

K3G133-RA01-03

EC centrifugal module - RadiCal

backward curved, single inlet
with housing



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Nominal data

| | | |
|--------------------------|-------------------|------------|
| Type | K3G133-RA01-03 | |
| Motor | M3G045-AI | |
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Nominal voltage range | VAC | 200 .. 240 |
| Frequency | Hz | 50/60 |
| Type of data definition | | ml |
| Speed | min ⁻¹ | 3770 |
| Power input | W | 27 |
| Current draw | A | 0.27 |
| 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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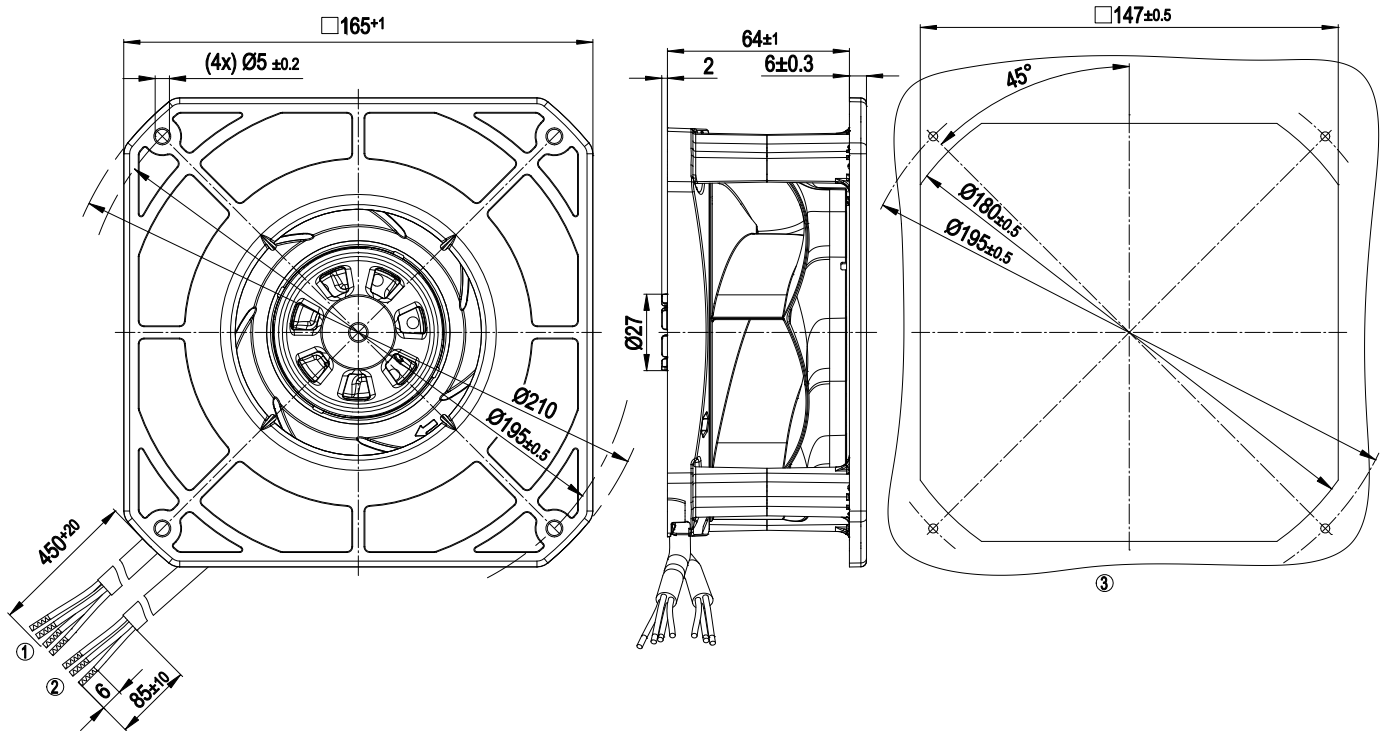
Technical features

| | |
|---|---|
| Mass | 0.75 kg |
| Size | 133 mm |
| Surface of rotor | Thick layer passivated |
| Material of electronics housing | Die-cast aluminium |
| Material of impeller | Plastic PA6, fibreglass-reinforced |
| Housing material | Plastic PA6, fibreglass-reinforced |
| Number of blades | 7 |
| Direction of rotation | Clockwise, seen on rotor |
| Type of protection | IP 54; Depending on installation and position |
| 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 | None, open rotor |
| Operation mode | S1 |
| Motor bearing | Ball bearing |
| Technical features | <ul style="list-style-type: none"> - Output 10 VDC, max. 1.1 mA - Tach output - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected electronics / 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 | Locked-rotor protection |
| Cable exit | Lateral |
| Protection class | I (if protective earth is connected by customer) |
| Product conforming to standard | EN 60335-1 |

