**G1G097-AA05-14**

# EC centrifugal fan

forward-curved, single-intake

with housing (without flange)



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## Nominal data

| | | |
|---|---|---|
| **Type** | **G1G097-AA05-14** | |
| **Motor** | **M1G045-BE** | |
| Nominal voltage | VDC | 24 |
| Nominal voltage range | VDC | 16 .. 28 |
| Method of obtaining data | | fa |
| Speed (rpm) | $min^{-1}$ | 2550 |
| Power consumption | W | 15 |
| Current draw | A | 0.7 |
| 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** | 0.8 kg |
| **Fan size** | 97 mm |
| **Rotor surface** | Thick-film passivated |
| **Impeller material** | Sheet steel, galvanized |
| **Housing material** | Sheet steel, galvanized |
| **Direction of rotation** | Clockwise, viewed toward rotor |
| **Degree of protection** | IP22 |
| **Insulation class** | "B" |
| **Moisture (F) / Environmental (H) protection class** | H0 - dry environment |
| **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 |
| **Mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Tach output<br>- Soft start<br>- Control input 10-0 VDC / PWM |
| **Motor protection** | Reverse polarity and locked-rotor protection |
| **With cable** | Axial |
| **Protection class** | I (if protective earth is connected by customer to the housing's connection point) |
| **Conformity with standards** | EN 60950-1 |

