**K3G225-RE07-01**

# EC centrifugal module - RadiCal

backward-curved

with housing



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ErP2015 EXCEEDS THE NORM

## Nominal data

| | |
|---|---|
| **Type** | **K3G225-RE07-01** |
| **Motor** | **M3G055-DF** |

| | | |
|---|---|---|
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Nominal voltage range | VAC | 200 .. 240 |
| Frequency | Hz | 50/60 |
| Method of obtaining data | | ml |
| Speed (rpm) | $min^{-1}$ | 2860 |
| Power consumption | W | 170 |
| Current draw | A | 1.4 |
| 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

## Data according to ErP Directive

| | | Actual | Req. 2015 |
|---|---|---|---|
| 01 Overall efficiency $\eta_{es}$ | % | 61.7 | 43.1 |
| 02 Measurement category | | A | |
| 03 Efficiency category | | Static | |
| 04 Efficiency grade N | | 80.6 | 62 |
| 05 Variable speed drive | | Yes | |

| | | |
|---|---|---|
| 09 Power consumption $P_{ed}$ | kW | 0.16 |
| 09 Air flow $q_v$ | $m^3/h$ | 705 |
| 09 Pressure increase $p_{fs}$ | Pa | 458 |
| 10 Speed (rpm) n | $min^{-1}$ | 2865 |
| 11 Specific ratio* | | 1.00 |

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + $p_{fs}$ / 100 000 Pa

LU-127001

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## Technical description

| | |
|---|---|
| **Weight** | 2.4 kg |
| **Fan size** | 225 mm |
| **Rotor surface** | Thick-film passivated |
| **Electronics housing material** | Die-cast aluminum |
| **Impeller material** | PA plastic |
| **Housing material** | PA plastic |
| **Number of blades** | 7 |
| **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** | - Speed setting input (230 V)<br>- Motor current limitation<br>- Soft start<br>- Thermal overload protection for electronics/motor<br>- Line undervoltage detection |
| **Speed levels** | 2 |
| **Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)** | <= 3.5 mA |
| **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** | CCC |



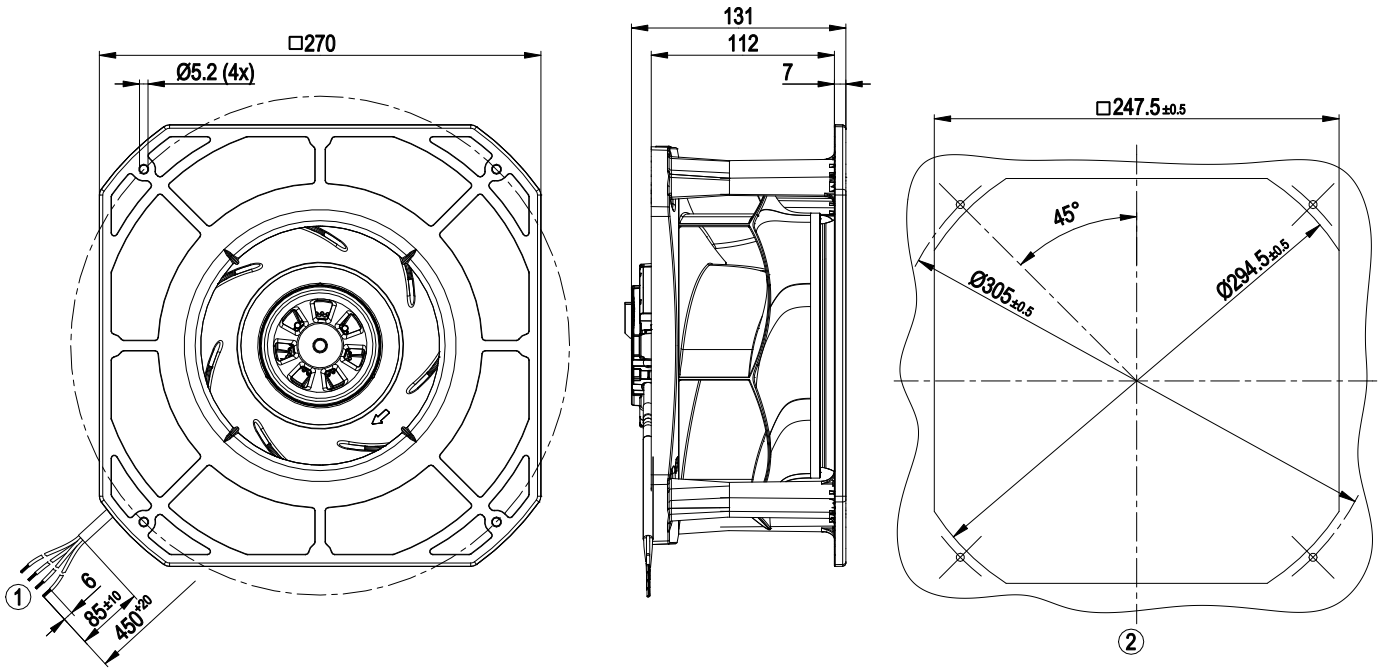
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## Product drawing




| | |
|---|---|
| 1 | Cable PVC 4G AWG20, 4x crimped splices |
| 2 | Mounting dimensions |



