**S1G300-BC19-54**

# EC axial fan

sickled blades (S series)

with guard grille for full nozzle

S1G300-BC19-54 ebmpapst Datasheet
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County court Stuttgart · HRA 590344

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## Nominal data

| | | |
|---|---|---|
| **Type** | **S1G300-BC19-54** | |
| **Motor** | **M1G074-CF** | |
| Nominal voltage | VDC | 24 |
| Nominal voltage range | VDC | 16 .. 28 |
| Type of data definition | | fa |
| Speed | min-1 | 1830 |
| Power input | W | 80 |
| Current draw | A | 3.8 |
| Max. back pressure | Pa | 100 |
| Min. ambient temperature | °C | -25 |
| Max. ambient temperature | °C | 60 |

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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## Technical features

| | |
|---|---|
| **Mass** | 2.3 kg |
| **Size** | 300 mm |
| **Surface of rotor** | Coated in black |
| **Material of blades** | Press-fitted sheet steel blank, sprayed with PP plastic |
| **Material of guard grille** | Steel, phosphated and coated in black plastic |
| **Number of blades** | 5 |
| **Direction of air flow** | "V" |
| **Direction of rotation** | Counter-clockwise, seen on rotor |
| **Type of protection** | IP 42 |
| **Insulation class** | "B" |
| **Humidity class** | F0 |
| **Max. permissible ambient motor temp. (transp./ storage)** | + 80 °C |
| **Min. permissible ambient motor temp. (transp./storage)** | - 40 °C |
| **Mounting position** | Any |
| **Condensate discharge holes** | None |
| **Operation mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Tach output<br>- Motor current limit<br>- Soft start<br>- Control input 0-10 VDC / PWM |
| **EMC interference immunity** | Acc. to EN 61000-6-2 (industrial environment) |
| **EMC interference emission** | Acc. to EN 55022 (Class B) |
| **Motor protection** | Reverse polarity and locked-rotor protection |
| **Cable exit** | Lateral |
| **Product conforming to standard** | EN 60950-1 |
| **Approval** | CSA C22.2 Nr.77; EAC; UL 1004-1 |

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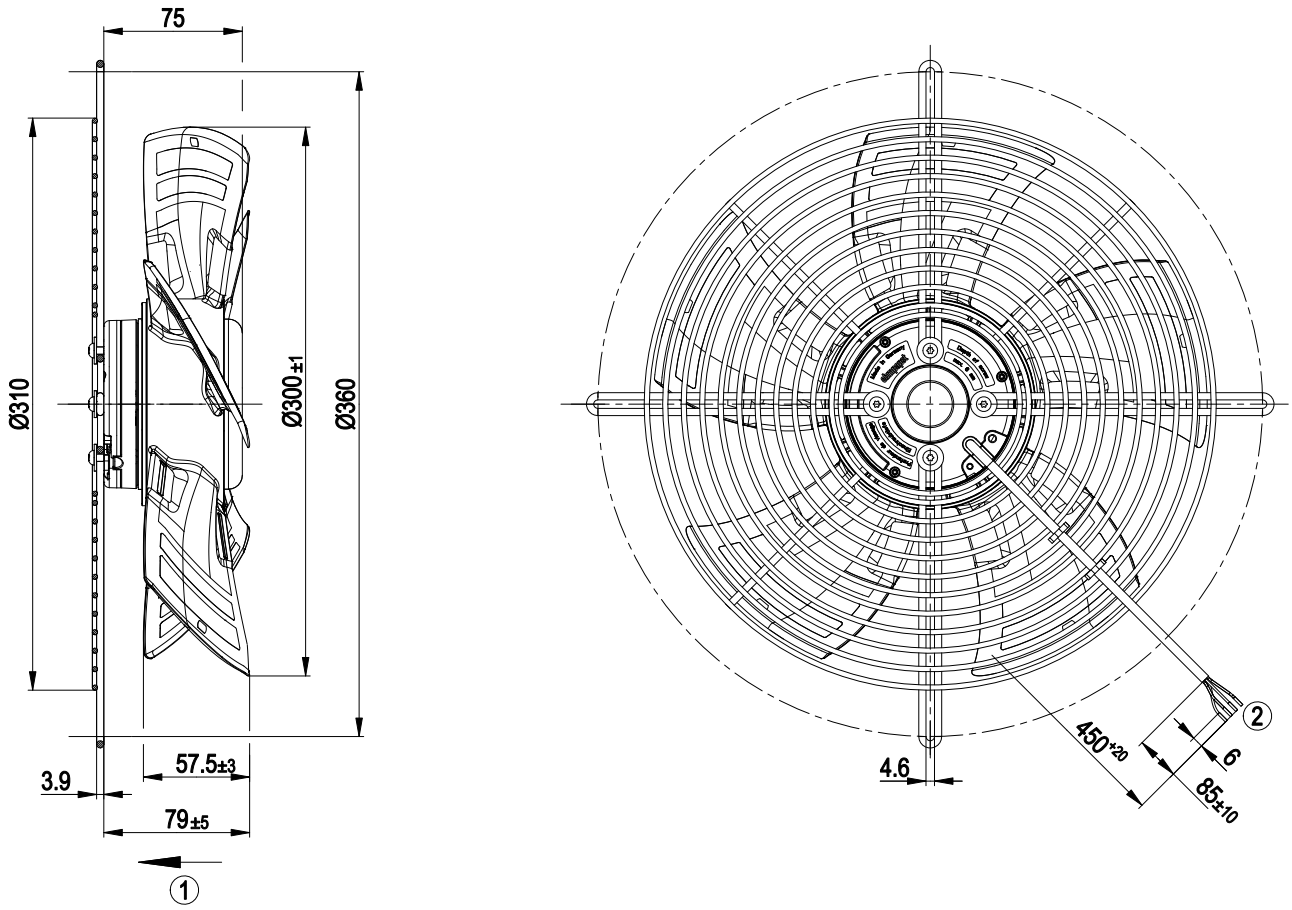
## Product drawing




