**S4E350-AP06-A1**

# AC axial fan

sickled blades (S series), single inlet

with guard grille for short nozzle

S4E350-AP06-A1 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

## Nominal data

| | |
|---|---|
| **Type** | **S4E350-AP06-A1** |
| **Motor** | **M4E074-DF** |

| | | | |
|---|---|---|---|
| Phase | | 1~ | 1~ |
| Nominal voltage | VAC | 230 | 230 |
| Frequency | Hz | 50 | 60 |
| Type of data definition | | fa | fa |
| Valid for approval / standard | | CE | CE |
| Speed | $min^{-1}$ | 1400 | 1590 |
| Power input | W | 130 | 190 |
| Current draw | A | 0.58 | 0.83 |
| Motor capacitor | µF | 4 | 4 |
| Capacitor voltage | VDB | 400 | 400 |
| Capacitor standard | | P0 (CE) | P0 (CE) |
| Max. back pressure | Pa | 90 | 60 |
| Min. ambient temperature | °C | -25 | -25 |
| Max. ambient temperature | °C | 55 | 55 |
| Starting current | A | 1.2 | 1.1 |

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

## Data according to ErP directive

| | |
|---|---|
| Installation category | A |
| Efficiency category | Static |
| Variable speed drive | No |
| Specific ratio* | 1.00 |

* Specific ratio = 1 + $p_{fs}$ / 100 000 Pa

| | | Actual | Request 2013 | Request 2015 |
|---|---|---|---|---|
| Overall efficiency $\eta_{es}$ | % | 28.5 | 24.5 | 28.5 |
| Efficiency grade N | | 40 | 36 | 40 |
| Power input $P_e$ | kW | 0.15 | | |
| Air flow $q_v$ | $m^3/h$ | 2200 | | |
| Pressure increase $p_{fs}$ | Pa | 70 | | |
| Speed n | $min^{-1}$ | 1345 | | |

Data definition with optimum efficiency. LU-31089
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

