**S4E300-AS72-97**

# AC axial fan

sickled blades (S series)

with guard grille for short nozzle

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## Nominal data

| | |
|---|---|
| **Type** | **S4E300-AS72-97** |
| **Motor** | **M4E068-CF** |

| | | | | |
|---|---|---|---|---|
| Phase | | 1~ | 1~ | 1~ |
| Nominal voltage | VAC | 230 | 230 | 230 |
| Frequency | Hz | 50 | 60 | 60 |
| Type of data definition | | ml | ml | ml |
| Valid for approval / standard | | CE | CE | UL 2111 |
| Speed (rpm) | $min^{-1}$ | 1320 | 1500 | 1500 |
| Power input | W | 72 | 90 | 96 |
| Current draw | A | 0.32 | 0.4 | 0.42 |
| Motor capacitor | µF | 2 | 2 | 2 |
| Capacitor voltage | VDB | 400 | 400 | 400 |
| Capacitor standard | | S0 (CE) | S0 (CE) | UL |
| Max. back pressure | Pa | 60 | 60 | 60 |
| Min. ambient temperature | °C | -25 | -25 | -25 |
| Max. ambient temperature | °C | 70 | 70 | 70 |
| Starting current | A | 0.6 | 0.57 | 0.6 |

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** | 2.8 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, coated in black plastic (RAL9005) |
| **Number of blades** | 5 |
| **Direction of air flow** | "A" |
| **Direction of rotation** | Clockwise, seen on rotor |
| **Type of protection** | IP 44; Depending on installation and position |
| **Insulation class** | "F" |
| **Humidity (F)/environmental protection class (H)** | H0+ |
| **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 |
| **Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)** | < 0.75 mA |
| **Motor protection** | Thermal overload protector (TOP) wired internally |
| **Cable exit** | Variable |
| **Protection class** | I (if protective earth is connected by customer) |
| **Product conforming to standard** | EN 60335-1; CE |
| **Approval** | CSA C22.2 No.100; UL 1004-1 |



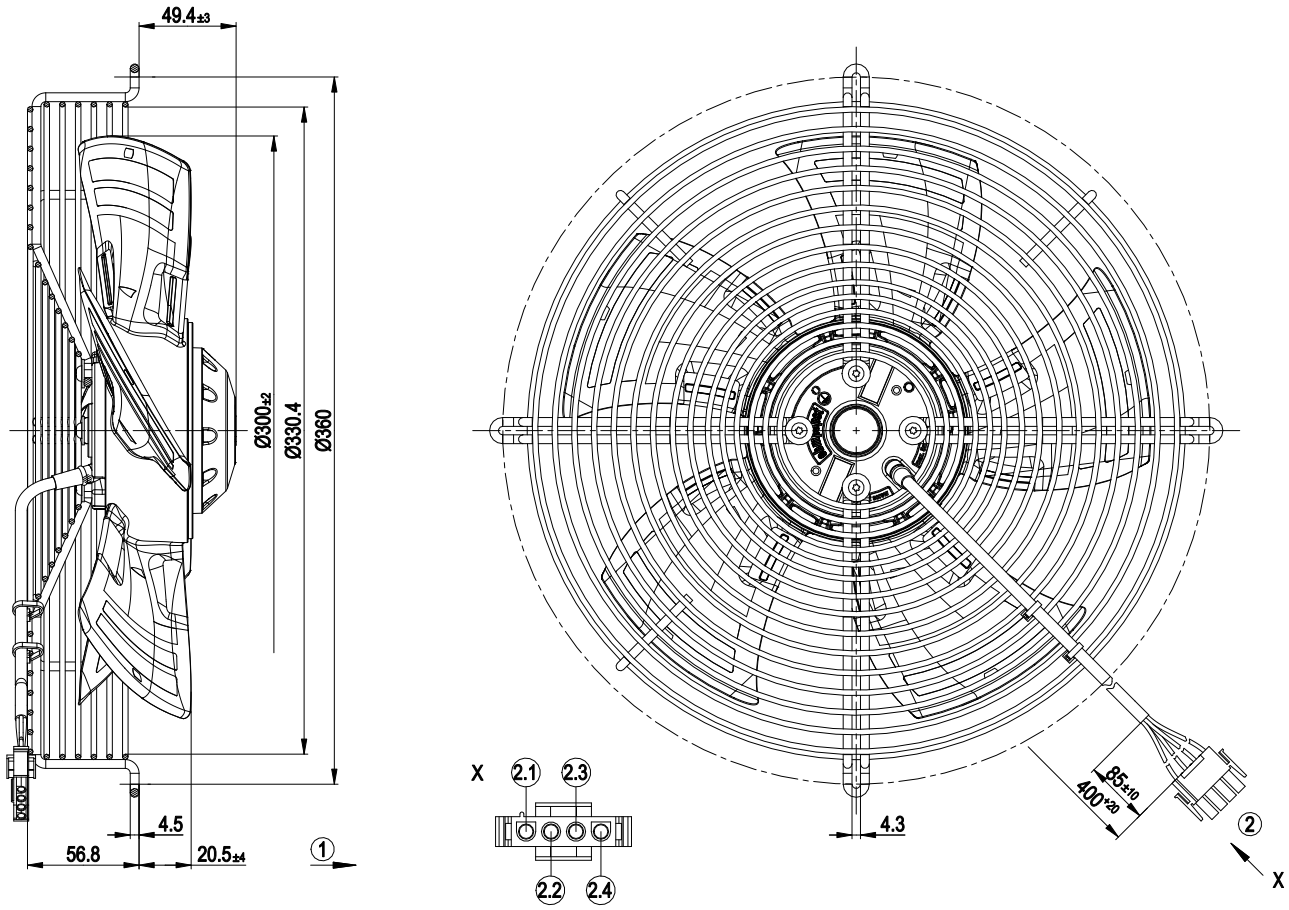
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## Product drawing




