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### Nominal data

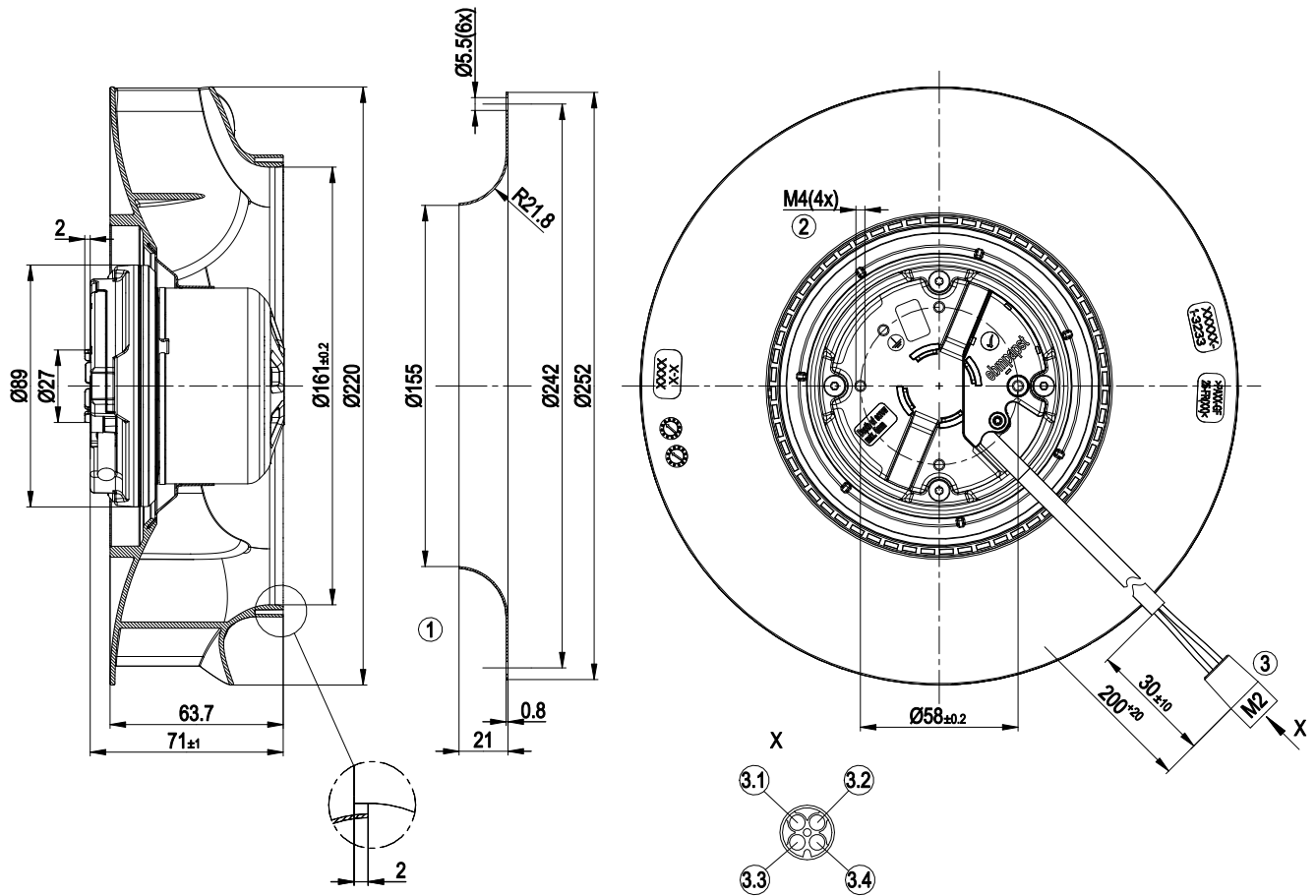
|                          |                   |            |
|--------------------------|-------------------|------------|
| Type                     | R3G220-RC09-08    |            |
| Motor                    | M3G055-BI         |            |
| Phase                    |                   | 1~         |
| Nominal voltage          | VAC               | 230        |
| Nominal voltage range    | VAC               | 200 .. 240 |
| Frequency                | Hz                | 50/60      |
| Method of obtaining data |                   | ml         |
| Status                   |                   | prelim.    |
| Speed (rpm)              | min <sup>-1</sup> | 2070       |
| Power consumption        | W                 | 51         |
| Current draw             | A                 | 0.47       |
| Min. ambient temperature | °C                | -25        |
| Max. ambient temperature | °C                | 60         |

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

## Technical description

|                                                                            |                                                                                                                                                                                                        |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Weight                                                                     | 1.1 kg                                                                                                                                                                                                 |
| Fan size                                                                   | 220 mm                                                                                                                                                                                                 |
| Rotor surface                                                              | Unpainted                                                                                                                                                                                              |
| Impeller material                                                          | PA plastic                                                                                                                                                                                             |
| Number of blades                                                           | 7                                                                                                                                                                                                      |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                                                                                                                                                                         |
| Degree of protection                                                       | IP54                                                                                                                                                                                                   |
| Insulation class                                                           | "B"                                                                                                                                                                                                    |
| Moisture (F) / Environmental (H) protection class                          | H1                                                                                                                                                                                                     |
| 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"> <li>- Speed setting input (230 V)</li> <li>- Motor current limitation</li> <li>- Soft start</li> <li>- Thermal overload protection for electronics/motor</li> </ul> |
| 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                                                          | STK                                                                                                                                                                                                    |
| Motor protection                                                           | Electronic motor protection                                                                                                                                                                            |
| With cable                                                                 | Variable                                                                                                                                                                                               |
| Protection class                                                           | I (with customer connection of protective earth)                                                                                                                                                       |
| Conformity with standards                                                  | EN 60335-1; CE                                                                                                                                                                                         |
| Approval                                                                   | CCC; C22.2 No.77 + CAN/CSA-E60730-1; UL 1004-7 + 60730                                                                                                                                                 |

