**K3G200-AG16-I3**

Siemens AG

# EC centrifugal fan

backward curved, single inlet

with housing and angle bracket



Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

## Nominal data

| | | |
|---|---|---|
| **Type** | **K3G200-AG16-I3** | |
| **Motor** | **M3G084-DF** | |
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Nominal voltage range | VAC | 195 .. 277 |
| Frequency | Hz | 50/60 |
| Type of data definition | | ml |
| Speed (rpm) | $min^{-1}$ | 5390 |
| Power input | W | 450 |
| Current draw | A | 2 |
| 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

## Data in accordance with ecodesign regulation EU 327/2011

| | | Actual | Request 2015 |
|---|---|---|---|
| 01 Overall efficiency $\eta_{es}$ | % | 49.5 | 35.7 |
| 02 Measurement category | | A | |
| 03 Efficiency category | | Static | |
| 04 Efficiency grade N | | 63.8 | 50 |
| 05 Variable speed drive | | Yes | |

| | | |
|---|---|---|
| 09 Power input $P_{ed}$ | kW | 0.43 |
| 09 Air flow $q_v$ | $m^3/h$ | 780 |
| 09 Pressure increase $p_{fs}$ | Pa | 899 |
| 10 Speed (rpm) n | $min^{-1}$ | 5395 |
| 11 Specific ratio* | | 1.01 |

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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

LU-167344



ebmpapst

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## Technical features

| | |
|---|---|
| **Mass** | 6.7 kg |
| **Size** | 200 mm |
| **Motor size** | 84 |
| **Material of electronics housing** | Die-cast aluminium |
| **Material of impeller** | PA plastic |
| **Housing material** | PA plastic |
| **Material of mounting plate** | Sheet steel, galvanised |
| **Material of inlet nozzle** | Sheet steel, galvanised |
| **Number of blades** | 7 |
| **Stability** | Permitted harmful gas classes 1C3, 2C3 and 3C3 according to EN60721-3-1:1997 |
| **Direction of rotation** | Clockwise, seen on rotor |
| **Type of protection** | IP55 |
| **Insulation class** | "F" |
| **Humidity (F) / environmental protection class (H)** | H1 |
| **Note ambient temperature** | Occasional start-up between -40°C and -25°C is permissible.<br>For continuous operation at ambient temperatures below -25°C (e.g. refrigeration applications) we recommend our fan version with special low-temperature bearings. |
| **Max. permissible ambient motor temp. (transp./ storage)** | +80 °C |
| **Min. permissible ambient motor temp. (transp./storage)** | -40 °C |
| **Mounting position** | Shaft horizontal or rotor on bottom; rotor on top on request |
| **Condensation drainage holes** | None |
| **Operation mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Integrated PID controller<br>- Output limit<br>- Motor current limit<br>- PFC, active<br>- Soft start<br>- Over-temperature protected electronics / motor<br>- Line undervoltage / phase failure detection |
| **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 |
| **Electrical connection** | Connector with connection line |
| **Motor protection** | Thermal overload protector (TOP) wired internally |
| **Cable exit** | Variable |
| **Protection class** | I (if protective earth is connected by customer) |
| **Product conforming to standard** | EN 61800-5-1; CE |
| **Approval** | EAC; CCC; UL 1004-7 + 60730; CSA C22.2 no. 77 + CAN/CSA-E60730-1 |
| **Remark** | Perm. operating altitude max. 2000 m above sea level as per DIN 61800-5-1_2008_Sect. 4.3.6.4.1 |