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Product drawing



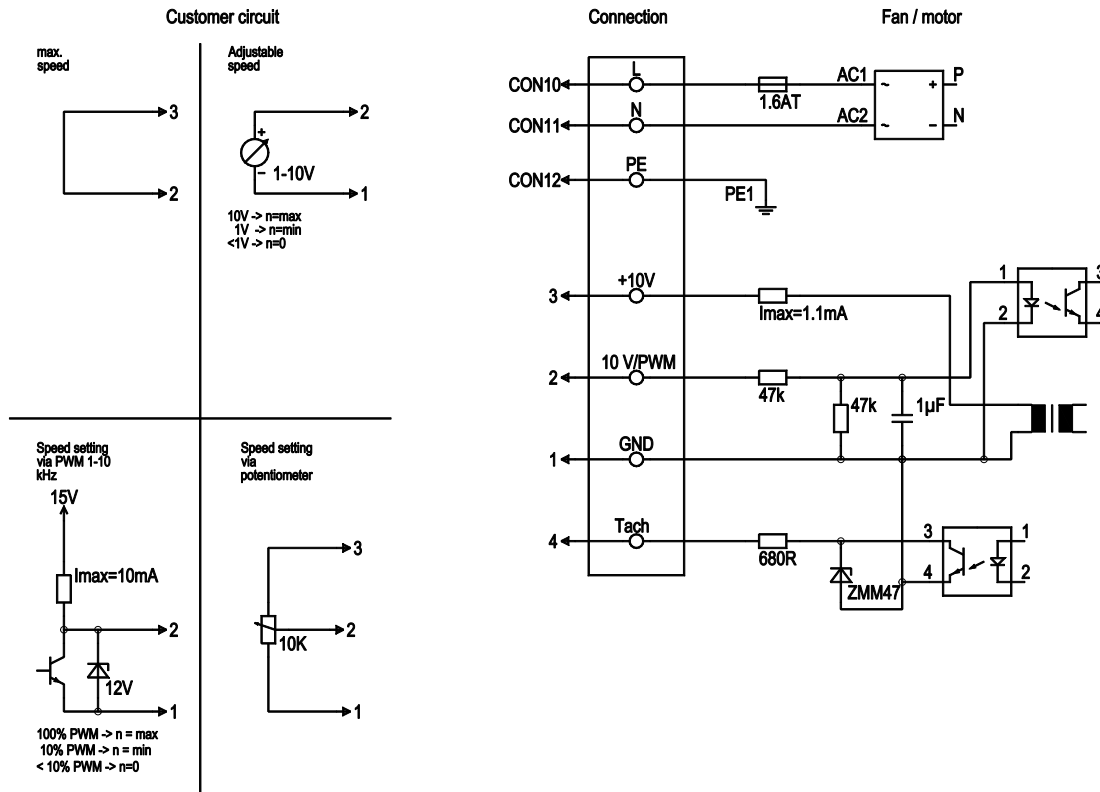
| | |
|---|--|
| 1 | Control line PVC 4X AWG22, 4 x brass lead tips crimped |
| 2 | Connection line PVC 3G AWG20, 3x brass lead tips crimped |
| 3 | Mounting dimensions |