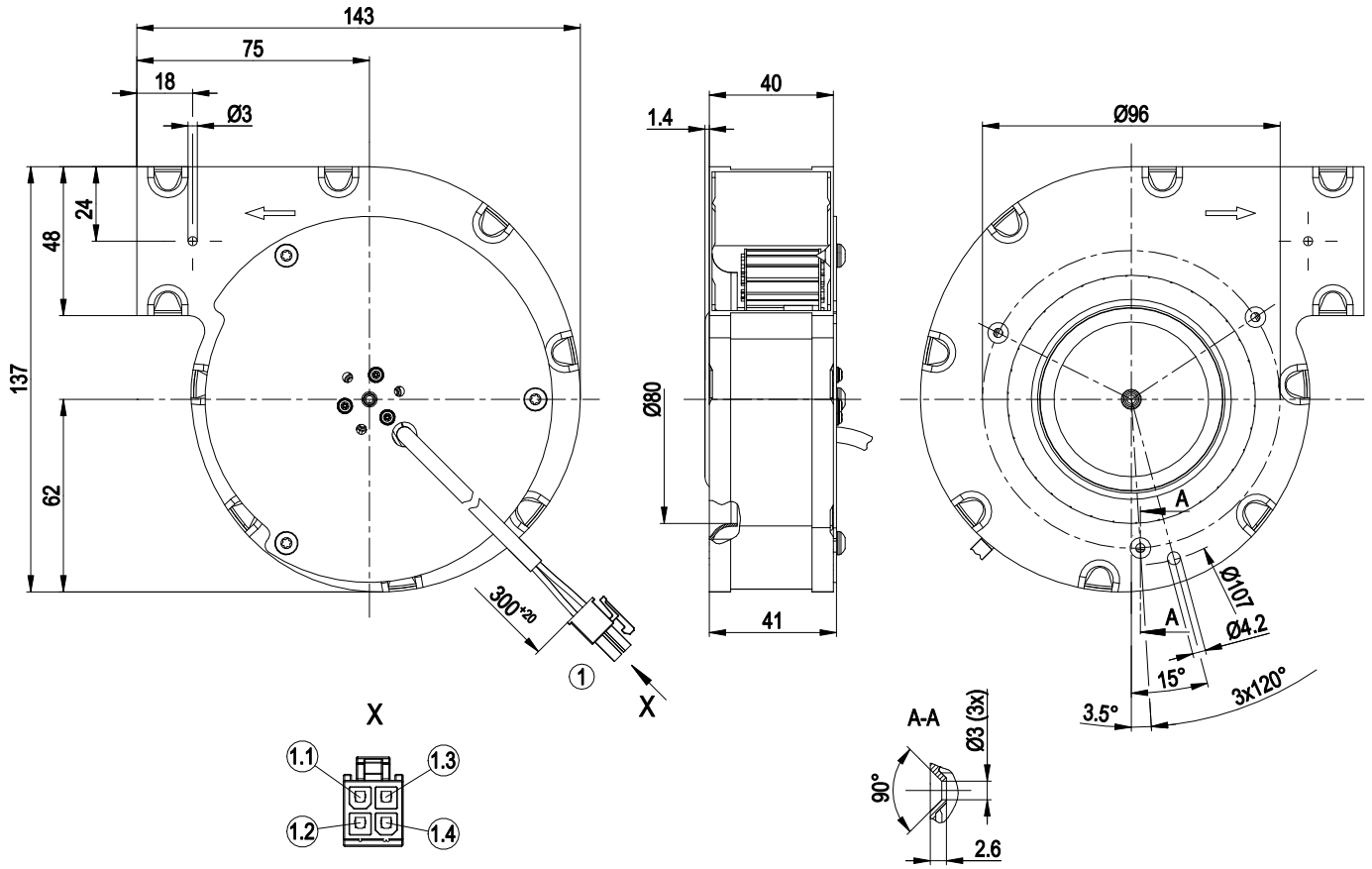


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## Product drawing




| | |
|---|---|
| 1 | Cable PVC AWG22, 4-pole connector housing Molex 39-01-2045, 4x socket Molex 39-00-0065 |
| 1.1 | Tach (white) |
| 1.2 | GND (blue) |
| 1.3 | 0-10 VDC (yellow) |
| 1.4 | UN +24 VDC (red) |



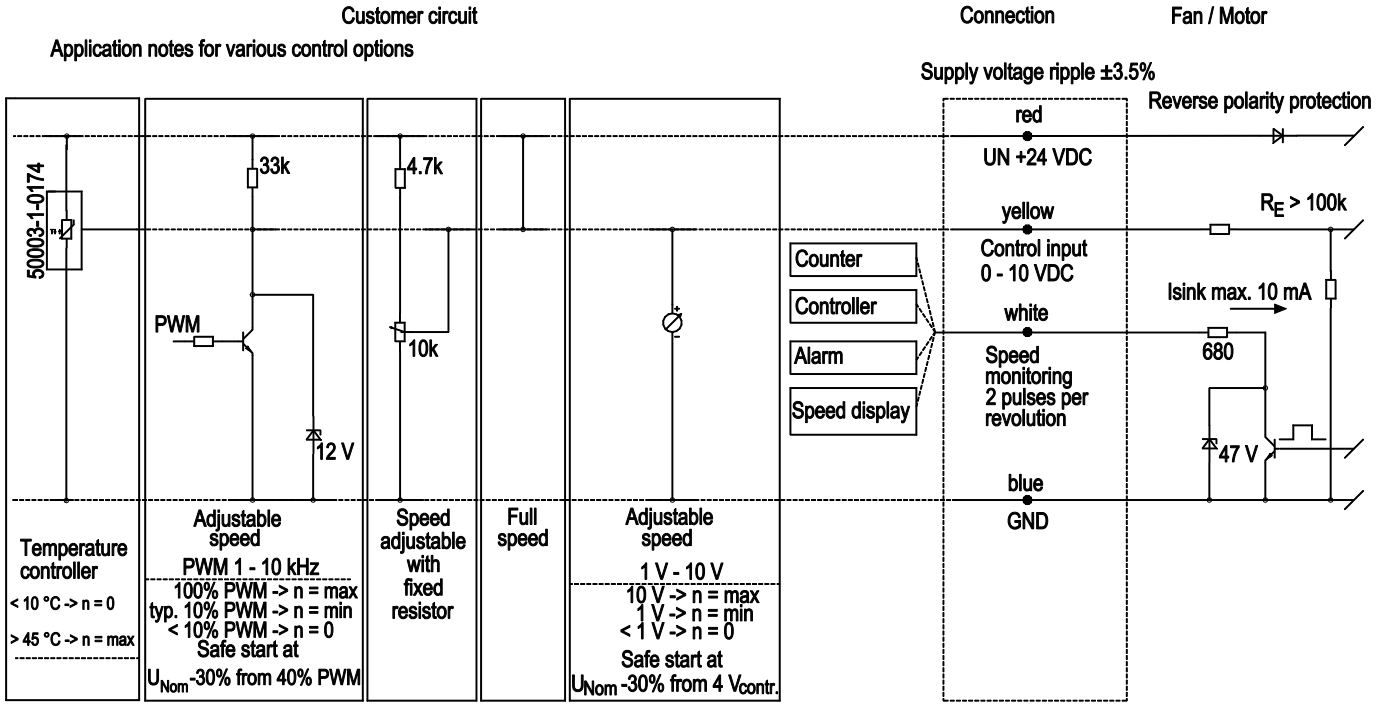
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## Connection diagram





