

G3G140-AW17-33

# EC centrifugal fan

forward-curved, single-intake  
with housing (flange)



G3G140-AW17-33 ebmpapst Datasheet  
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## Nominal data

|                          |                   |       |
|--------------------------|-------------------|-------|
| Type                     | G3G140-AW17-33    |       |
| Motor                    | M3G055-CF         |       |
| Phase                    |                   | 1~    |
| Nominal voltage          | VAC               | 230   |
| Frequency                | Hz                | 50/60 |
| Speed                    | min <sup>-1</sup> | 2550  |
| Power consumption        | W                 | 116   |
| Current draw             | A                 | 0.9   |
| Min. ambient temperature | °C                | -25   |
| Max. ambient temperature | °C                | 40    |

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



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## Technical description

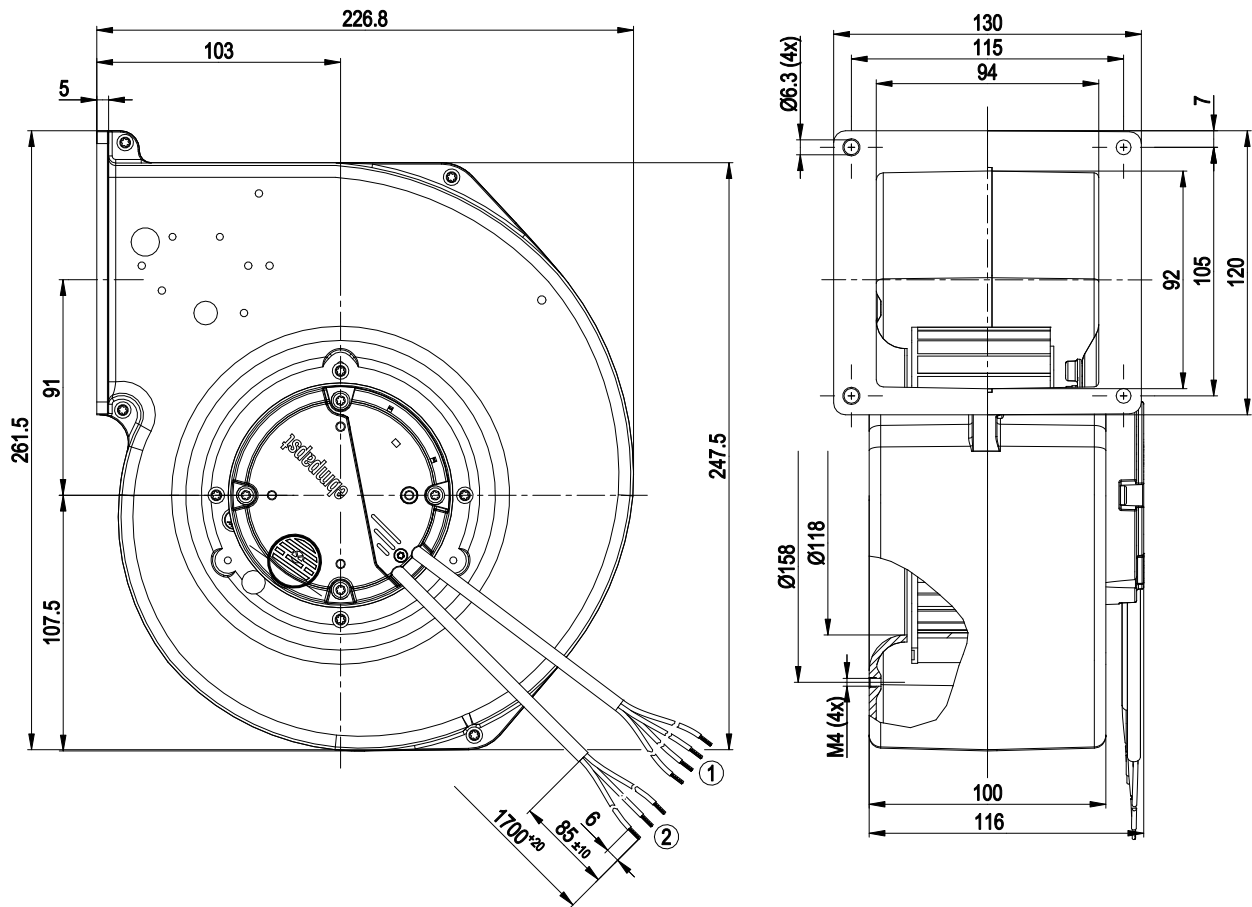
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Weight                                                                     | 2.6 kg                                                                                                                                                                                                                                                                                                                                                                                                  |
| Fan size                                                                   | 140 mm                                                                                                                                                                                                                                                                                                                                                                                                  |
| Rotor surface                                                              | Thick-film passivated                                                                                                                                                                                                                                                                                                                                                                                   |
| Impeller material                                                          | PA plastic                                                                                                                                                                                                                                                                                                                                                                                              |
| Housing material                                                           | Die-cast aluminum                                                                                                                                                                                                                                                                                                                                                                                       |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                                                                                                                                                                                                                                                                                                                                                                          |
| Degree of protection                                                       | IP44; installation- and position-dependent                                                                                                                                                                                                                                                                                                                                                              |
| Insulation class                                                           | "B"                                                                                                                                                                                                                                                                                                                                                                                                     |
| Moisture (F) / Environmental (H) protection class                          | F3-1                                                                                                                                                                                                                                                                                                                                                                                                    |
| Max. permitted ambient temp. for motor (transport/storage)                 | + 80 °C                                                                                                                                                                                                                                                                                                                                                                                                 |
| Min. permitted ambient temp. for motor (transport/storage)                 | - 40 °C                                                                                                                                                                                                                                                                                                                                                                                                 |
