

G3G200-GN20-01

## EC centrifugal fan

backward curved, single inlet

with housing (flange), Gas blower for gas-condensing heating



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### Nominal data

|                           |                   |             |
|---------------------------|-------------------|-------------|
| Type                      | G3G200-GN20-01    |             |
| Motor                     | M3G084-DF         |             |
| Phase                     |                   | 1~          |
| Nominal voltage           | VAC               | 230         |
| Nominal voltage range     | VAC               | 208 .. 240  |
| Frequency                 | Hz                | 50/60       |
| Type of data definition   |                   | ml          |
| Speed                     | min <sup>-1</sup> | 6100        |
| Power input               | W                 | 890         |
| Current draw              | A                 | 4.3 @ 208 V |
| Min. ambient temperature  | °C                | -20         |
| Max. ambient temperature  | °C                | 50          |
| Min. temp. of flow medium | °C                | 0           |
| Max. temp. of flow medium | °C                | 50          |

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



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## Technical features

|  |   |
|--|---|
| <b>Mass</b>  | 9.2 kg  |
| <b>Size</b>  | 200 mm  |
| <b>Surface of rotor</b>  | Coated in black   |
| <b>Material of protective cover</b>                            | Polyflam RPP 374-ND CS1 (UL 97-V0)  |
| <b>Material of impeller</b>                                    | Aluminium sheet   |
| <b>Housing material</b>  | Die-cast aluminium  |
| <b>Number of blades</b>  | 7   |
| <b>Direction of rotation</b>                                   | Clockwise, seen on rotor  |
| <b>Type of protection</b>                                      | IP 20   |
| <b>Insulation class</b>  | "B"   |
| <b>Max. permissible ambient motor temp. (transp./ storage)</b> | +80 °C  |
| <b>Min. permissible ambient motor temp. (transp./storage)</b>  | -40 °C  |
| <b>Mounting position</b>                                       | Any   |
| <b>Condensate discharge holes</b>                              | Rotor-side  |
| <b>Operation mode</b>  | S1  |
| <b>Motor bearing</b>   | Ball bearing  |
| <b>Technical features</b>                                      | <ul style="list-style-type: none"> <li>- Tach output</li> <li>- Over-temperature-protected electronics / motor</li> <li>- PFC, active</li> <li>- Motor current limit</li> <li>- Line undervoltage / phase failure detection</li> <li>- PWM control input</li> <li>- Control input 0-10 V</li> </ul> |
| <b>EMC interference immunity</b>                               | Acc. to EN 61000-6-2 (industrial environment)   |
| <b>EMC interference emission</b>                               | Acc. to EN 61000-6-4 (industrial environment)   |
| <b>EMC harmonics</b>   | Acc. to EN 61000-3-2/3  |
| <b>Leakage current</b>   | <= 3.5 mA   |
| <b>Electrical leads</b>  | With plug   |
| <b>Motor protection</b>  | Locked-rotor protection   |
| <b>Protection class</b>  | I   |
| <b>Approval</b>  | CSA C22.2 Nr.113; UL 507  |

