**G3G200-EL29-72**

# EC centrifugal fan

forward curved, single inlet

with housing (large flange)

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## Nominal data

| | |
|---|---|
| **Type** | **G3G200-EL29-72** |
| **Motor** | **M3G084-FA** |

| | | |
|---|---|---|
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Nominal voltage range | VAC | 200 .. 277 |
| Frequency | Hz | 50/60 |
| Type of data definition | | ml |
| Speed (rpm) | $min^{-1}$ | 1800 |
| Power input | W | 500 |
| Current draw | A | 3.2 |
| Min. back pressure | Pa | 60 |
| Min. ambient temperature | °C | -25 |
| Max. ambient temperature | °C | 50 |

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

## Data according to ErP directive

| | | Actual | Request 2015 |
|---|---|---|---|
| 01 Overall efficiency $\eta_{es}$ | % | 49.3 | 34.1 |
| 02 Measurement category | | A | |
| 03 Efficiency category | | Static | |
| 04 Efficiency grade N | | 59.2 | 44 |
| 05 Variable speed drive | | Yes | |

| | | |
|---|---|---|
| 09 Power input $P_{ed}$ | kW | 0.27 |
| 09 Air flow $q_v$ | $m^3/h$ | 845 |
| 09 Pressure increase $p_{fs}$ | Pa | 504 |
| 10 Speed (rpm) n | $min^{-1}$ | 2010 |
| 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-169041

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## Technical features

| | |
|---|---|
| **Mass** | 9 kg |
| **Size** | 200 mm |
| **Surface of rotor** | Coated in black |
| **Material of electronics housing** | Die-cast aluminium |
| **Material of impeller** | Sheet steel, galvanised |
| **Housing material** | Sheet steel, galvanised |
| **Direction of rotation** | Counter-clockwise, seen on rotor |
| **Type of protection** | IP 54 |
| **Insulation class** | "B" |
| **Humidity (F)/environmental protection class (H)** | F3-1 |
| **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 top; rotor on bottom on request |
| **Condensate discharge holes** | None |
| **Operation mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Output 10 VDC, max. 1.1 mA<br>- Alarm relay<br>- Motor current limit<br>- Soft start<br>- Control input 0-10 VDC / PWM<br>- Control interface with SELV potential safely disconnected from the mains<br>- Over-temperature protected electronics / motor<br>- Line undervoltage detection |
| **Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)** | <= 3.5 mA |
| **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** | 5C; C22.2 Nr.77 + CAN/CSA-E60730-1 |



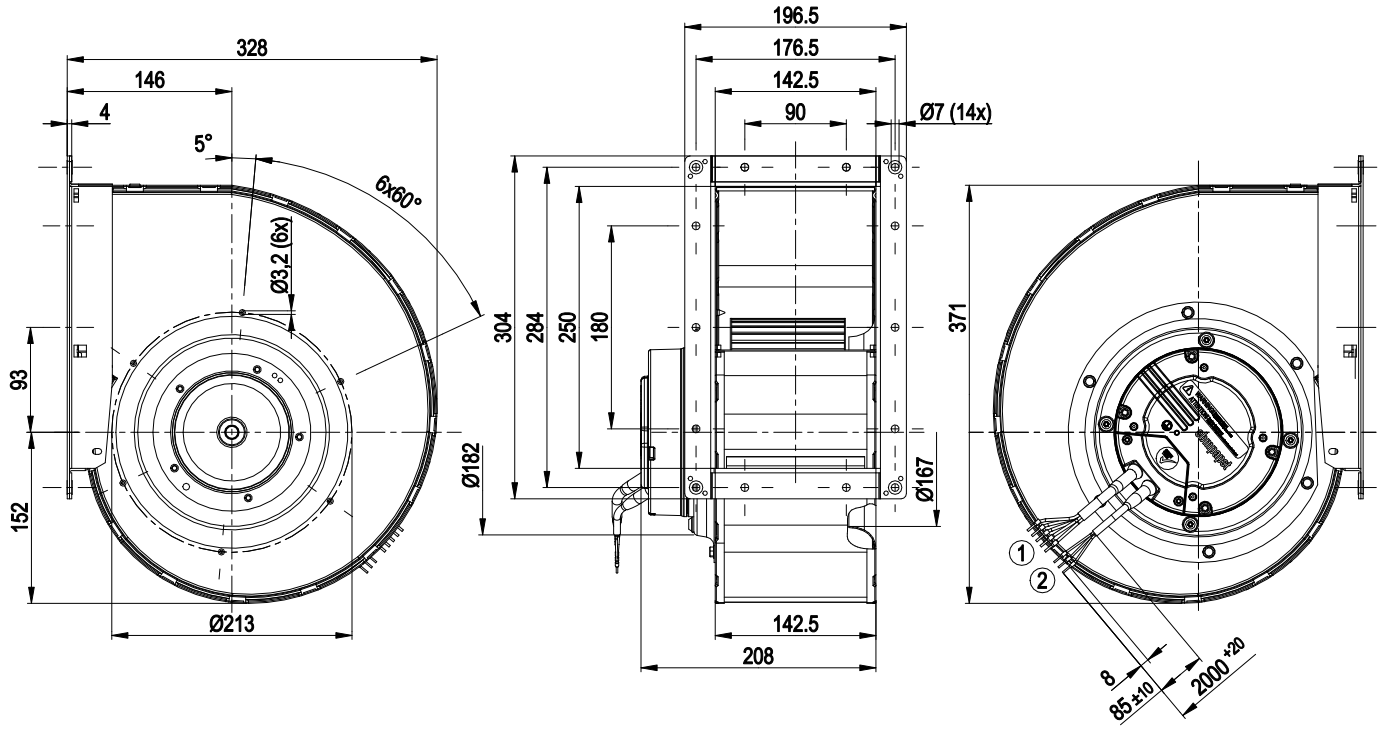
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## Product drawing