| | |
|---|---|
| 1 | Direction of air flow "V" |
| 2 | Connection line PVC AWG20, 4x brass lead tips crimped |

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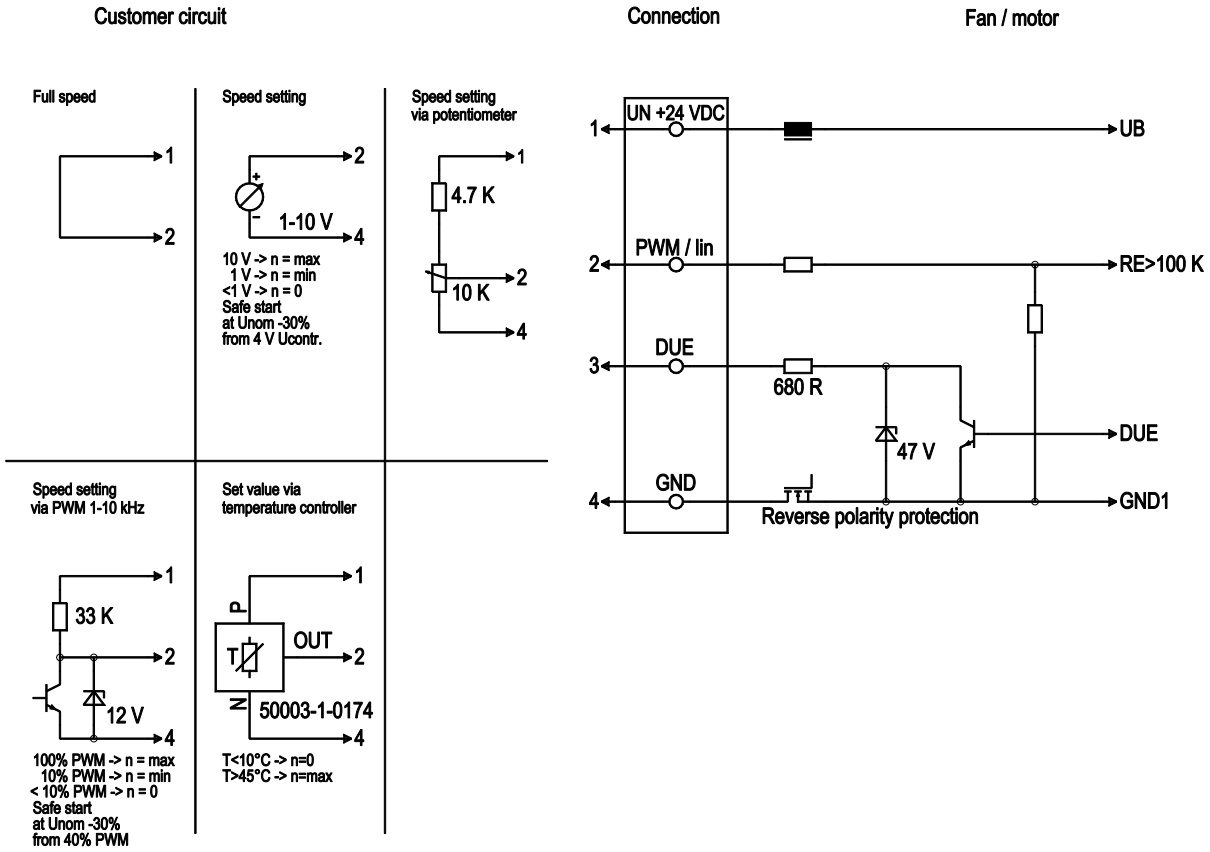
## Connection screen