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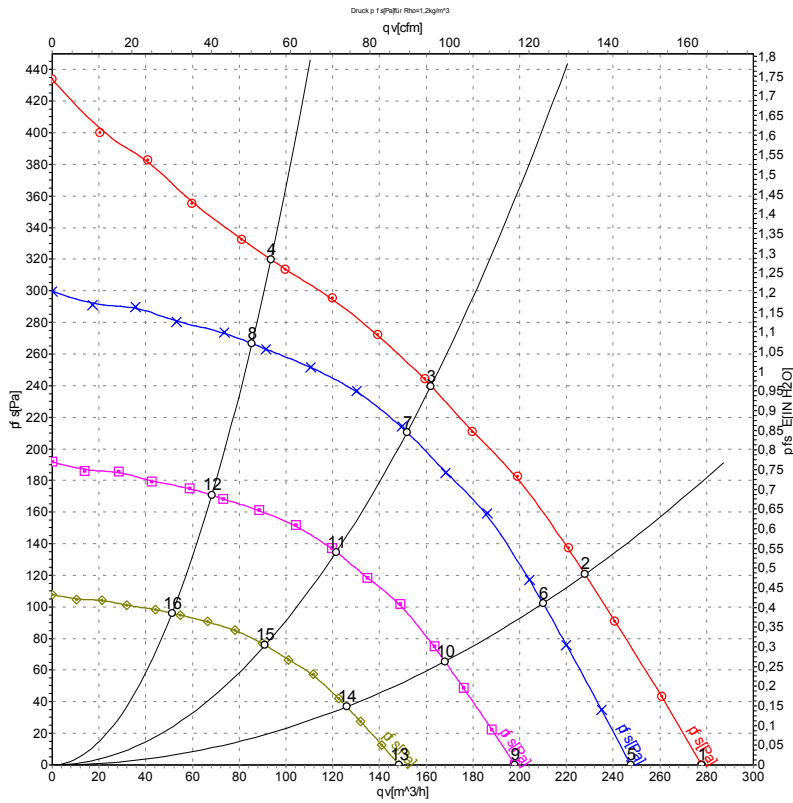
Connection screen



| Line | No. | Signal | Colour | Function / assignment |
|------|-------|----------------|--------------|--|
| | CON10 | L | black | Power supply 230 VAC, 50-60 Hz, see type plate for voltage range |
| | CON11 | N | blue | Neutral conductor |
| | CON12 | PE | green/yellow | Protective earth |
| | 1 | GND | blue | GND - Connection for control interface |
| | 2 | 0- 10V PWM | yellow | Control input 0 - 10 V or PWM, electrically isolated |
| | 3 | 10V/ max 1.1mA | red | Voltage output 10V/ 1.1mA, electrically isolated, not short-circuit-proof. |
| | 4 | Tach | white | Tach output: open collector, 1 pulse per revolution, electrically isolated |



Charts: Air flow 50 Hz



Measurement: LU-131806

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.

Measured values

| | U | f | n | P _{ed} | I | LpA _{in} | LwA _{in} | qv | ps |
|----|-----|----|-------------------|-----------------|------|-------------------|-------------------|-------------------|-----|
| | V | Hz | min ⁻¹ | W | A | dB(A) | dB(A) | m ³ /h | Pa |
| 1 | 230 | 50 | 3930 | 24 | 0.23 | 58 | 66 | 280 | 0 |
| 2 | 230 | 50 | 3800 | 26 | 0.26 | 54 | 63 | 230 | 120 |
| 3 | 230 | 50 | 3770 | 27 | 0.27 | 52 | 61 | 160 | 240 |
| 4 | 230 | 50 | 3835 | 26 | 0.25 | 56 | 65 | 95 | 320 |
| 5 | 230 | 50 | 3500 | 17 | 0.16 | 55 | 64 | 250 | 0 |
| 6 | 230 | 50 | 3500 | 20 | 0.20 | 53 | 61 | 210 | 102 |
| 7 | 230 | 50 | 3500 | 22 | 0.22 | 51 | 59 | 150 | 211 |
| 8 | 230 | 50 | 3500 | 19 | 0.19 | 54 | 63 | 85 | 267 |
| 9 | 230 | 50 | 2800 | 8.5 | 0.08 | 50 | 59 | 200 | 0 |
| 10 | 230 | 50 | 2800 | 10 | 0.10 | 48 | 57 | 170 | 66 |
| 11 | 230 | 50 | 2800 | 11 | 0.11 | 46 | 55 | 120 | 135 |
| 12 | 230 | 50 | 2800 | 9.9 | 0.10 | 49 | 59 | 70 | 171 |
| 13 | 230 | 50 | 2100 | 3.6 | 0.04 | 44 | 53 | 150 | 0 |
| 14 | 230 | 50 | 2100 | 4.4 | 0.04 | 42 | 50 | 125 | 37 |
| 15 | 230 | 50 | 2100 | 4.8 | 0.05 | 39 | 48 | 90 | 76 |
| 16 | 230 | 50 | 2100 | 4.2 | 0.04 | 43 | 52 | 50 | 96 |

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
ps = Pressure increase