| Installation position                                                      | Shaft horizontal or rotor on bottom; rotor on top on request                                                                                                                                                                                                                                                                                                                                            |
| Condensation drainage holes                                                | On rotor side                                                                                                                                                                                                                                                                                                                                                                                           |
| Mode                                                                       | S1                                                                                                                                                                                                                                                                                                                                                                                                      |
| Motor bearing                                                              | Ball bearing                                                                                                                                                                                                                                                                                                                                                                                            |
| Technical features                                                         | <ul style="list-style-type: none"> <li>- Output 10 VDC, max. 1.1 mA</li> <li>- Tach output</li> <li>- Motor current limitation</li> <li>- Soft start</li> <li>- Set value input Lin 0-10 VDC / PWM (1.7 V corresponds to V=min, 10 V corresponds to V=max)</li> <li>- Control interface with SELV potential safely disconnected from supply</li> <li>- Thermal overload protection for motor</li> </ul> |
| EMC immunity to interference                                               | According to EN 61000-6-2 (industrial environment)                                                                                                                                                                                                                                                                                                                                                      |
| EMC circuit feedback                                                       | According to EN 61000-3-2/3                                                                                                                                                                                                                                                                                                                                                                             |
| EMC interference emission                                                  | According to EN 55022 (Class B, household environment)                                                                                                                                                                                                                                                                                                                                                  |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | <= 3.5 mA                                                                                                                                                                                                                                                                                                                                                                                               |
| Motor protection                                                           | Thermal overload protector (TOP) internally connected                                                                                                                                                                                                                                                                                                                                                   |
| With cable                                                                 | Variable                                                                                                                                                                                                                                                                                                                                                                                                |
| Protection class                                                           | I (with customer connection of protective earth)                                                                                                                                                                                                                                                                                                                                                        |
| Conformity with standards                                                  | EN 60335-1                                                                                                                                                                                                                                                                                                                                                                                              |
| Approval                                                                   | EAC                                                                                                                                                                                                                                                                                                                                                                                                     |



