

K3G190-RB01-01

## EC centrifugal module - RadiCal

backward curved, single inlet  
with housing



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### Nominal data

|                          |                   |            |
|--------------------------|-------------------|------------|
| Type                     | K3G190-RB01-01    |            |
| Motor                    | M3G055-BD         |            |
| Phase                    |                   | 1~         |
| Nominal voltage          | VAC               | 230        |
| Nominal voltage range    | VAC               | 200 .. 240 |
| Frequency                | Hz                | 50/60      |
| Type of data definition  |                   | ml         |
| Speed                    | min <sup>-1</sup> | 2710       |
| Power input              | W                 | 57         |
| Current draw             | A                 | 0.43       |
| 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



## Technical features

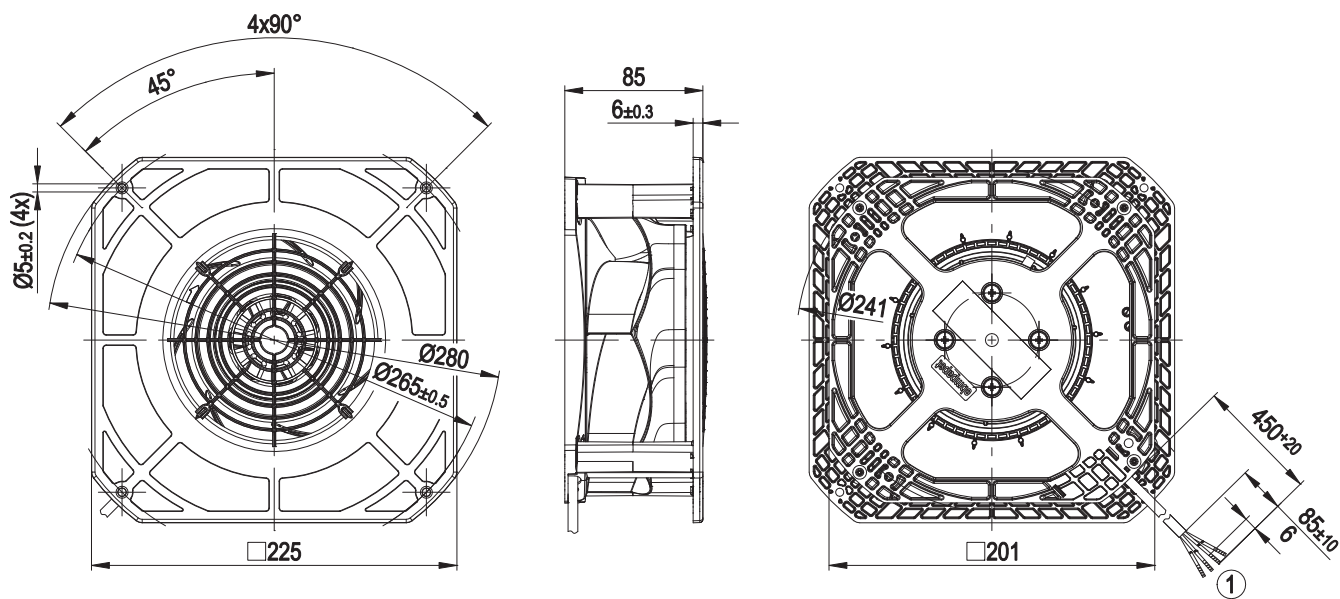
|                                                                    |                                                                                                                                                      |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mass                                                               | 1.4 kg                                                                                                                                               |
| Size                                                               | 190 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                                                                                                                                                |
| Insulation class                                                   | "B"                                                                                                                                                  |
| 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"> <li>- Over-temperature protected motor</li> <li>- Soft start</li> <li>- Speed adjustment input (230 V)</li> </ul> |
| Speed steps                                                        | 2                                                                                                                                                    |
| 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                                                         | Variable                                                                                                                                             |
| Protection class                                                   | I (if protective earth is connected by customer)                                                                                                     |
| Product conforming to standard                                     | EN 60335-1                                                                                                                                           |