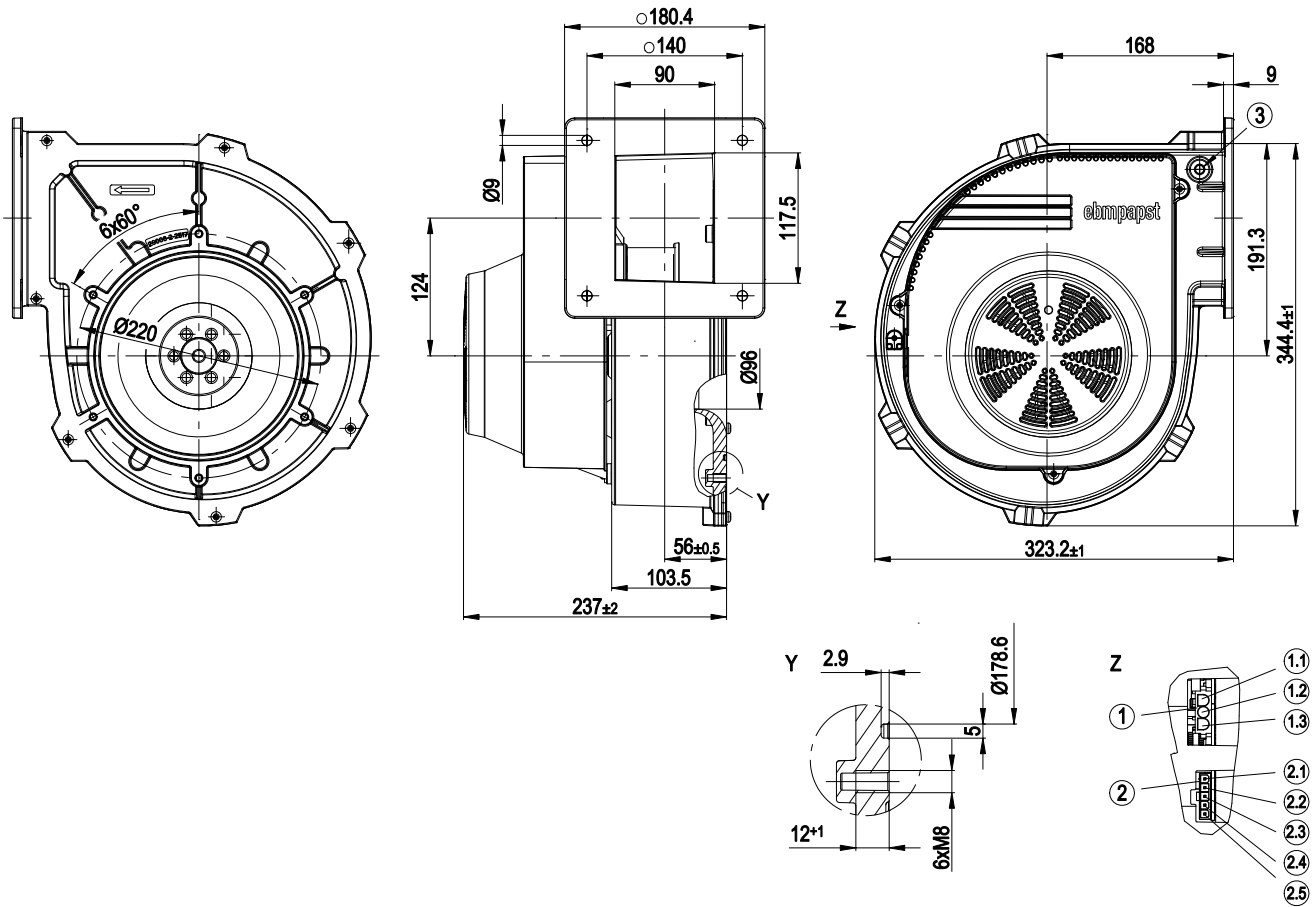


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## Product drawing



|     |   |
|-----|---|
| Y   | Detail Y  |
| Z   | View Z / plug assignment  |
| 1   | 3-pole strip to fit mating connector (not included in standard scope of delivery) Tyco No. 350766-1, female connector Tyco No. 926884-1       |
| 1.1 | L   |
| 1.2 | N   |
| 1.3 | PE  |
| 2   | 5-pole strip to fit mating connector (not included in standard scope of delivery) Molex No. 39-01-4050, female connector Molex No. 39-00-0059 |
| 2.1 | +   |
| 2.2 | Speed monitoring  |
| 2.3 | 0-10 VDC  |
| 2.4 | PWM input   |
| 2.5 | -   |
| 3   | Pressure tap optionally available   |