| | |
|---|---|
| 1 | Connection line PVC AWG18, 5x crimped core-end sleeves |
| 2 | Connection line PVC AWG22, 3x crimped core-end sleeves |



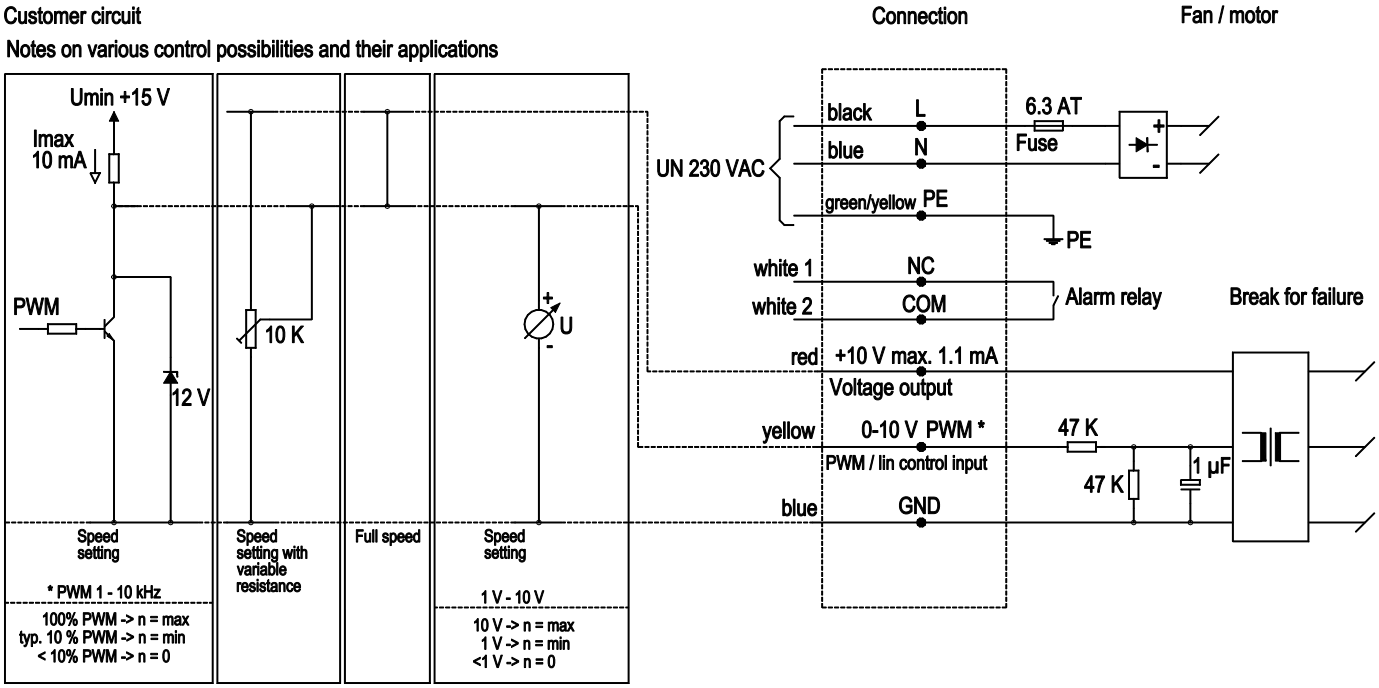
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## Connection screen