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### Product drawing



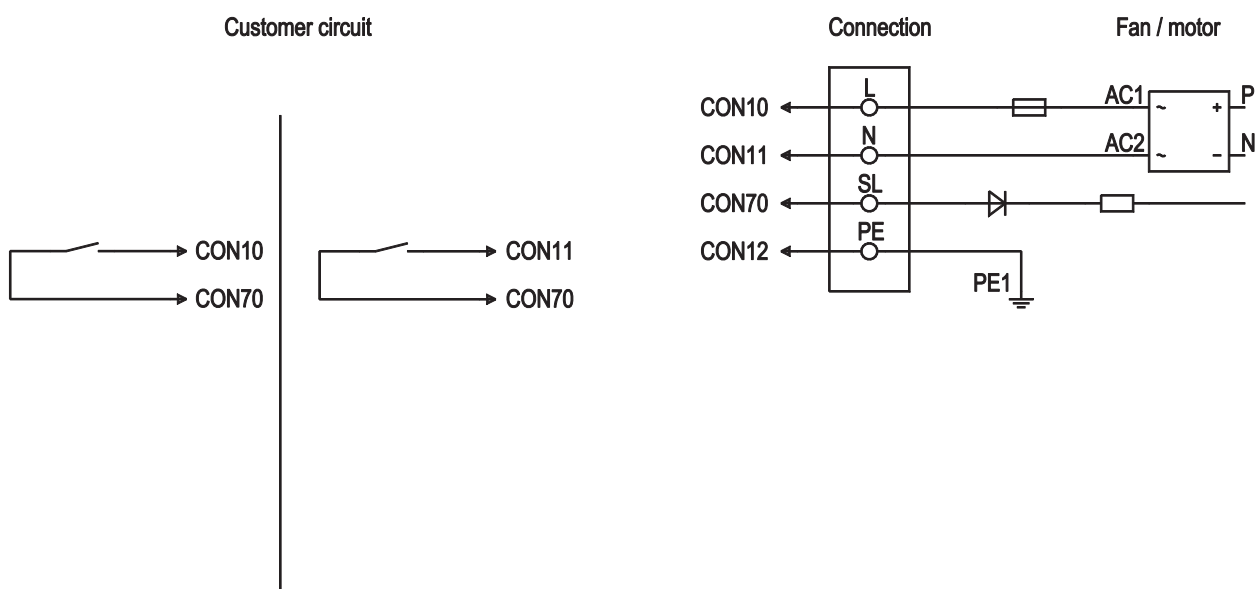
1 Connection line AWG20, 4 x brass lead tips crimped



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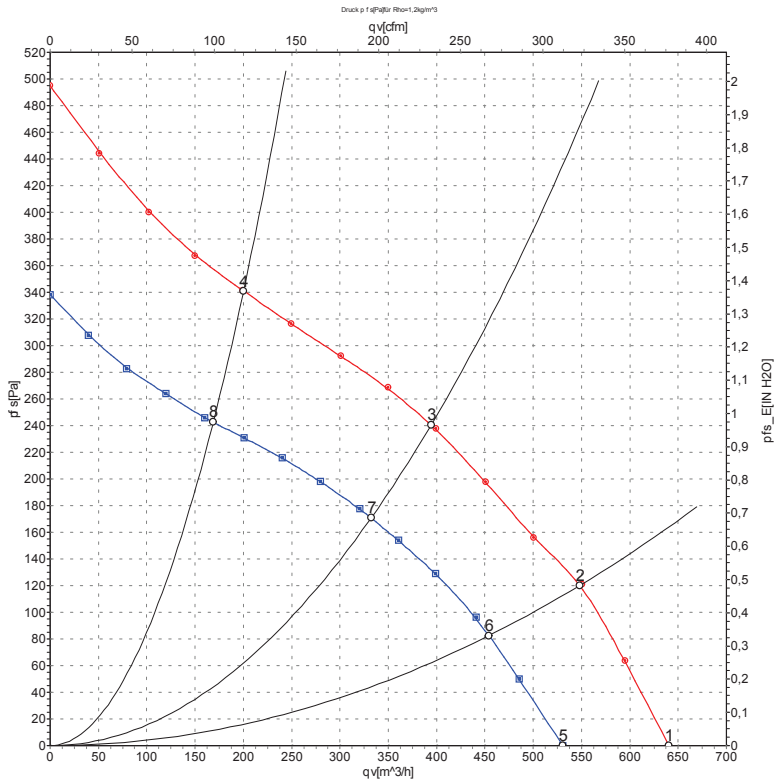
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## Connection screen



| Line | No.    | Signal | Colour       | Function / assignment                                              |
|------|--------|--------|--------------|--------------------------------------------------------------------|
|      | CON 10 | L      | black        | Power supply 230 VAC, 50 - 60 Hz, see type plate 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    |

## Charts: Air flow 50 Hz



Measurement: LU-125487  
Measurement: LU-125489

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 <sub>ed</sub> | I    | LpA <sub>in</sub> | LwA <sub>in</sub> | qV   | p <sub>fs</sub> |
|---|-----|----|-------------------|-----------------|------|-------------------|-------------------|------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W               | A    | dB(A)             | dB(A)             | m³/h | Pa              |
| 1 | 230 | 50 | 2880              | 49              | 0.36 | 61                | 69                | 640  | 0               |
| 2 | 230 | 50 | 2825              | 52              | 0.40 | 56                | 64                | 550  | 120             |
| 3 | 230 | 50 | 2710              | 57              | 0.43 | 54                | 62                | 395  | 240             |
| 4 | 230 | 50 | 2810              | 52              | 0.40 | 60                | 68                | 200  | 340             |
| 5 | 230 | 50 | 2435              | 30              | 0.23 |                   |                   | 530  | 0               |
| 6 | 230 | 50 | 2395              | 32              | 0.25 |                   |                   | 455  | 83              |
| 7 | 230 | 50 | 2325              | 35              | 0.27 |                   |                   | 330  | 171             |
| 8 | 230 | 50 | 2385              | 32              | 0.25 |                   |                   | 170  | 242             |

U = Supply voltage · f = Frequency · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side · qV = Air flow  
p<sub>fs</sub> = Pressure increase