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## Product drawing



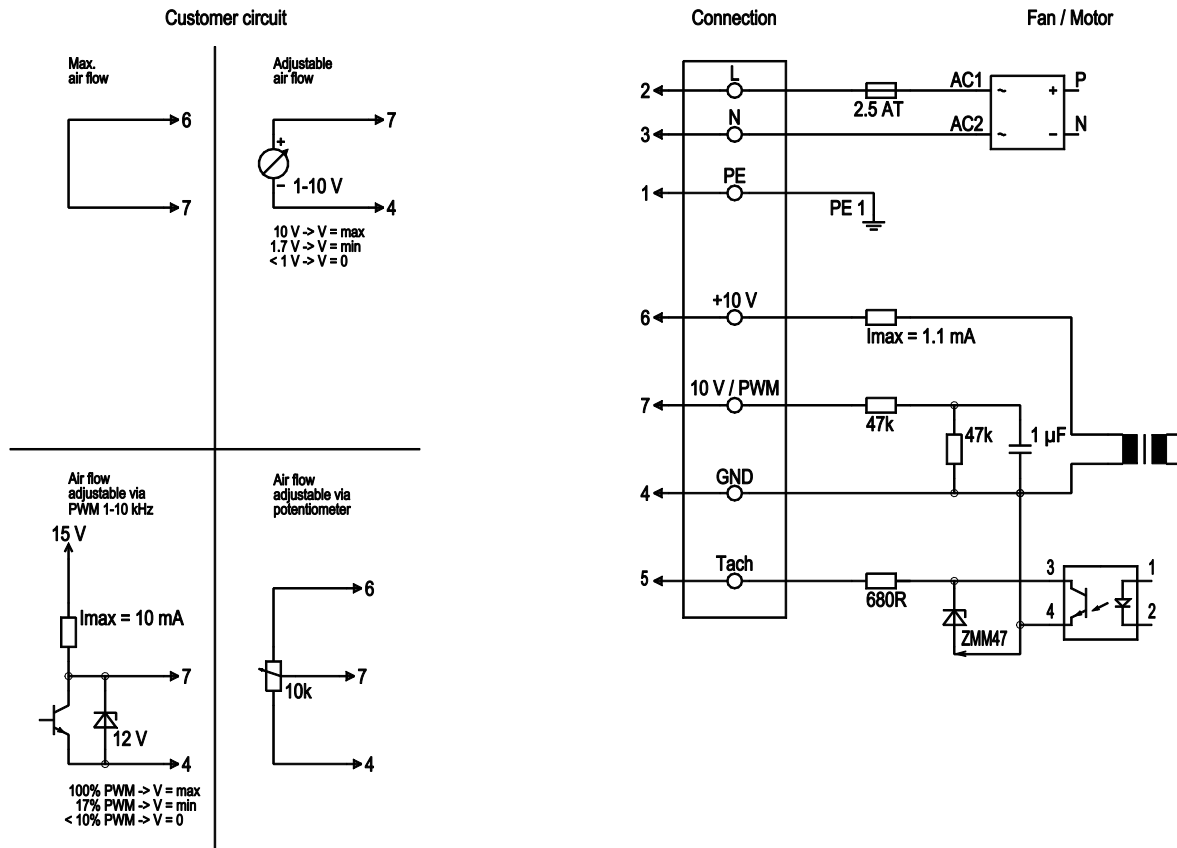
- |   |                                                        |
|---|--------------------------------------------------------|
| 1 | Cable PVC 3G 0.5 mm <sup>2</sup> , 3x crimped splices  |
| 2 | Cable PVC 4x 0.25 mm <sup>2</sup> , 4x crimped splices |



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## Connection diagram

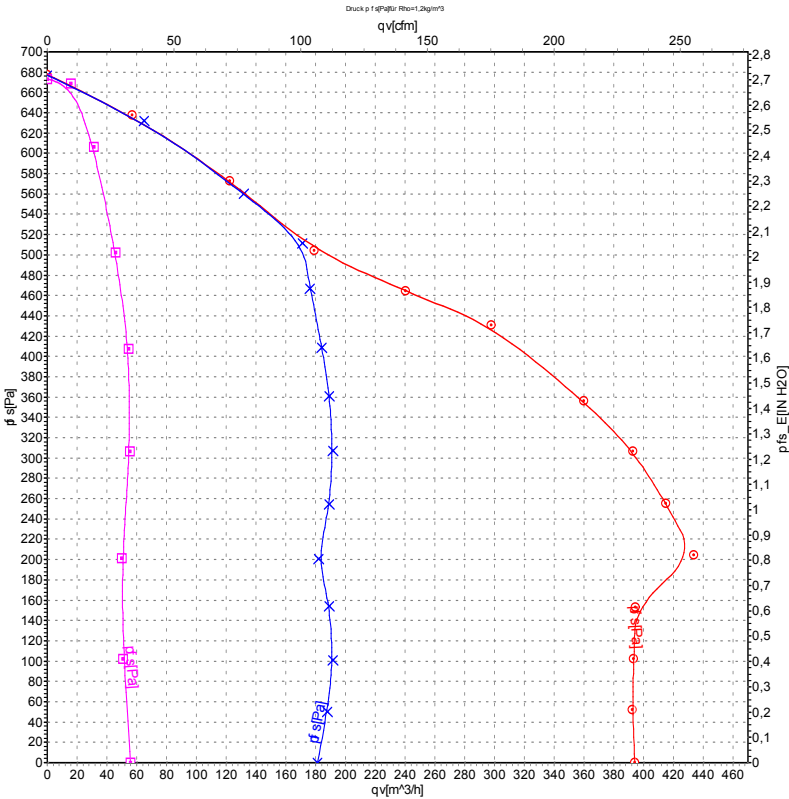


| No. | Conn. | Designation | Color        | Function/assignment                                                                       |
|-----|-------|-------------|--------------|-------------------------------------------------------------------------------------------|
|     | 2     | L           | brown        | Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range                           |
|     | 3     | N           | blue         | Neutral conductor                                                                         |
|     | 1     | PE          | green/yellow | Protective earth                                                                          |
|     | 7     | 0-10 V PWM  | yellow       | Control input 0-10 V or PWM, electrically isolated                                        |
|     | 5     | Tach        | white        | Tach output: open collector, 1 pulse per revolution, electrically isolated                |
|     | 6     | 10V         | red          | max. 1.1 mA, voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof |
|     | 4     | GND         | blue         | GND connection for control interface                                                      |

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Curves: Air performance 50 Hz



Measurement: LU-76354-1  
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Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