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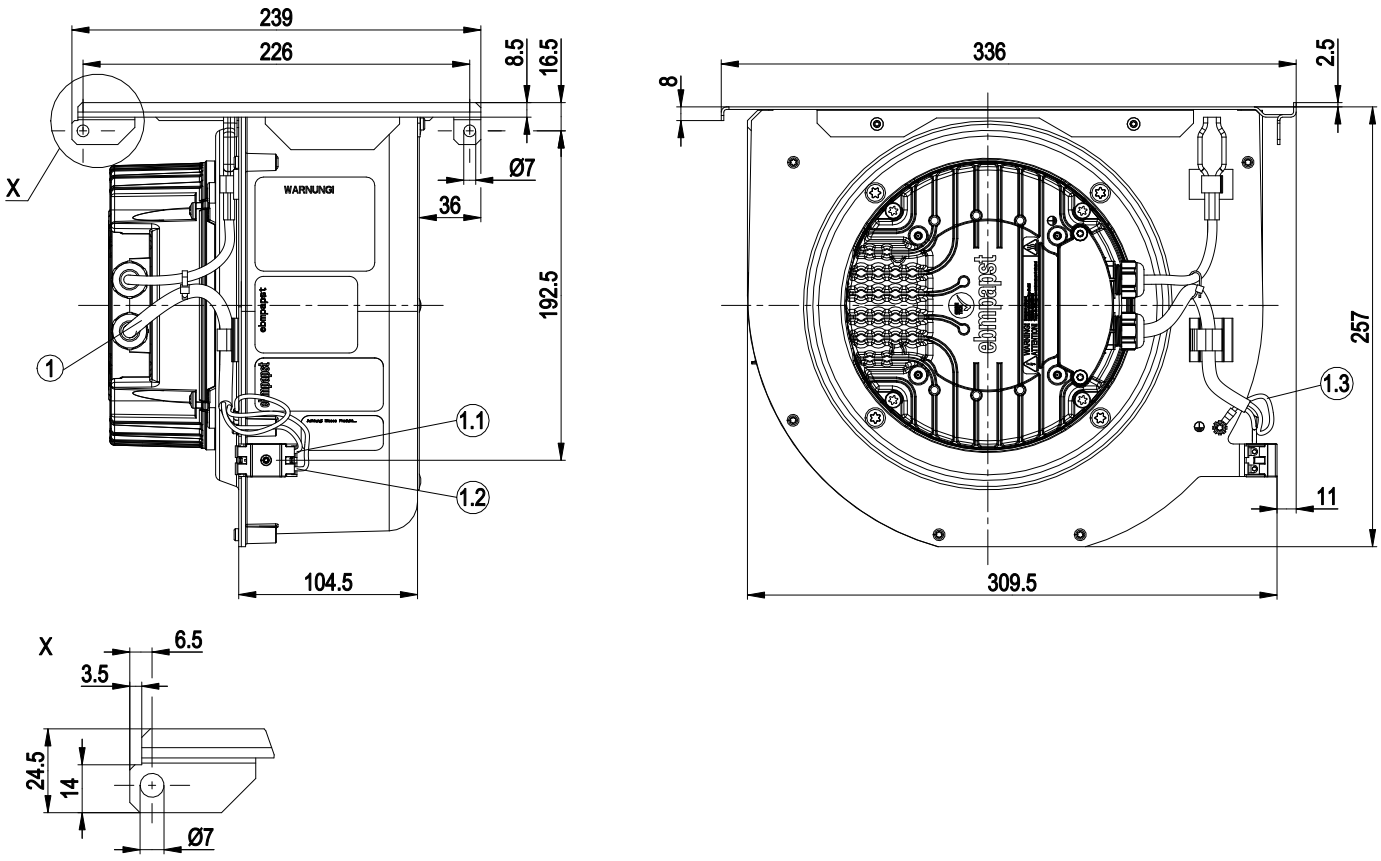
## Product drawing




| | |
|---|---|
| 1 | Connection line PVC AWG18 |
| 1.1 | N (blue) (reverse connection of N and L is also permissible) |
| 1.2 | L (black) |
| 1.3 | PE (green/yellow) |

