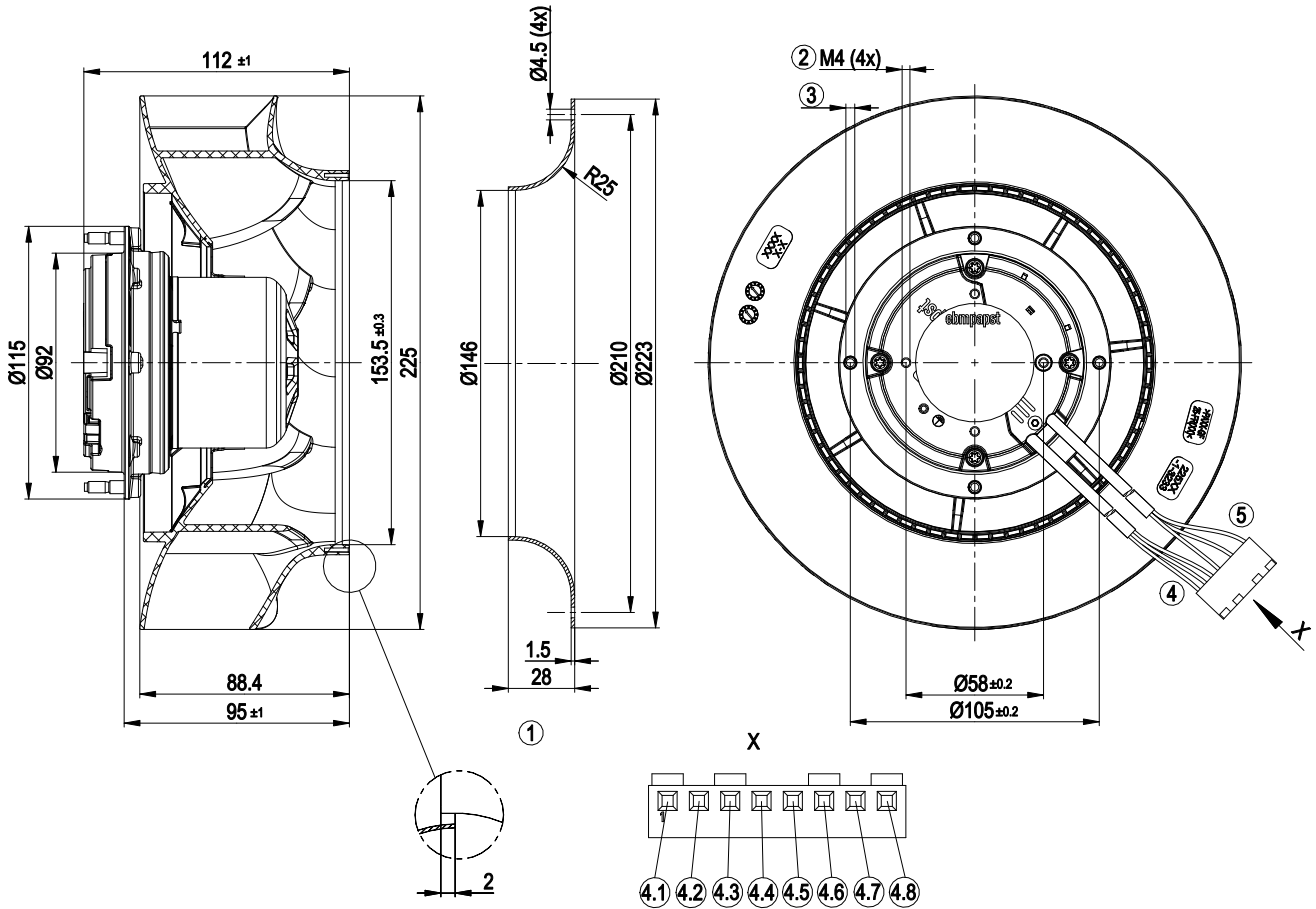
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

| | |
|---|---|
| Weight | 1.5 kg |
| Fan size | 225 mm |
| Electronics housing material | Die-cast aluminum |
| Impeller material | PA plastic |
| Direction of rotation | Clockwise, viewed toward rotor |
| Degree of protection | IP54 |
| Insulation class | "B" |
| 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 | None, open rotor |
| Mode | S1 |
| Motor bearing | Ball bearing |
| Technical features | <ul style="list-style-type: none"> - Tach output - Motor current limitation - Soft start - PWM control input - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for motor |
| 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 | Locked-rotor protection |
| With cable | Variable |
| Protection class | I (with customer connection of protective earth) |
| Conformity with standards | EN 60335-1; CE |
| Approval | CSA C22.2 No. 77; UL 1004-7 + 60730; CCC |