| No. | Conn. | Designation | Colour | Function / assignment |
|---|---|---|---|---|
| 1 | 1 | Un +24V | red | Power supply 24 VDC, residual ripple 3.5 % |
| 1 | 2 | PWM / lin | yellow | PWM / lin, control input, 0-10 V |
| 1 | 3 | Tach | white | Speed monitoring output, 3 pulses per revolution, Isink max = 10 mA |
| 1 | 4 | GND | blue | Reference mass |

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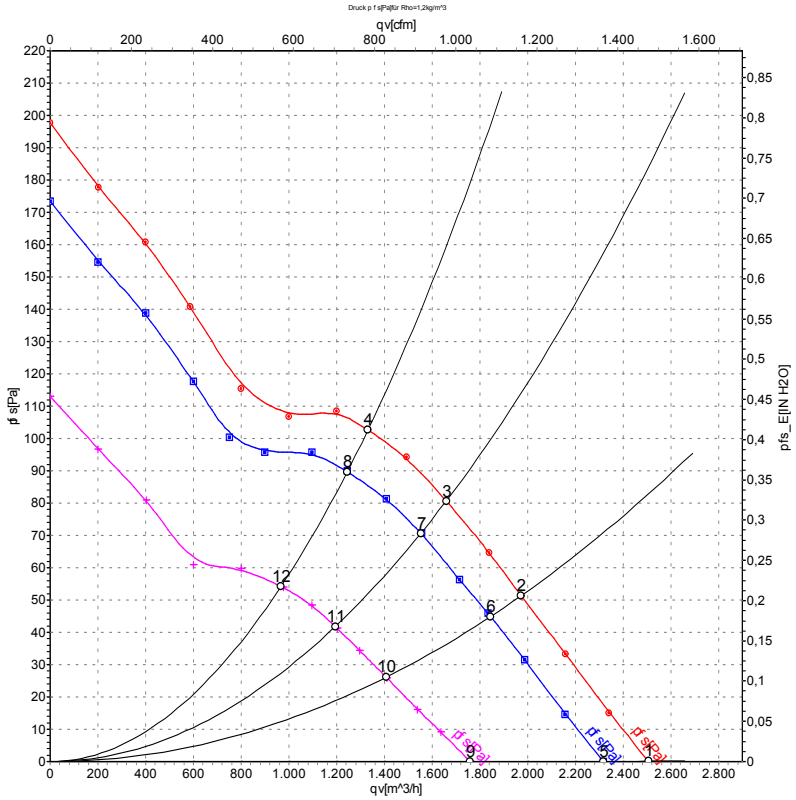
## Charts: Air flow




Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

| | U | n | $P_{ed}$ | I | $LpA_{in}$ | $LwA_{in}$ | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|
| | V | $min^{-1}$ | W | A | dB(A) | dB(A) | $m^3/h$ | Pa |
| 1 | 28 | 1965 | 102 | 4.11 | 61 | 69 | 2505 | 0 |
| 2 | 28 | 1855 | 105 | 4.31 | 60 | 67 | 1975 | 51 |
| 3 | 28 | 1805 | 107 | 4.42 | 59 | 67 | 1660 | 81 |
| 4 | 28 | 1745 | 109 | 4.56 | 63 | 71 | 1330 | 103 |
| 5 | 24 | 1810 | 80 | 3.80 | 60 | 67 | 2320 | 0 |
| 6 | 24 | 1730 | 86 | 4.03 | 58 | 67 | 1845 | 45 |
| 7 | 24 | 1690 | 87 | 4.10 | 57 | 66 | 1555 | 70 |
| 8 | 24 | 1635 | 89 | 4.21 | 62 | 70 | 1245 | 90 |
| 9 | 16 | 1380 | 37 | 2.63 | 52 | 60 | 1760 | 0 |
| 10 | 16 | 1330 | 40 | 2.82 | 51 | 58 | 1410 | 26 |
| 11 | 16 | 1305 | 41 | 2.92 | 51 | 59 | 1195 | 42 |
| 12 | 16 | 1280 | 43 | 3.04 | 56 | 64 | 965 | 54 |

U = Supply voltage · n = Speed · $P_{ed}$ = Power input · I = Current draw · $LpA_{in}$ = Sound pressure level inlet side · $LwA_{in}$ = Sound power level inlet side · qv = Air flow · $p_{fs}$ = Pressure increase