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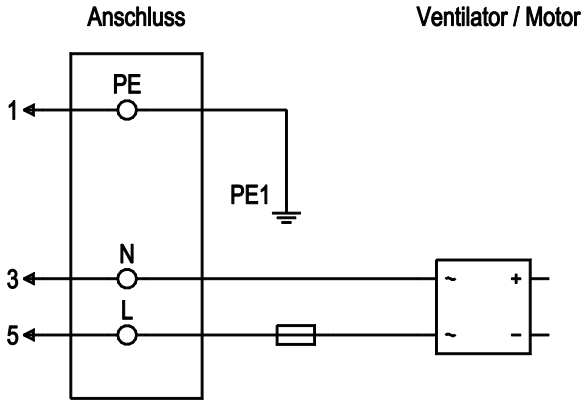
## Connection screen




| No. | Conn. | Designation | Colour | Function / assignment |
|---|---|---|---|---|
| 1 | 1 | PE | green/yellow | Protective earth |
| 1 | 3 | N | blue | Power supply, neutral conductor |
| 1 | 5 | L | black | Power supply, phase |

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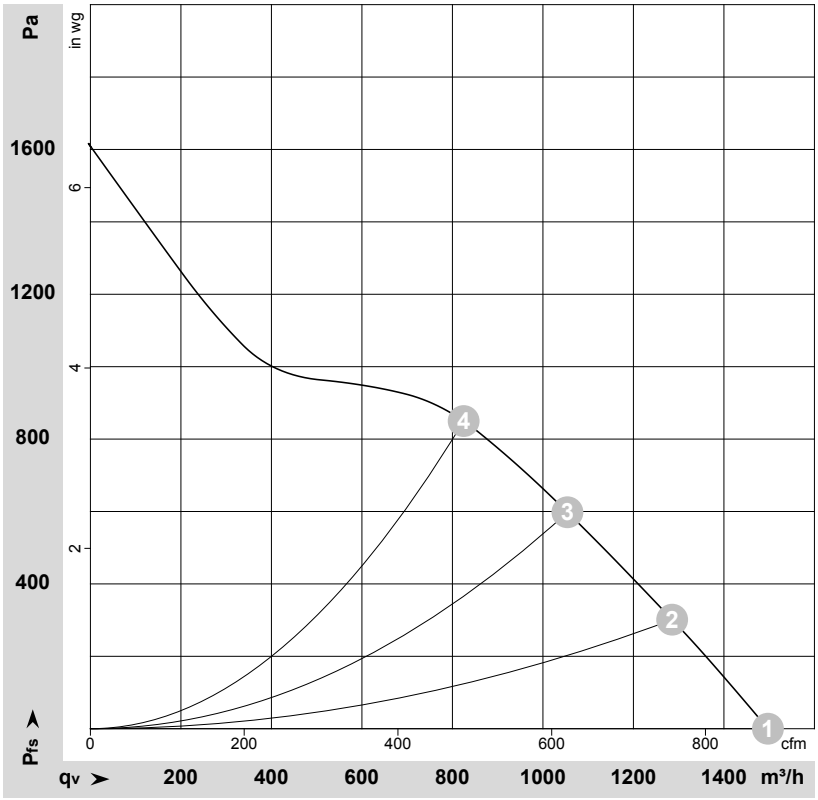
## Charts: Air flow 50 Hz




ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-167344-1

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 | $LpA_{in}$ | $LwA_{in}$ | $q_V$ | $p_{fs}$ | $q_V$ | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | dB(A) | dB(A) | $m^3/h$ | Pa | cfm | in. wg |
| 1 | 230 | 50 | 5375 | 427 | 1.91 | 83 | 87 | 1500 | 0 | 885 | 0.00 |
| 2 | 230 | 50 | 5390 | 441 | 1.96 | 81 | 86 | 1285 | 300 | 755 | 1.20 |
| 3 | 230 | 50 | 5390 | 450 | 2.00 | 79 | 84 | 1055 | 600 | 620 | 2.41 |
| 4 | 230 | 50 | 5390 | 442 | 1.97 | 79 | 85 | 825 | 850 | 485 | 3.41 |

U = Supply voltage · f = Frequency · n = Speed (rpm) · $P_{ed}$ = Power input · I = Current draw · $LpA_{in}$ = Sound pressure level inlet side · $LwA_{in}$ = Sound power level inlet side · $q_V$ = Air flow
$p_{fs}$ = Pressure increase