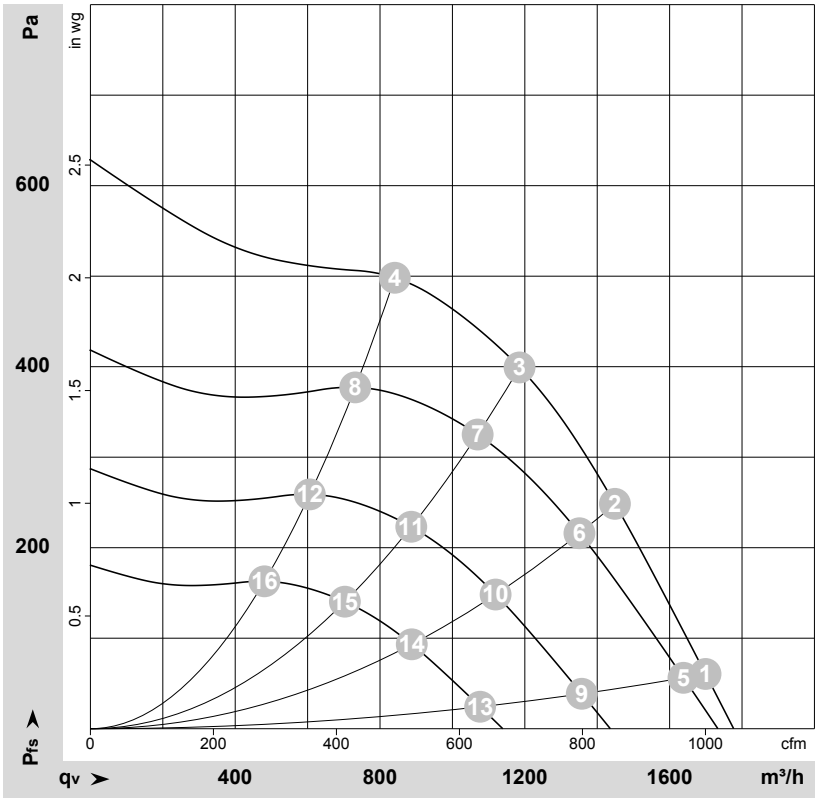

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## Charts: Air flow 50 Hz




ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-169041-1

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 | $q_V$ | $p_{fs}$ | $q_V$ | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa | cfm | inH2O |
| 1 | 230 | 50 | 1800 | 500 | 3.20 | 1700 | 60 | 1000 | 0.24 |
| 2 | 230 | 50 | 1875 | 433 | 2.81 | 1450 | 250 | 855 | 1.00 |
| 3 | 230 | 50 | 1940 | 361 | 2.35 | 1185 | 400 | 695 | 1.61 |
| 4 | 230 | 50 | 2010 | 270 | 1.78 | 840 | 500 | 495 | 2.01 |
| 5 | 230 | 50 | 1750 | 449 | 2.91 | 1640 | 57 | 965 | 0.23 |
| 6 | 230 | 50 | 1750 | 352 | 2.28 | 1350 | 218 | 795 | 0.88 |
| 7 | 230 | 50 | 1750 | 266 | 1.73 | 1070 | 326 | 630 | 1.31 |
| 8 | 230 | 50 | 1750 | 178 | 1.17 | 730 | 381 | 430 | 1.53 |
| 9 | 230 | 50 | 1450 | 255 | 1.65 | 1355 | 39 | 800 | 0.16 |
| 10 | 230 | 50 | 1450 | 200 | 1.30 | 1120 | 150 | 660 | 0.60 |
| 11 | 230 | 50 | 1450 | 151 | 0.98 | 885 | 224 | 520 | 0.90 |
| 12 | 230 | 50 | 1450 | 101 | 0.67 | 605 | 262 | 355 | 1.05 |
| 13 | 230 | 50 | 1150 | 127 | 0.83 | 1075 | 24 | 635 | 0.10 |
| 14 | 230 | 50 | 1150 | 100 | 0.65 | 890 | 94 | 525 | 0.38 |
| 15 | 230 | 50 | 1150 | 75 | 0.49 | 705 | 141 | 415 | 0.57 |
| 16 | 230 | 50 | 1150 | 50 | 0.33 | 480 | 165 | 285 | 0.66 |

U = Supply voltage · f = Frequency · n = Speed (rpm) · $P_{ed}$ = Power input · I = Current draw · $q_V$ = Air flow · $p_{fs}$ = Pressure increase



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