| | |
|---|---|
| 1 | Direction of air flow "A" |
| 2 | Connection line PFA AWG20 (gn/ye AWG18), 1x 4-pole connector housing tyco 350779-1, 4x plug pin tyco 926885-1 |
| 2.1 | black |
| 2.2 | blue |
| 2.3 | brown |
| 2.4 | green/yellow |



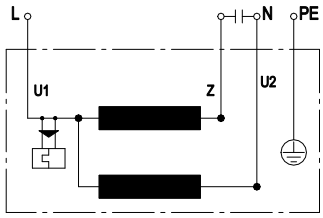
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## Connection screen




| | | | | | |
|---|---|---|---|---|---|
| U1 | blue | Z | brown | U2 | black |
| PE | green/yellow | | | | |



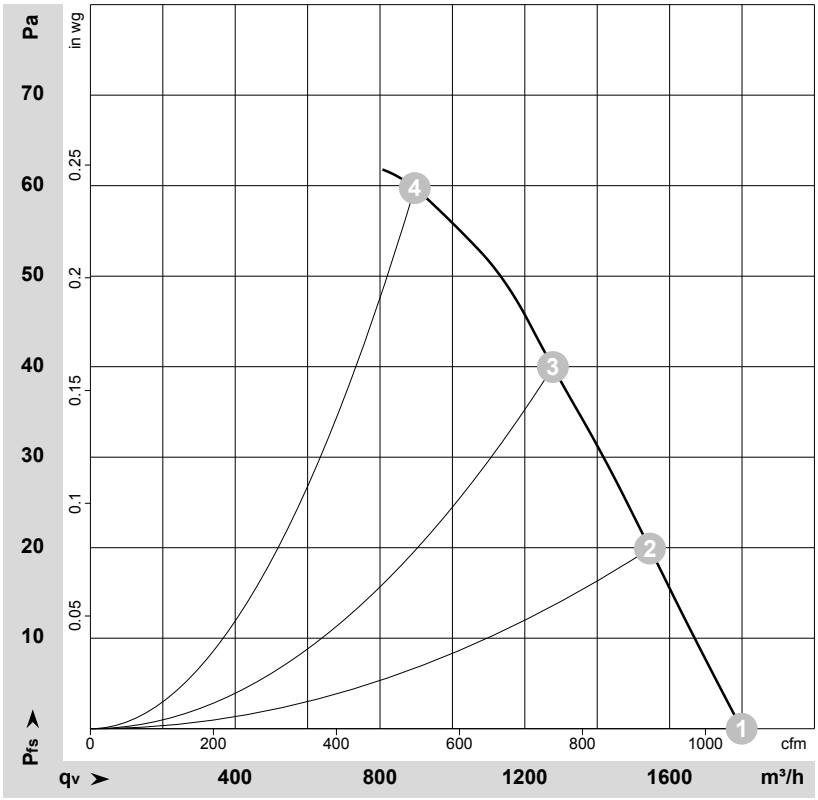
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## Charts: Air flow 50 Hz




ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-112383-1

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 | f | n | $P_e$ | I | $LpA_{in}$ | $LwA_{in}$ | $q_V$ | $p_{fs}$ | $q_V$ | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | dB(A) | dB(A) | $m^3/h$ | Pa | cfm | inH2O |
| 1 | 230 | 50 | 1385 | 60 | 0.28 | 53 | 60 | 1800 | 0 | 1060 | 0.00 |
| 2 | 230 | 50 | 1365 | 63 | 0.28 | 52 | 59 | 1545 | 20 | 910 | 0.08 |
| 3 | 230 | 50 | 1355 | 66 | 0.29 | 51 | 58 | 1280 | 40 | 750 | 0.16 |
| 4 | 230 | 50 | 1320 | 72 | 0.32 | 53 | 61 | 895 | 60 | 525 | 0.24 |

U = Supply voltage · f = Frequency · n = Speed (rpm) · $P_e$ = Power input · I = Current draw · $LpA_{in}$ = Sound pressure level inlet side · $LwA_{in}$ = Sound power level inlet side · $q_V$ = Air flow
$p_{fs}$ = Pressure increase



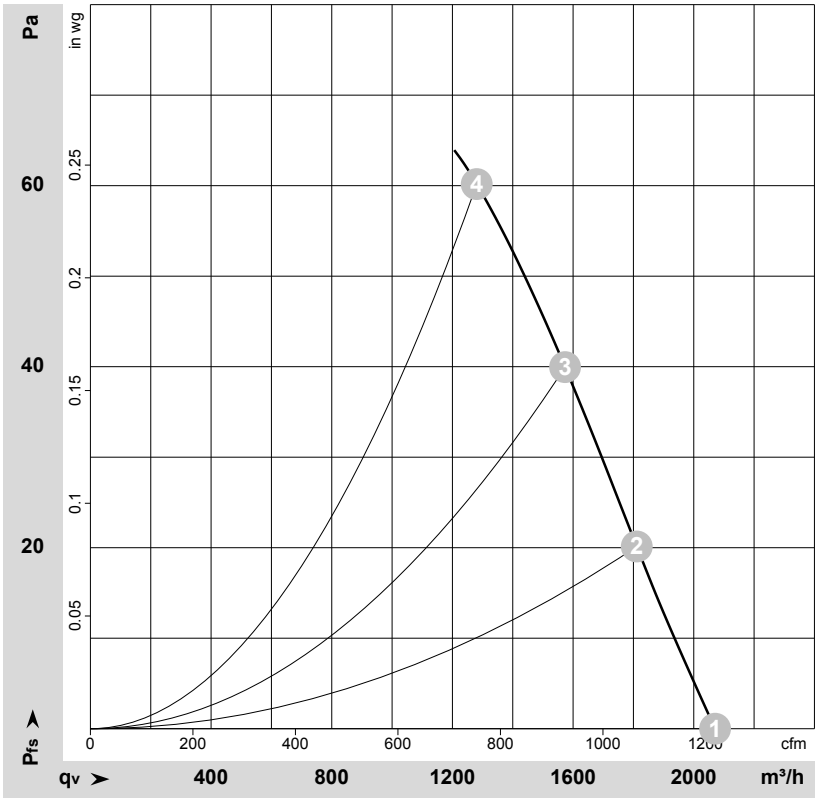
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# AC axial fan

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## Charts: Air flow 60 Hz




ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-112387-1

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 | f | n | $P_e$ | I | $LpA_{in}$ | $LwA_{in}$ | $q_V$ | $p_{fs}$ | $q_V$ | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | dB(A) | dB(A) | $m^3/h$ | Pa | cfm | inH2O |
| 1 | 230 | 60 | 1595 | 78 | 0.34 | 56 | 63 | 2070 | 0 | 1220 | 0.00 |
| 2 | 230 | 60 | 1560 | 83 | 0.36 | 55 | 62 | 1810 | 20 | 1065 | 0.08 |
| 3 | 230 | 60 | 1535 | 86 | 0.37 | 55 | 62 | 1575 | 40 | 925 | 0.16 |
| 4 | 230 | 60 | 1500 | 90 | 0.40 | 55 | 62 | 1280 | 60 | 755 | 0.24 |

U = Supply voltage · f = Frequency · n = Speed (rpm) · $P_e$ = Power input · I = Current draw · $LpA_{in}$ = Sound pressure level inlet side · $LwA_{in}$ = Sound power level inlet side · $q_V$ = Air flow
$p_{fs}$ = Pressure increase



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