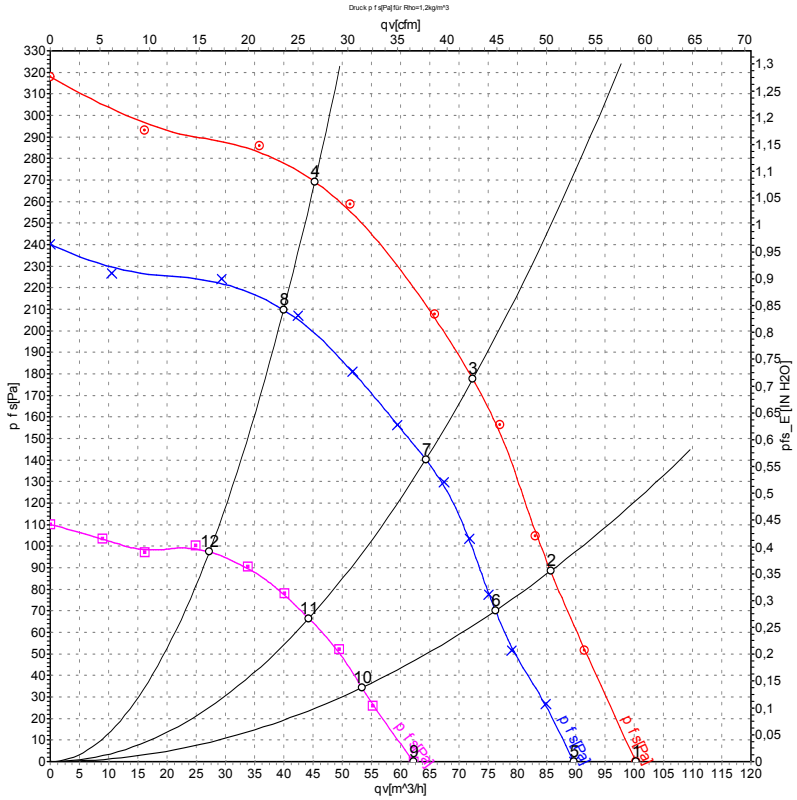

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## Curves: Air performance




Measurement: LU-53694-1
Measurement: LU-53693-1
Measurement: LU-53695-1

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 | $q_V$ | $p_{fs}$ | $q_V$ | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|
| | V | $min^{-1}$ | W | A | $m^3/h$ | Pa | cfm | inH2O |
| 1 | 28 | 2825 | 20 | 0.78 | 100 | 0 | 60 | 0.00 |
| 2 | 28 | 2960 | 18 | 0.71 | 85 | 88 | 50 | 0.35 |
| 3 | 28 | 3115 | 16 | 0.64 | 70 | 178 | 40 | 0.71 |
| 4 | 28 | 3410 | 13 | 0.52 | 45 | 269 | 25 | 1.08 |
| 5 | 24 | 2550 | 15 | 0.70 | 90 | 0 | 55 | 0.00 |
| 6 | 24 | 2640 | 13 | 0.61 | 75 | 70 | 45 | 0.28 |
| 7 | 24 | 2755 | 12 | 0.55 | 65 | 140 | 40 | 0.56 |
| 8 | 24 | 3005 | 9.4 | 0.45 | 40 | 210 | 25 | 0.84 |
| 9 | 16 | 1820 | 6.0 | 0.44 | 60 | 0 | 35 | 0.00 |
| 10 | 16 | 1885 | 5.5 | 0.41 | 55 | 34 | 30 | 0.14 |
| 11 | 16 | 1950 | 5.0 | 0.38 | 45 | 66 | 25 | 0.26 |
| 12 | 16 | 2085 | 4.0 | 0.33 | 25 | 98 | 15 | 0.39 |

U = Power supply · n = Speed (rpm) · $P_{ed}$ = Power consumption · I = Current draw · $q_V$ = Air flow · $p_{fs}$ = Pressure increase



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