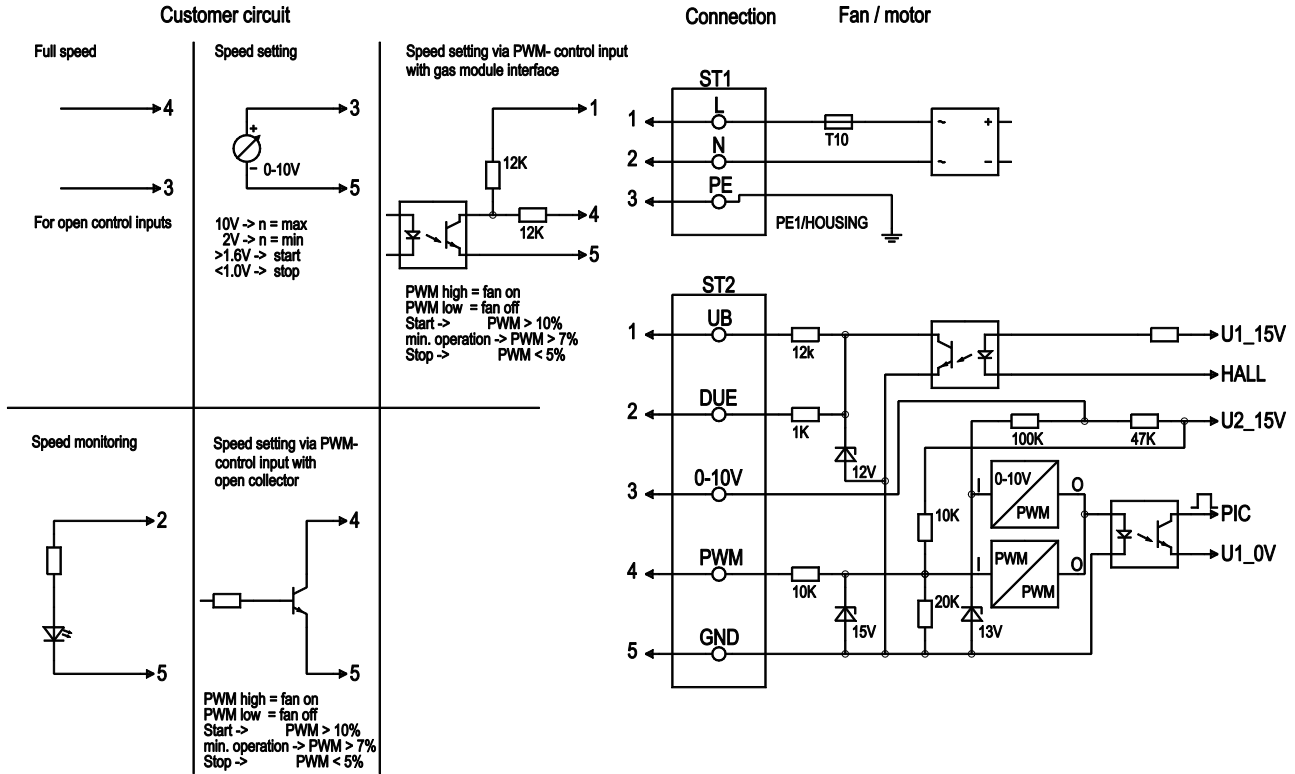


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## Connection screen



| No. | Pin     | Signal   | Function / assignment  |
|-----|---------|----------|--|
| ST1 | 1; 2; 3 | L; N; PE | Power supply 230 VAC, 50 - 60 Hz, phase, neutral, protective earth |
| ST2 | 1       | UB       | External voltage 16 - 45 VDC, residual ripple +/- 3.5%, SELV       |
| ST2 | 2       | DUE      | Speed monitoring, 3 pulses per revolution, SELV                    |
| ST2 | 3       | 0 - 10 V | Control input 0 - 10 V, impedance 100k, SELV                       |
| ST2 | 4       | PWM      | Control input PWM, 1 - 6 kHz, SELV                                 |
| ST2 | 5       | GND      | GND - Connection for control interface, SELV                       |

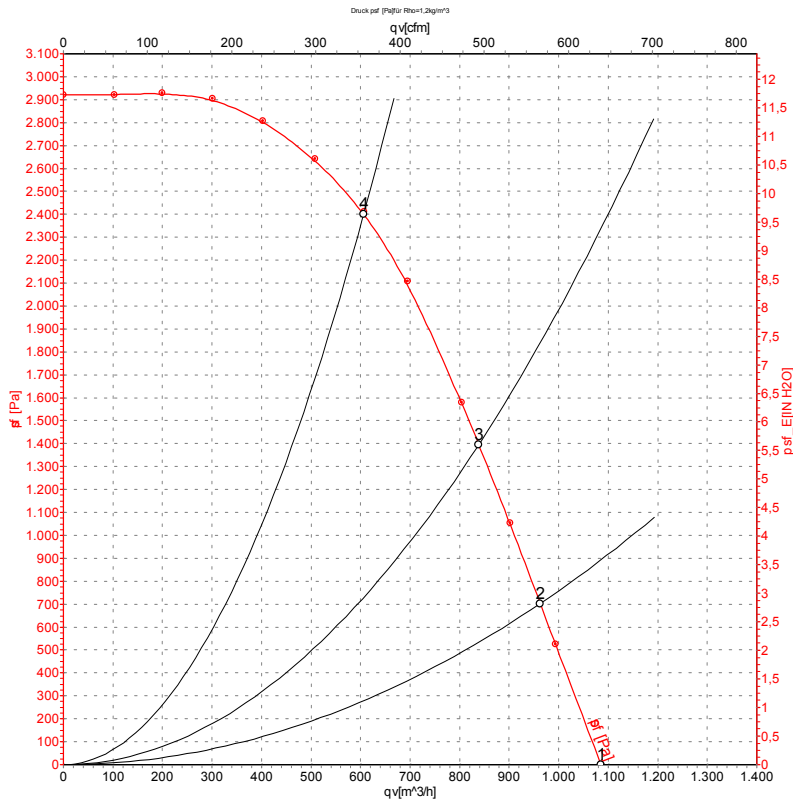


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## Charts: Air flow 50 Hz



Measurement: LU-105042

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: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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>e</sub> | I    | q <sub>v</sub>    | P <sub>sf</sub> |
|---|-----|----|-------------------|----------------|------|-------------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m <sup>3</sup> /h | Pa              |
| 1 | 230 | 50 | 6100              | 829            | 3.61 | 1100              | 0               |
| 2 | 230 | 50 | 6100              | 878            | 3.83 | 965               | 700             |
| 3 | 230 | 50 | 6100              | 890            | 3.87 | 840               | 1400            |
| 4 | 230 | 50 | 6100              | 817            | 3.57 | 605               | 2400            |

