**G3G146-ED19-19**

# EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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## Nominal data

| | | |
|---|---|---|
| **Type** | **G3G146-ED19-19** | |
| **Motor** | **M3G055-CF** | |
| Nominal voltage | VDC | 380 |
| Nominal voltage range | VDC | 370 .. 390 |
| Method of obtaining data | | fa |
| Speed (rpm) | min$^{-1}$ | 1930 |
| Power consumption | W | 110 |
| Current draw | A | 0.5 |
| 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** | 146 mm |
| **Rotor surface** | Thick-film passivated |
| **Impeller material** | Sheet steel, galvanized |
| **Housing material** | Sheet steel, painted black |
| **Direction of rotation** | Counterclockwise, viewed toward rotor |
| **Degree of protection** | IP54 |
| **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** | Any |
| **Condensation drainage holes** | None, open rotor |
| **Mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Output 10 VDC, max. 10 mA<br>- Fault output (open collector)<br>- Power limiter<br>- Motor current limitation<br>- Soft start<br>- Control input 0-10 VDC / PWM<br>- Control interface with SELV potential safely disconnected from the mains<br>- Thermal overload protection for electronics/motor |
| **Motor protection** | Locked-rotor protection |
| **With cable** | Variable |
| **Protection class** | I (with customer connection of protective earth) |
| **Conformity with standards** | EN 60335-1; CE |



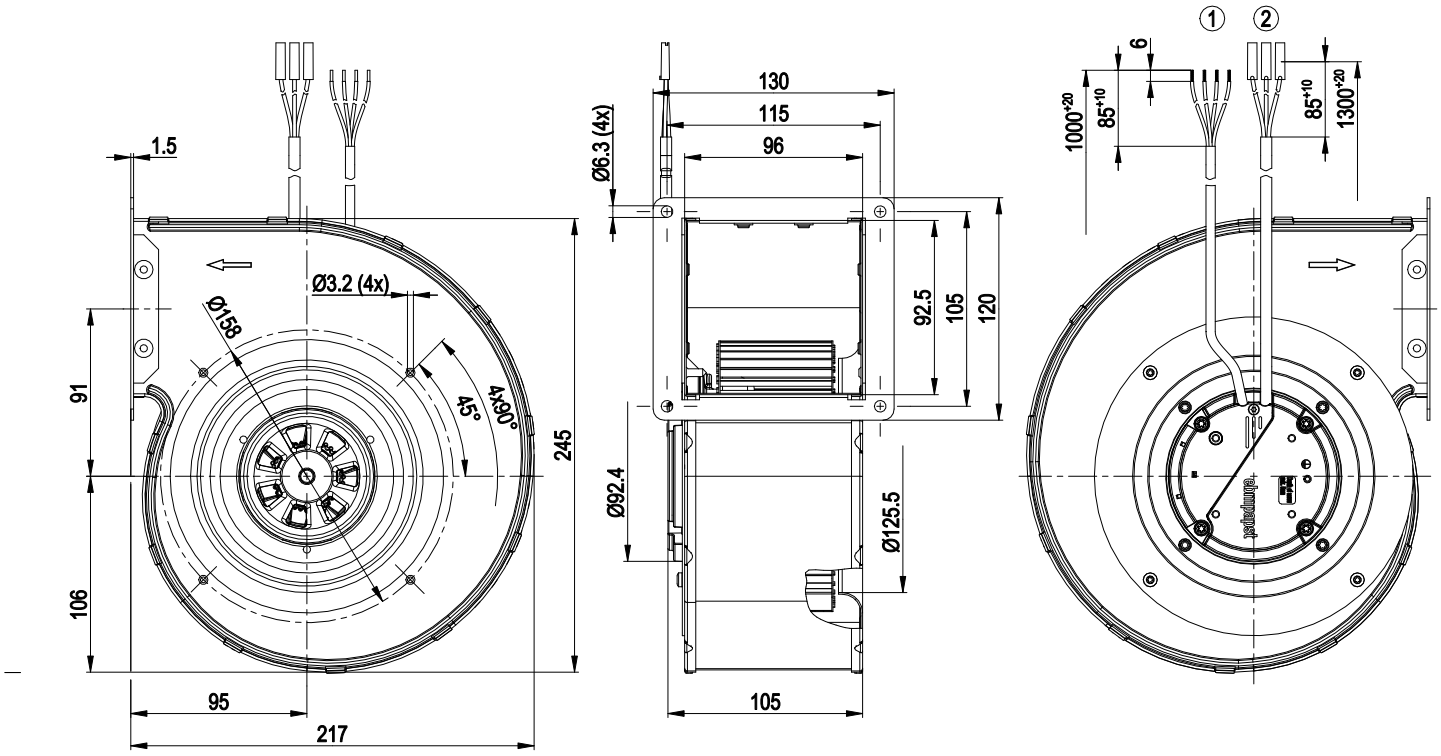
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## Product drawing