# AC axial fan

sickled blades (S series), single inlet
with guard grille for short nozzle

## Technical features

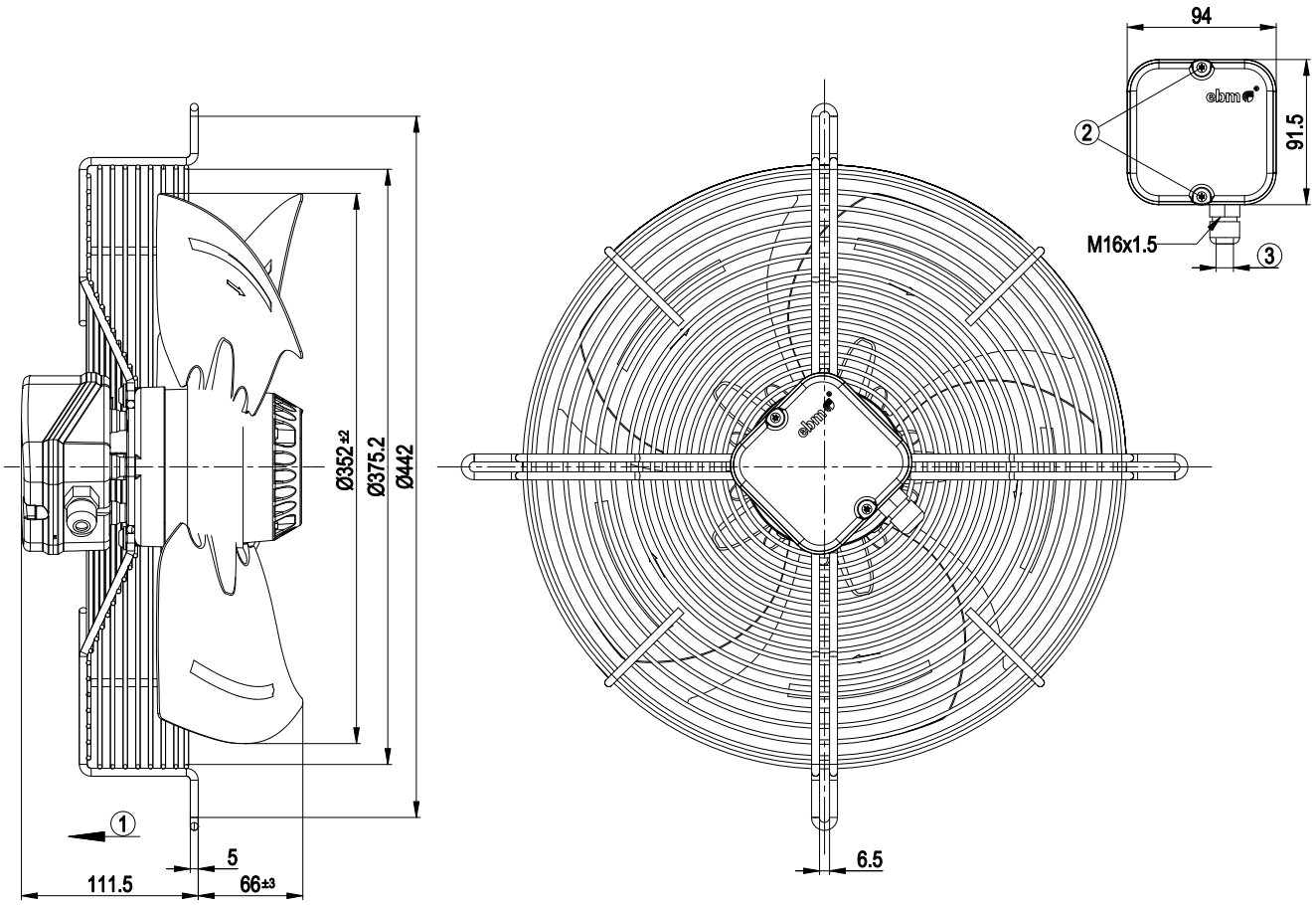
| | |
|---|---|
| **Mass** | 5 kg |
| **Size** | 350 mm |
| **Surface of rotor** | Coated in black |
| **Material of terminal box** | ABS plastic |
| **Material of blades** | Sheet steel, coated in black |
| **Material of guard grille** | Steel, coated in black plastic (RAL9005) |
| **Number of blades** | 5 |
| **Direction of air flow** | "V" |
| **Direction of rotation** | Counter-clockwise, seen on rotor |
| **Type of protection** | IP 44; Depending on installation and position as per EN 60034-5 |
| **Insulation class** | "F" |
| **Humidity class** | F2-2 |
| **Max. permissible ambient motor temp. (transp./ storage)** | + 80 °C |
| **Min. permissible ambient motor temp. (transp./storage)** | - 40 °C |
| **Mounting position** | Shaft horizontal or rotor on bottom; rotor on top on request |
| **Condensate discharge holes** | Rotor-side |
| **Operation mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)** | < 0.75 mA |
| **Electrical leads** | Via terminal box, integrated capacitor connected via terminal box |
| **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 |

# AC axial fan

sickled blades (S series), single inlet

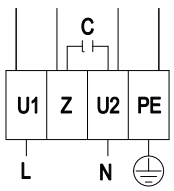
with guard grille for short nozzle

## Product drawing




| | |
|---|---|
| 1 | Direction of air flow "V" |
| 2 | Tightening torque 0.5±0.1 Nm |
| 3 | Cable diameter: max. 7.5 mm, tightening torque 1.3±0.2 Nm |