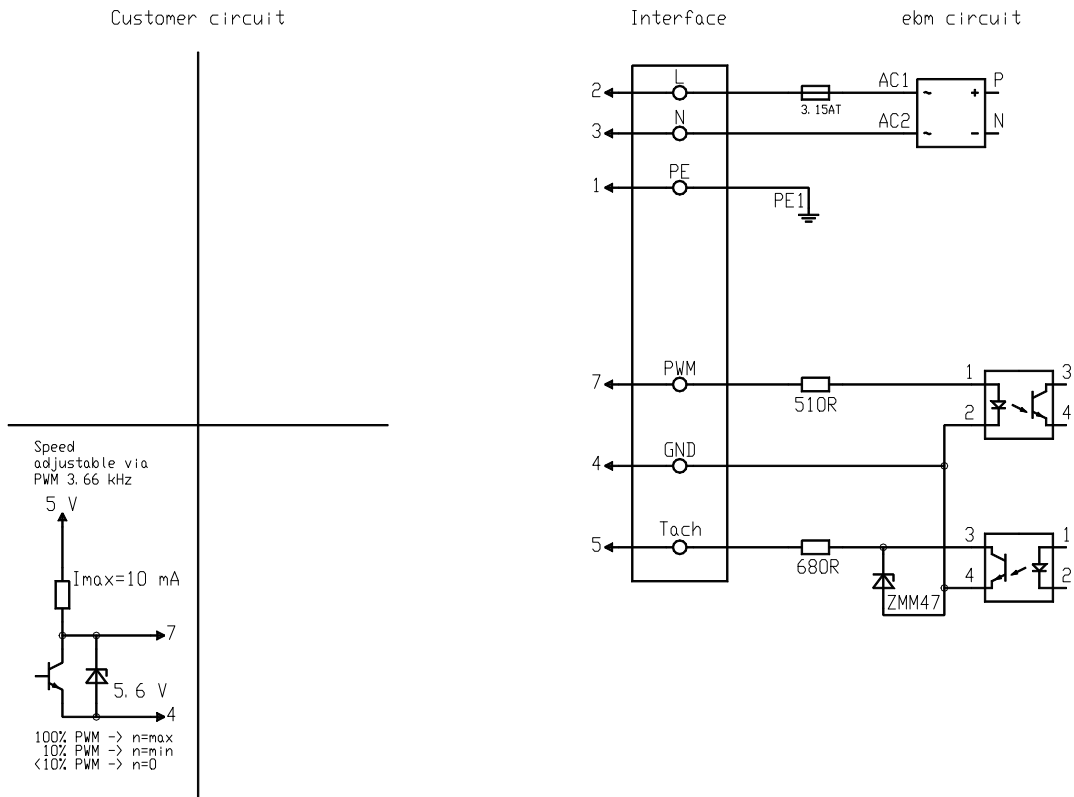
Product drawing



| No. | Conn. | Designation | Color | Function/assignment |
|-----|-------|-------------|--------------|---|
| | | 1 | | Accessory part: inlet ring 96358-2-4013 not included in scope of delivery |
| | | 2 | | Max. clearance for screw 6 mm |
| | | 3 | | Thread on threaded pin: 10-24 UNC |
| | | 4 | | Cable AWG20, 3x plug pin Molex 08-50-0105 crimped |
| | | 5 | | Cable AWG 22, 3x plug pin Molex 08-50-0105 crimped, with connector housing Molex 09-50-8081 |
| | | 5.1 | brown | AC 230 V/115 V |
| | | 5.2 | | not used |
| | | 5.3 | light blue | AC neutral |
| | | 5.4 | | not used |
| | | 5.5 | green/yellow | Ground |
| | | 5.6 | yellow | speed control |
| | | 5.7 | white | tach output |
| | | 5.8 | blue | signal ground |

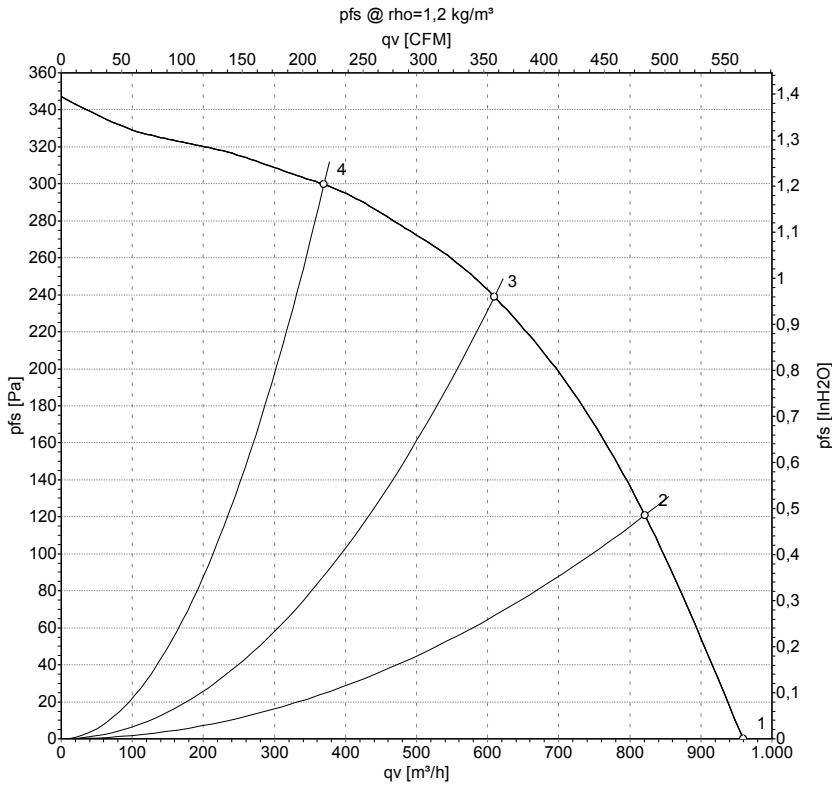


Connection diagram



| No. | Conn. | Designation | Color | Function/assignment |
|-----|-------|-------------|--------------|---|
| | 2 | L | brown | Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range |
| | 3 | N | blue | Neutral conductor |
| | 1 | PE | green/yellow | Protective earth |
| | 7 | PWM | yellow | Control input PWM, electrically isolated |
| | 5 | Tacho | white | Tach output: Open collector, 1 pulse per revolution, electrically isolated, $I_{sink_max} = 10 \text{ mA}$ |
| | 4 | GND | blue | GND connection for control interface |

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 ebmpapst. 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 | q _v | p _{fs} | q _v | 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 · q_v = Air flow · p_{fs} = Pressure increase