| | |
|---|---|
| 1 | Cable halogen-free, 4x 0.25 mm², 4x crimped splices |
| 2 | Cable halogen-free, 3G 0.5 mm², 3x flat push-on receptacle Stocko RSB 8100 F2.8-1, 3x insulator Stocko EH 657.100 |



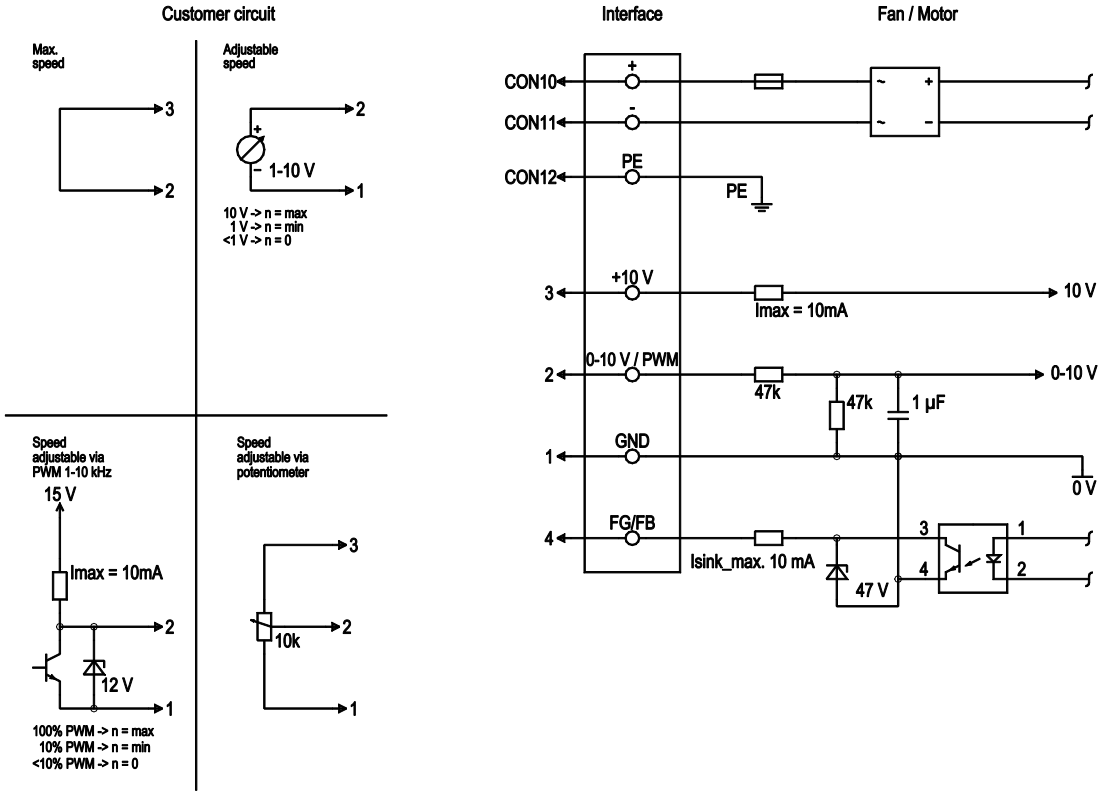
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## Connection diagram