## Product drawing

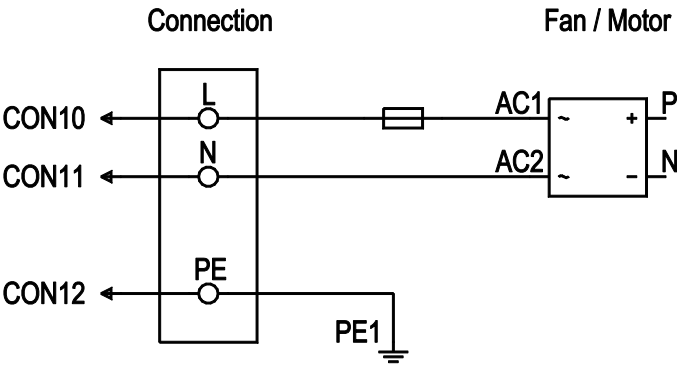


|     |                                                                                    |
|-----|------------------------------------------------------------------------------------|
| 1   | Accessory part: inlet ring 09609-2-4013, not included in scope of delivery         |
| 2   | Max. clearance for screw 5 mm                                                      |
| 3   | Cable PVC AWG20, 4-pole connector housing tyco 925075-7, 4x plug pin tyco 163555-6 |
| 3.1 | blue (N)                                                                           |
| 3.2 | green/yellow (PE)                                                                  |
| 3.3 | black (L)                                                                          |
| 3.4 | free position                                                                      |

# EC centrifugal fan - RadiCal

backward-curved, single-intake

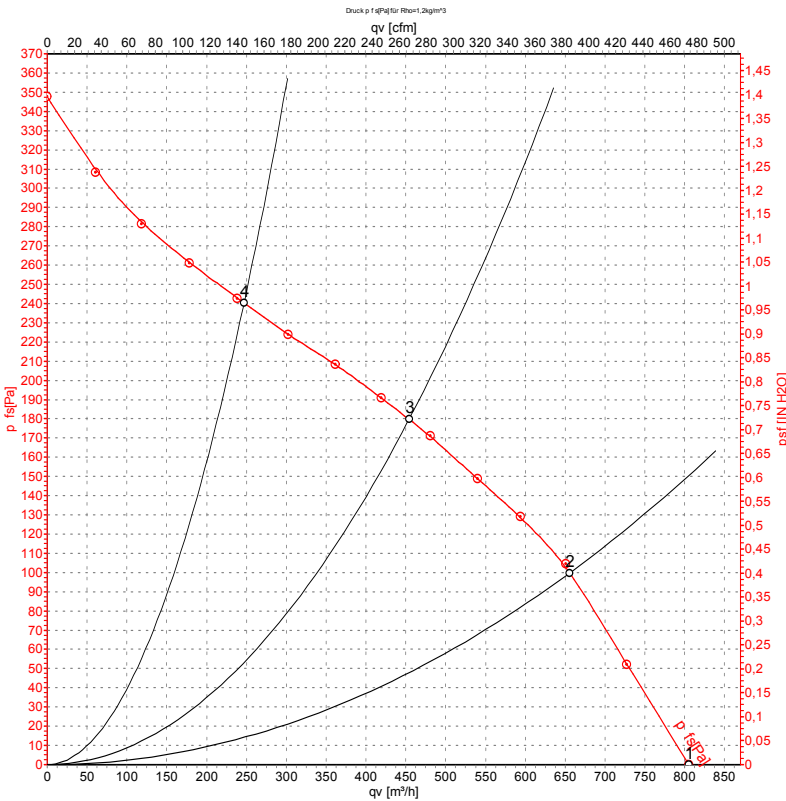
Connection diagram



| No. | Conn.  | Designation | Color        | Function/assignment                                             |
|-----|--------|-------------|--------------|-----------------------------------------------------------------|
|     | CON 10 | L           | black        | Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range |
|     | CON 11 | N           | blue         | Neutral conductor                                               |
|     | CON 12 | PE          | green/yellow | Protective earth                                                |



Curves: Air performance 50 Hz



Measurement: LU-127404-1

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 <sub>ed</sub> | I    | q <sub>v</sub> | p <sub>ts</sub> | q <sub>v</sub> | p <sub>ts</sub> |
|---|-----|----|-------------------|-----------------|------|----------------|-----------------|----------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W               | A    | m³/h           | Pa              | cfm            | in. wg          |
| 1 | 230 | 50 | 2190              | 44              | 0.43 | 805            | 0               | 475            | 0.00            |
| 2 | 230 | 50 | 2115              | 48              | 0.47 | 655            | 100             | 385            | 0.40            |
| 3 | 230 | 50 | 2070              | 51              | 0.47 | 455            | 180             | 265            | 0.72            |
| 4 | 230 | 50 | 2140              | 47              | 0.44 | 245            | 240             | 145            | 0.96            |

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>ts</sub> = Pressure increase