## Connection screen



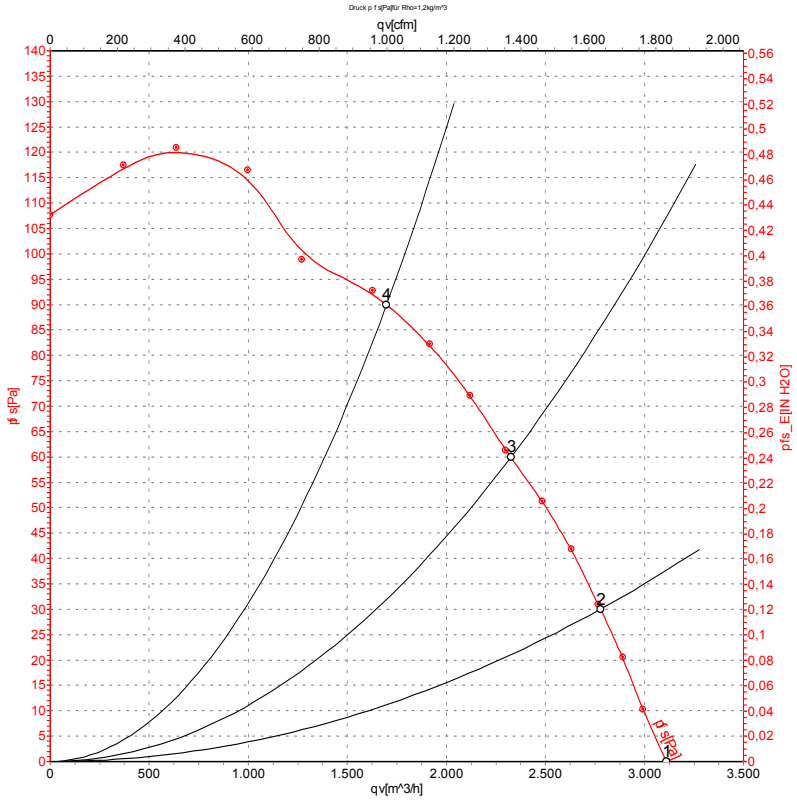

| | | | | | |
|---|---|---|---|---|---|
| L | = U1 = blue | Z | brown | N | = U2 = black |
| PE | green/yellow | | | | |

# AC axial fan

sickled blades (S series), single inlet

with guard grille for short nozzle

## Charts: Air flow 50 Hz




Measurement: LU-28525

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 | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa |
| 1 | 230 | 50 | 1400 | 130 | 0.58 | 3110 | 0 |
| 2 | 230 | 50 | 1380 | 140 | 0.61 | 2780 | 30 |
| 3 | 230 | 50 | 1355 | 151 | 0.66 | 2325 | 60 |
| 4 | 230 | 50 | 1290 | 174 | 0.76 | 1700 | 90 |

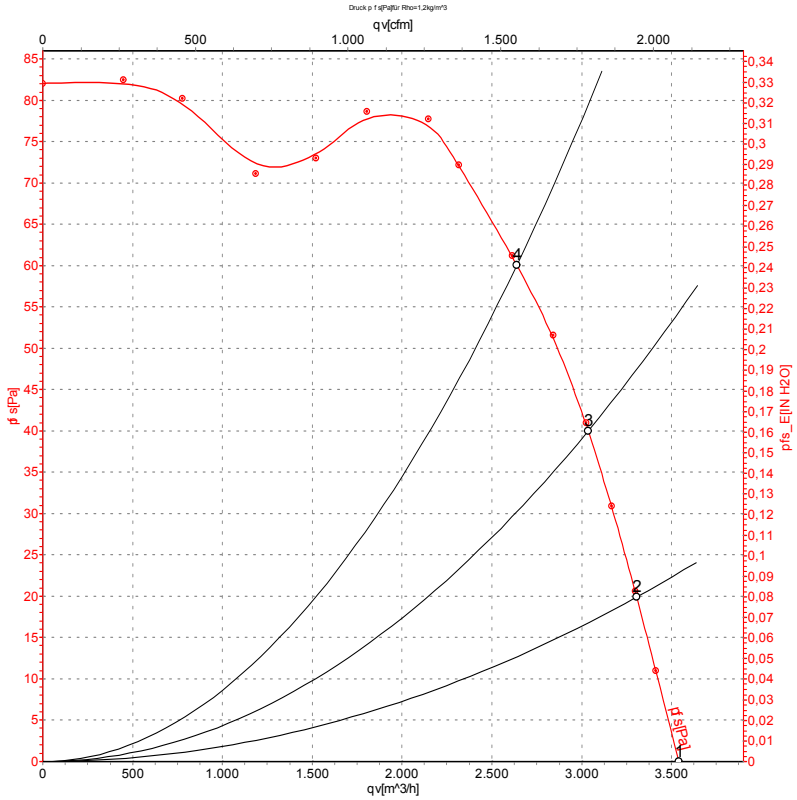
U = Supply voltage · f = Frequency · n = Speed · $P_e$ = Power input · I = Current draw · qv = Air flow · $p_{fs}$ = Pressure increase

# AC axial fan

sickled blades (S series), single inlet

with guard grille for short nozzle

## Charts: Air flow 60 Hz




Measurement: LU-28527

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 | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa |
| 1 | 230 | 60 | 1590 | 190 | 0.83 | 3540 | 0 |
| 2 | 230 | 60 | 1565 | 196 | 0.85 | 3305 | 20 |
| 3 | 230 | 60 | 1520 | 203 | 0.88 | 3035 | 40 |
| 4 | 230 | 60 | 1455 | 208 | 0.90 | 2640 | 60 |

U = Supply voltage · f = Frequency · n = Speed · $P_e$ = Power input · I = Current draw · qv = Air flow · $p_{fs}$ = Pressure increase