**W3G300-CB56-11**

# EC axial fan

sickle-shaped blades (S series)

with round full nozzle

**ebm-papst Mulfingen GmbH & Co. KG**
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

| | |
|---|---|
| **Type** | **W3G300-CB56-11** |
| **Motor** | **M3G074-CF** |

| | | |
|---|---|---|
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Nominal voltage range | VAC | 200 .. 277 |
| Frequency | Hz | 50/60 |
| Method of obtaining data | | fa |
| Speed (rpm) | $min^{-1}$ | 1710 |
| Power consumption | W | 76 |
| Current draw | A | 0.55 |
| 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** | 4.3 kg |
| **Fan size** | 300 mm |
| **Rotor surface** | Painted black |
| **Electronics housing material** | Die-cast aluminum, painted black |
| **Blade material** | Sheet steel, painted black |
| **Fan housing material** | Sheet steel, galvanized and coated with black plastic (RAL 9005) |
| **Guard grille material** | Steel, coated with black plastic (RAL 9005) |
| **Number of blades** | 5 |
| **Airflow direction** | "V" |
| **Direction of rotation** | Counterclockwise, viewed toward rotor |
| **Degree of protection** | IP44; installation- and position-dependent as per EN 60034-5 |
| **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 made of stainless steel |
| **Technical features** | - Tach output<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 motor |
| **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) |
| **Approval** | CSA; UL |



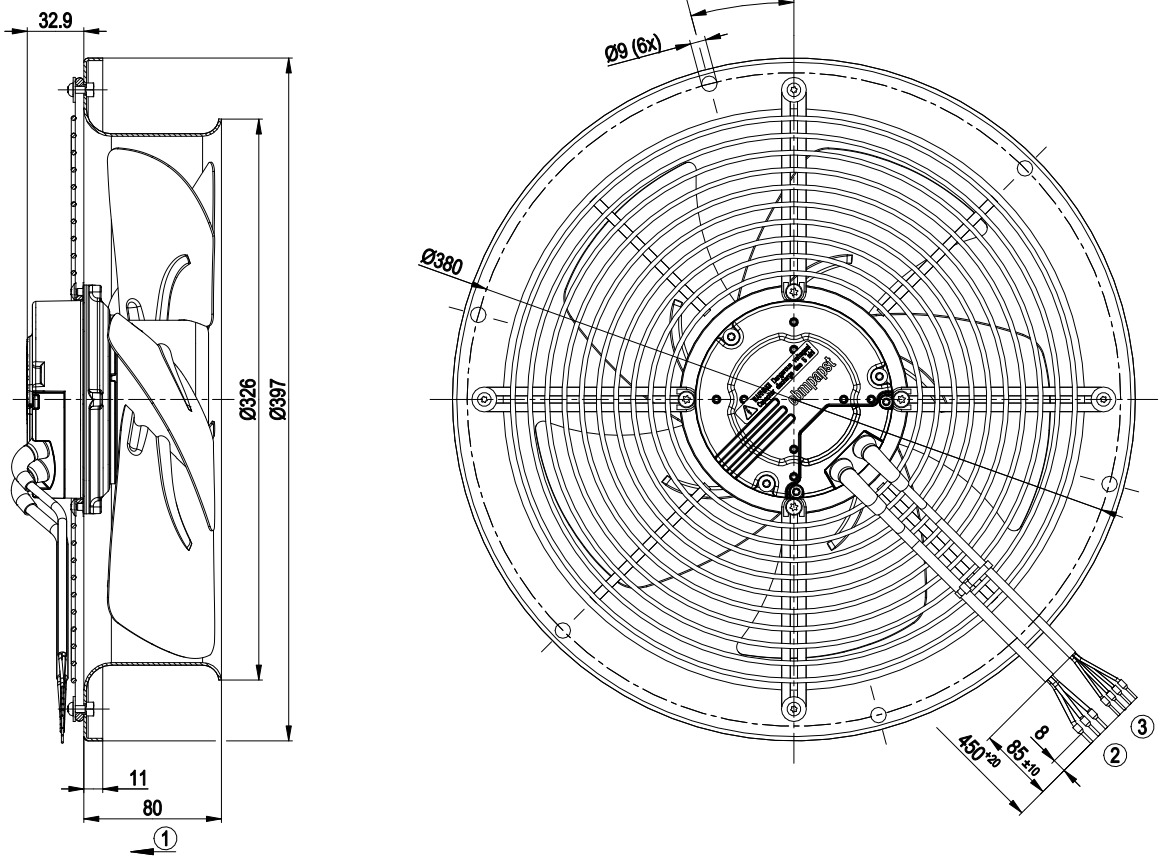
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## Product drawing




