**G3G160-AD54-20**

# EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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## Nominal data

| | | |
|---|---|---|
| **Type** | **G3G160-AD54-20** | |
| **Motor** | **M3G074-BF** | |
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Frequency | Hz | 50 |
| Method of obtaining data | | ml |
| Speed (rpm) | $min^{-1}$ | 2460 |
| Power consumption | W | 160 |
| Current draw | A | 1.3 |
| Min. ambient temperature | °C | -25 |
| Max. ambient temperature | °C | 60 |

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** | 3.2 kg |
| **Fan size** | 160 mm |
| **Rotor surface** | Thick-film passivated |
| **Impeller material** | Sheet steel, galvanized |
| **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 top; rotor on bottom on request |
| **Condensation drainage holes** | None |
| **Mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Output 10 VDC, max. 1.1 mA<br>- Tach output<br>- Motor current limitation<br>- Soft start<br>- Set value input Lin 0-10 VDC / PWM (1.7 V corresponds to V=min, 10 V corresponds to V=max)<br>- Control interface with SELV potential safely disconnected from the mains<br>- Thermal overload protection for motor |
| **EMC immunity to interference** | According to EN 61000-6-2 |
| **EMC circuit feedback** | According to EN 61000-3-2/3 |
| **EMC interference emission** | According to EN 61000-6-3 (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 |



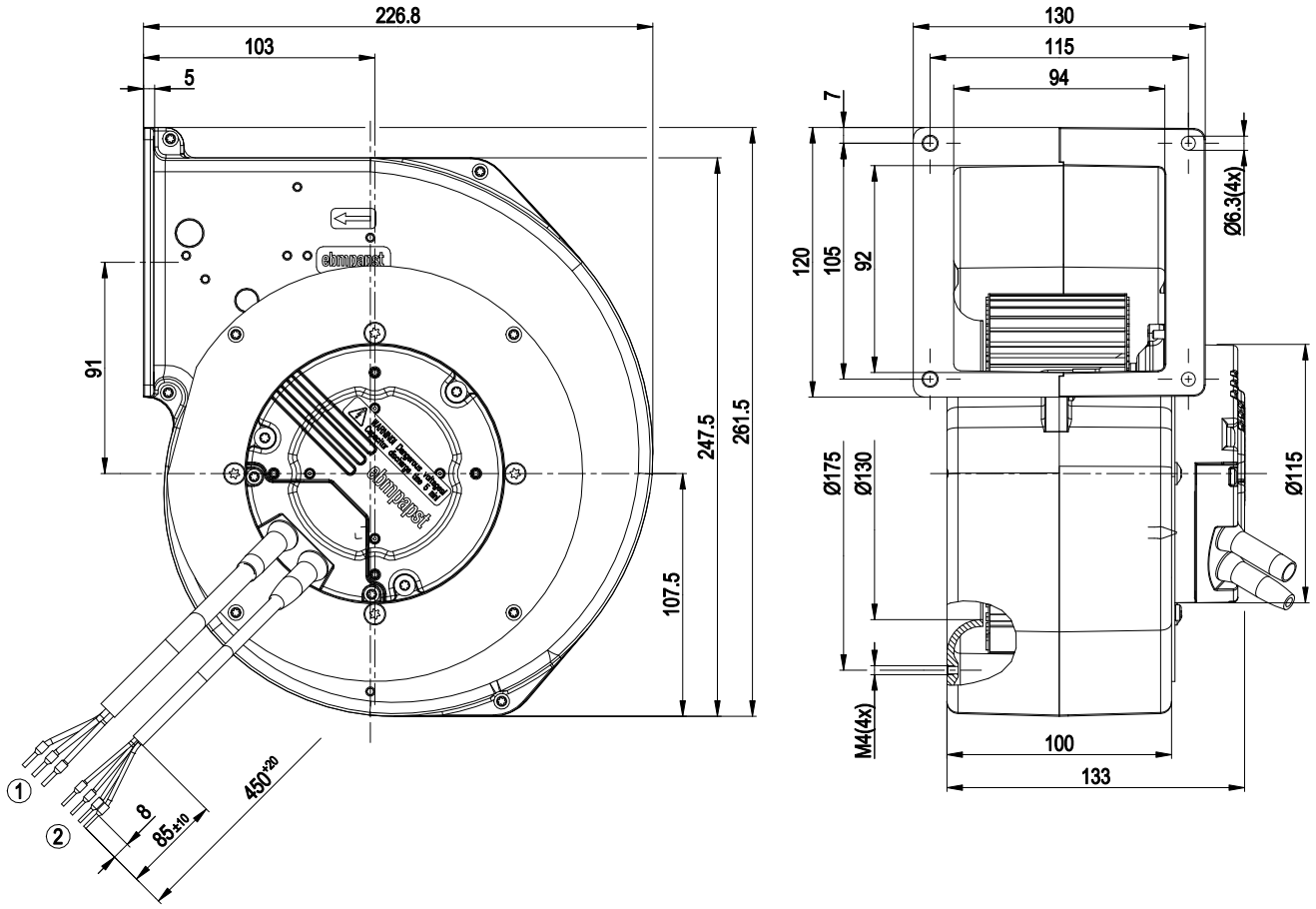
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## Product drawing




| | |
|---|---|
| 1 | Cable PVC AWG18, 3x crimped ferrules |
| 2 | Cable PVC AWG22, 4x crimped ferrules |