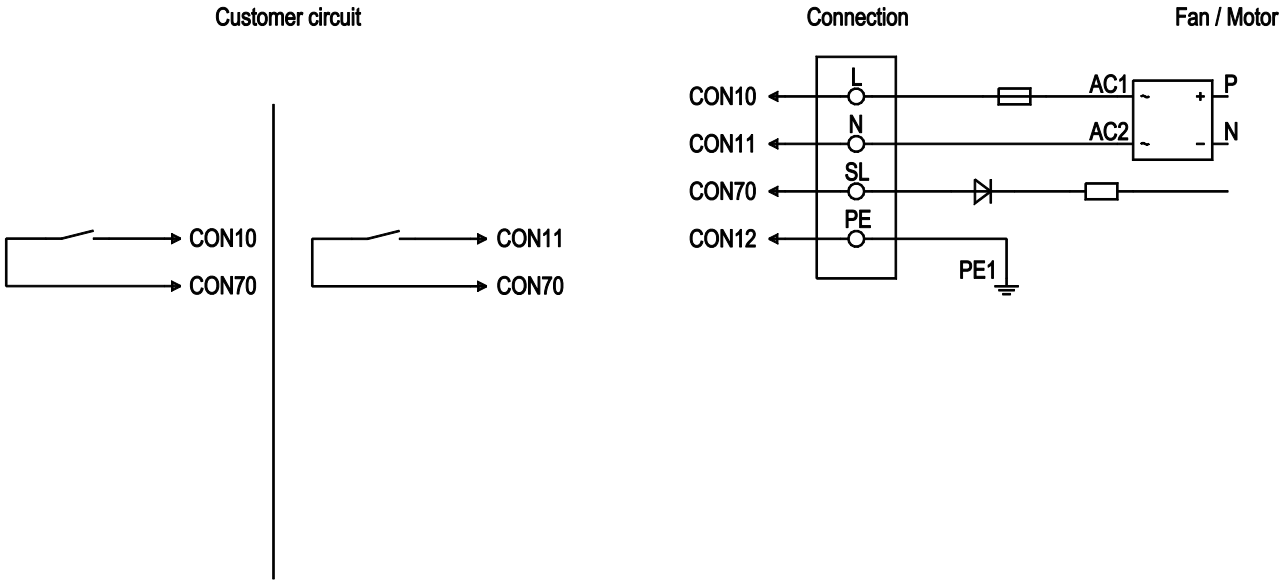
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## Connection diagram




| 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 |
| | CON 70 | SL | brown | Speed selection: switch open speed 1; switch closed speed 2 |



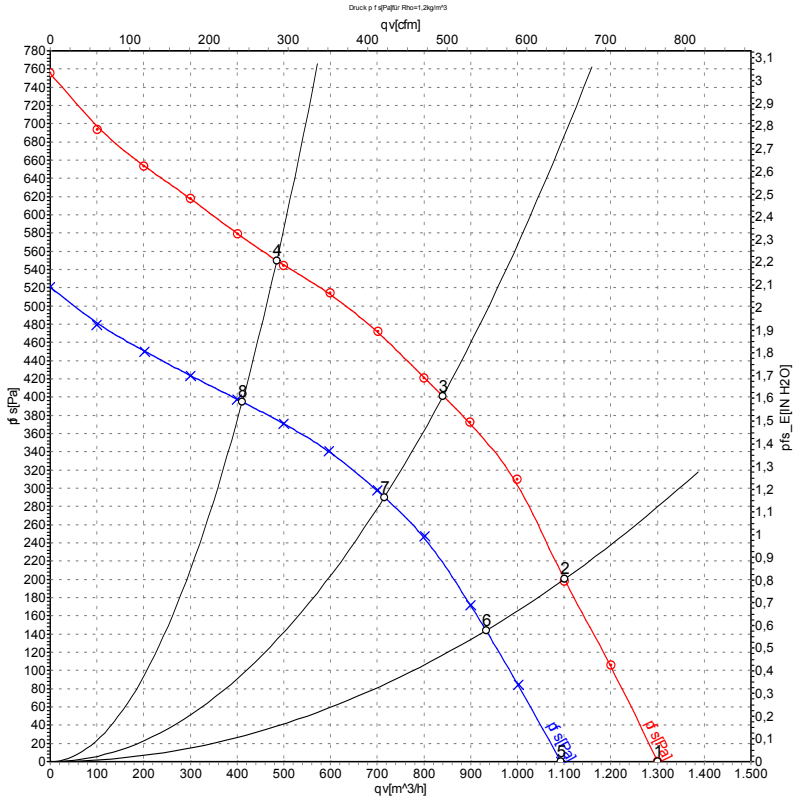
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## Curves: Air performance 50 Hz




Measurement: LU-129100-1
Measurement: LU-129105-1

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 | $LpA_{in}$ | $LwA_{in}$ | qv | $p_{fs}$ | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | dB(A) | dB(A) | $m^3/h$ | Pa | CFM | inH2O |
| 1 | 230 | 50 | 3030 | 151 | 1.25 | 70 | 78 | 1300 | 0 | 765 | 0.00 |
| 2 | 230 | 50 | 2910 | 168 | 1.40 | 66 | 74 | 1100 | 200 | 650 | 0.80 |
| 3 | 230 | 50 | 2860 | 170 | 1.40 | 60 | 68 | 840 | 400 | 495 | 1.61 |
| 4 | 230 | 50 | 2970 | 157 | 1.35 | 65 | 73 | 485 | 550 | 285 | 2.21 |
| 5 | 230 | 50 | 2550 | 91 | 0.83 | | | 1095 | 0 | 645 | 0.00 |
| 6 | 230 | 50 | 2495 | 104 | 0.94 | | | 935 | 144 | 550 | 0.58 |
| 7 | 230 | 50 | 2490 | 105 | 0.93 | | | 715 | 290 | 420 | 1.16 |
| 8 | 230 | 50 | 2525 | 97 | 0.89 | | | 410 | 395 | 240 | 1.59 |

U = Power supply · f = Frequency · n = Speed (rpm) · $P_{ed}$ = Power consumption · I = Current draw · $LpA_{in}$ = Sound pressure level intake side · $LwA_{in}$ = Sound power level intake side
qv = Air flow · $p_{fs}$ = Pressure increase



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