| No. | Conn. | Designation | Color | Function/assignment |
|---|---|---|---|---|
| | CON10 | + | brown | Supply connection, power supply +, voltage range see nameplate |
| | CON11 | - | blue | Supply connection, power supply -, voltage range see nameplate |
| | CON12 | PE | green/yellow | Ground connection |
| | 3 | +10 V | red | Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV |
| | 2 | 0- 10V PWM | yellow | 0-10 V / PWM control input, Ri=100 kΩ, SELV |
| | 1 | GND | blue | Reference ground for control interface, SELV |
| | 4 | FG/FB | white | Fan good / fan bad: open collector, fan good = low, electrically isolated, Isink max = 10 mA |
| | | | | Attention! Device may only be operated with control unit 61423-1-0173. This is not included in scope of delivery. |



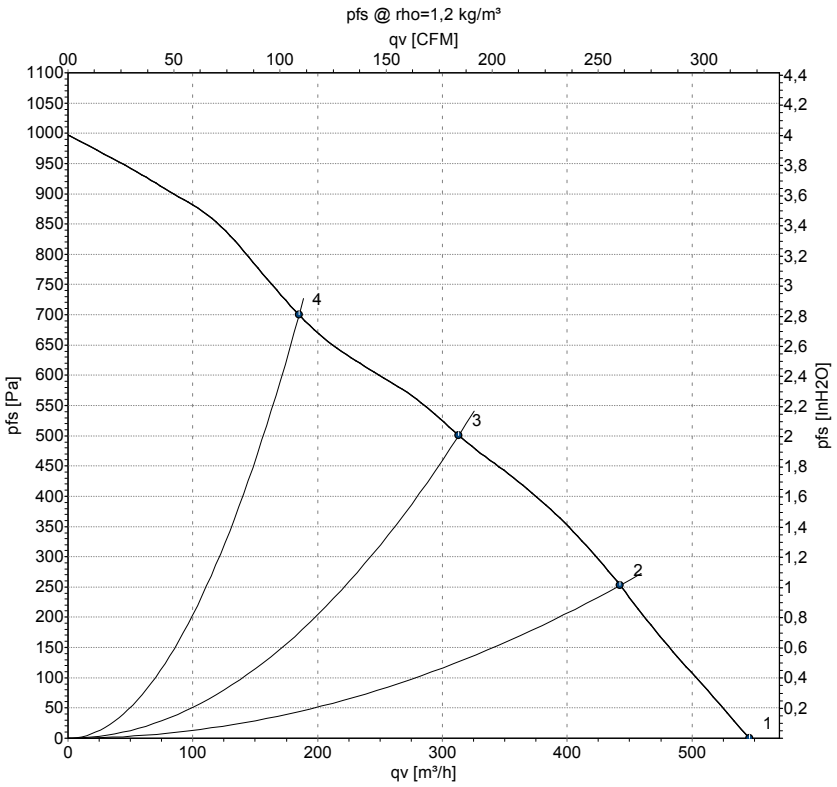
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## Curves: Air performance




Measurement: LU-156812-1

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.

## Measured values

| | U | n | $P_{ed}$ | I | $LpA_{in}$ | $LwA_{in}$ | qv | $p_{fs}$ | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | $min^{-1}$ | W | A | dB(A) | dB(A) | $m^3/h$ | Pa | CFM | inH2O |
| 1 | 380 | 1930 | 110 | 0.50 | 64 | 71 | 545 | 0 | 320 | 0.00 |
| 2 | 380 | 2275 | 110 | 0.50 | 64 | 70 | 440 | 250 | 260 | 1.00 |
| 3 | 380 | 2760 | 110 | 0.50 | 65 | 71 | 315 | 500 | 185 | 2.01 |
| 4 | 380 | 3315 | 110 | 0.50 | 70 | 76 | 185 | 700 | 110 | 2.81 |

U = Power supply · n = Speed (rpm) · $P_{ed}$ = Power consumption · I = Current draw · $LpA_{in}$ = Sound pressure level intake side · $LwA_{in}$ = Sound power level intake side · qv = Air flow
$p_{fs}$ = Pressure increase



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