| | |
|---|---|
| 1 | Direction of air flow "V" |
| 2 | Cable PVC AWG18, 3x crimped ferrules |
| 3 | Cable PVC AWG22, 4x crimped ferrules |



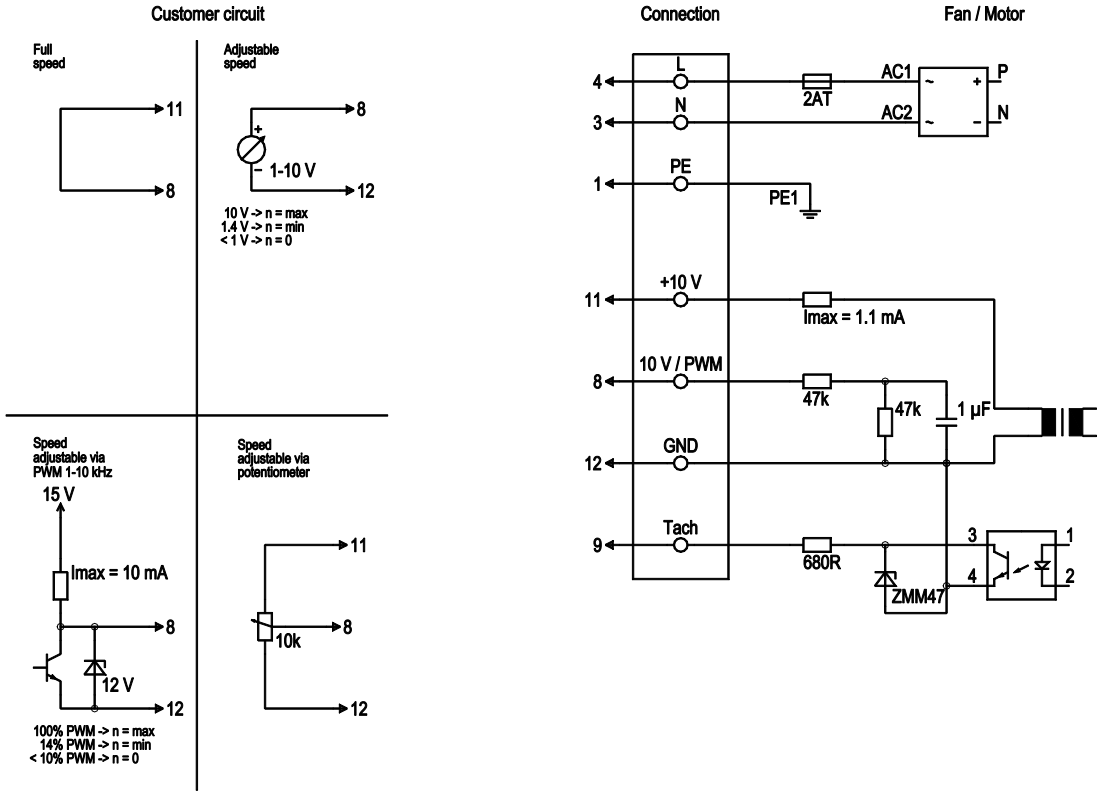
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## Connection diagram




| No. | Conn. | Designation | Color | Function/assignment |
|---|---|---|---|---|
| | 4 | 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 |
| | 8 | 0-10 V PWM | yellow | Control input 0-10 V or PWM, electrically isolated |
| | 9 | Tach | white | Tach output: open collector, 1 pulse per revolution, electrically isolated |
| | 11 | 10V / max 1.1 mA | red | Voltage output 10 V/max. 1.1 mA, electrically isolated |
| | 12 | GND | blue | GND connection for control interface |