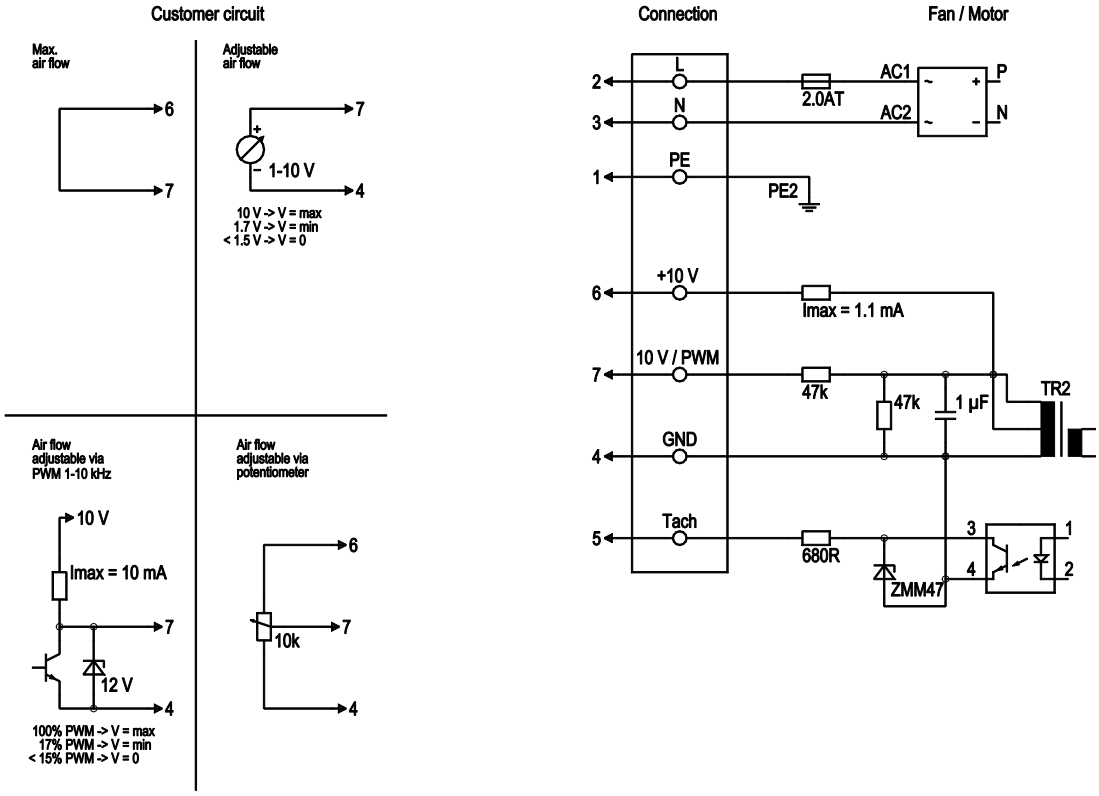
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## Connection diagram




| No. | Conn. | Designation | Color | Function/assignment |
|---|---|---|---|---|
| | 2 | L | black | 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 / max 1.1 mA | red | Voltage output 10 V / 1 mA, electrically isolated |
| | 4 | GND | blue | GND connection for control interface |



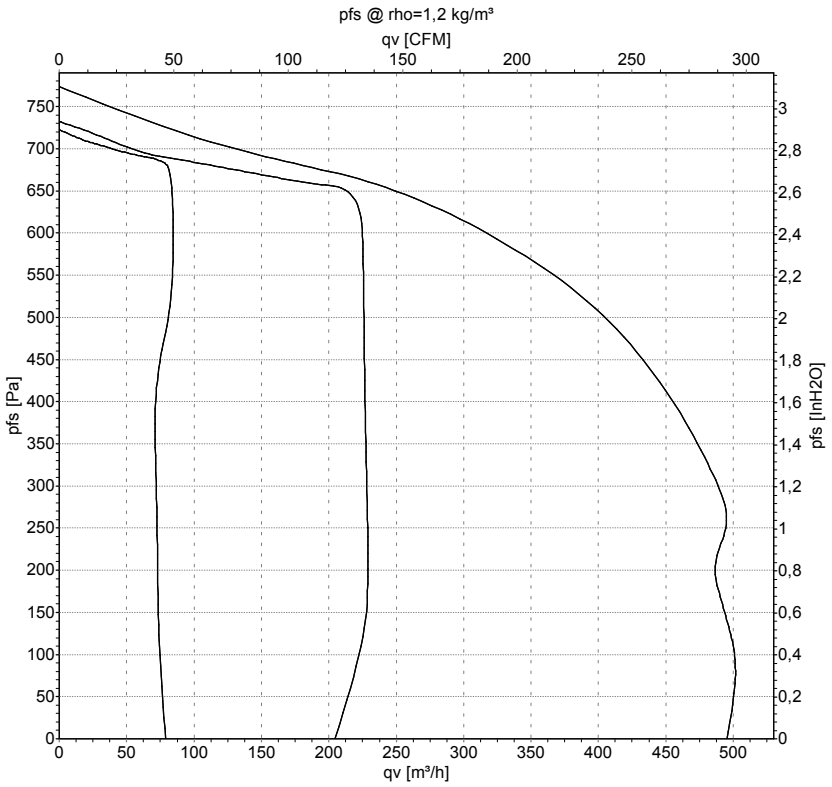
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## Curves: Air performance 50 Hz




Measurement: LU-133302-1
Measurement: LU-129130-1
Measurement: LU-129131-1

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.



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