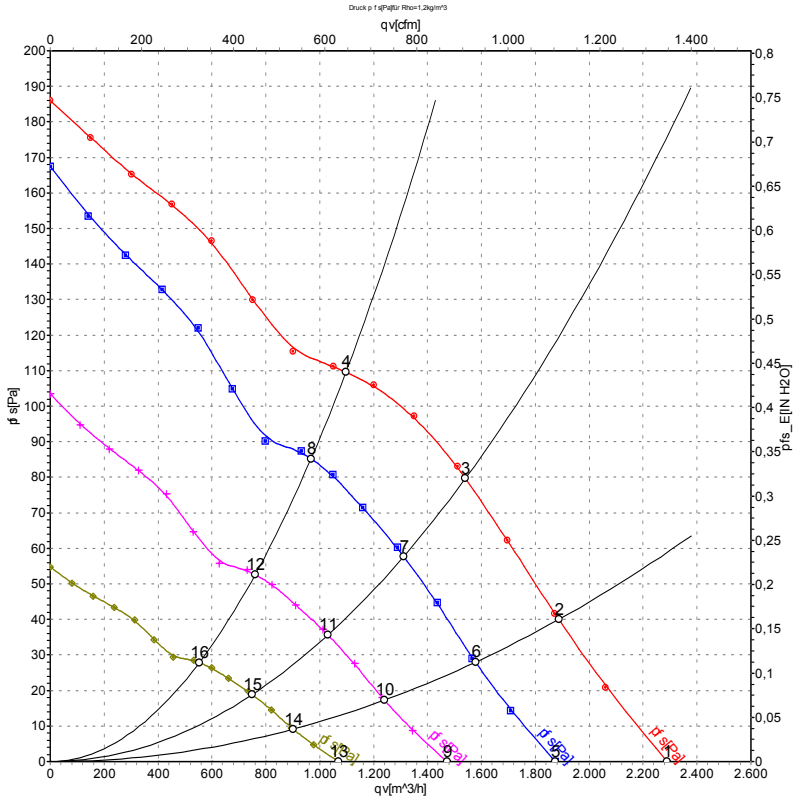
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## Curves: Air performance 50 Hz




Measurement: LU-72521-1

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 | f | n | $P_{ed}$ | I | qv | $p_{fs}$ | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa | CFM | inH2O |
| 1 | 230 | 50 | 1710 | 76 | 0.55 | 2290 | 0 | 1350 | 0.00 |
| 2 | 230 | 50 | 1675 | 84 | 0.61 | 1885 | 40 | 1110 | 0.16 |
| 3 | 230 | 50 | 1645 | 89 | 0.65 | 1540 | 80 | 905 | 0.32 |
| 4 | 230 | 50 | 1580 | 103 | 0.76 | 1095 | 110 | 645 | 0.44 |
| 5 | 230 | 50 | 1400 | 42 | 0.30 | 1875 | 0 | 1100 | 0.00 |
| 6 | 230 | 50 | 1400 | 49 | 0.36 | 1580 | 28 | 930 | 0.11 |
| 7 | 230 | 50 | 1400 | 55 | 0.40 | 1310 | 58 | 770 | 0.23 |
| 8 | 230 | 50 | 1400 | 70 | 0.51 | 970 | 85 | 570 | 0.34 |
| 9 | 230 | 50 | 1100 | 20 | 0.15 | 1470 | 0 | 865 | 0.00 |
| 10 | 230 | 50 | 1100 | 24 | 0.17 | 1240 | 17 | 730 | 0.07 |
| 11 | 230 | 50 | 1100 | 27 | 0.19 | 1030 | 36 | 605 | 0.14 |
| 12 | 230 | 50 | 1100 | 34 | 0.25 | 760 | 53 | 445 | 0.21 |
| 13 | 230 | 50 | 800 | 7.8 | 0.06 | 1070 | 0 | 630 | 0.00 |
| 14 | 230 | 50 | 800 | 9.1 | 0.07 | 900 | 9 | 530 | 0.04 |
| 15 | 230 | 50 | 800 | 10 | 0.08 | 750 | 19 | 440 | 0.08 |
| 16 | 230 | 50 | 800 | 13 | 0.10 | 555 | 28 | 325 | 0.11 |

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



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