

# AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

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## Nominal data

|                               |                   |      |      |
|-------------------------------|-------------------|------|------|
| Type                          | S4D300-AS34-30    |      |      |
| Motor                         | M4D068-CF         |      |      |
| Phase                         |                   | 3~   | 3~   |
| Nominal voltage               | VAC               | 400  | 400  |
| Connection                    |                   | Y    | Y    |
| Frequency                     | Hz                | 50   | 60   |
| Type of data definition       |                   | ml   | ml   |
| Valid for approval / standard |                   | CE   | CE   |
| Speed                         | min <sup>-1</sup> | 1300 | 1400 |
| Power input                   | W                 | 68   | 90   |
| Current draw                  | A                 | 0.14 | 0.15 |
| Max. back pressure            | Pa                | 60   | 70   |
| Min. ambient temperature      | °C                | -25  | -25  |
| Max. ambient temperature      | °C                | 60   | 55   |

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



## Technical features

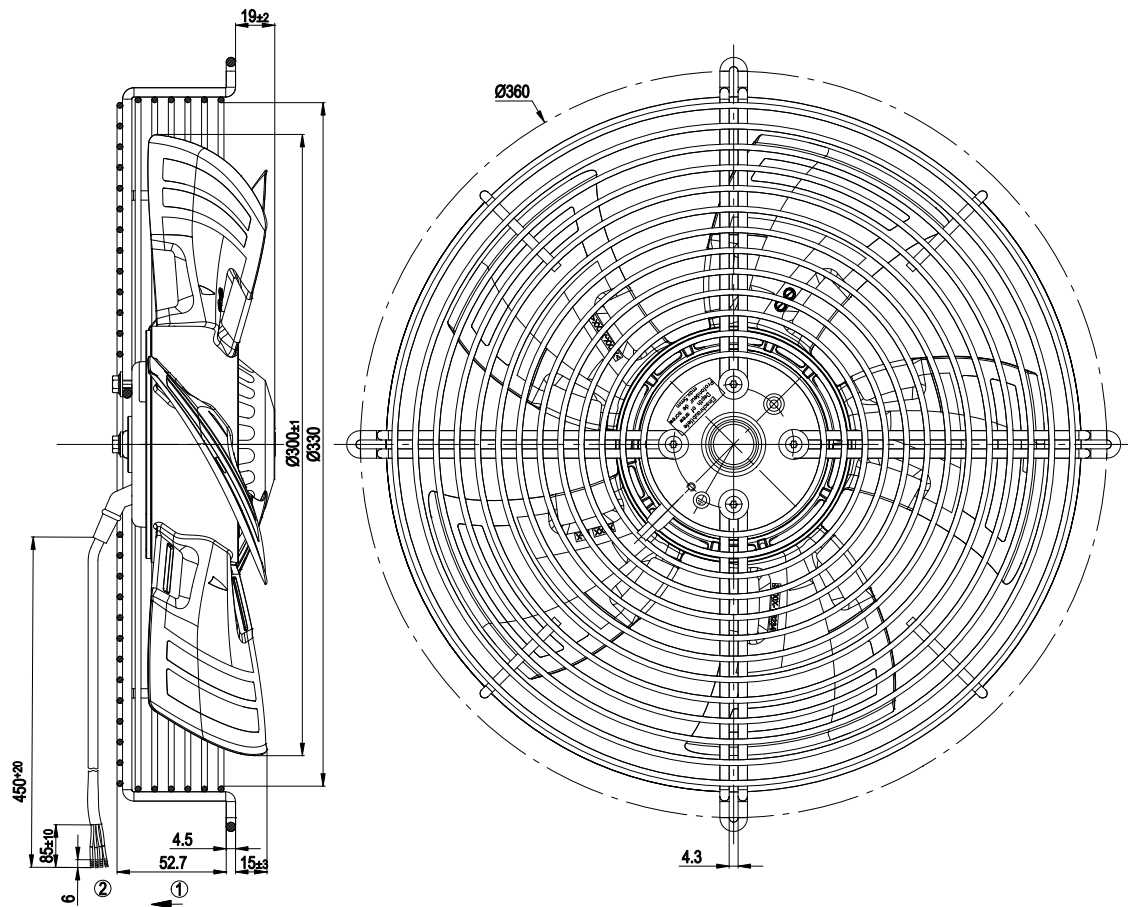
|                                                                    |                                                                 |
|--------------------------------------------------------------------|-----------------------------------------------------------------|
| Mass                                                               | 2.6 kg                                                          |
| Size                                                               | 300 mm                                                          |
| Surface of rotor                                                   | Coated in black                                                 |
| Material of impeller                                               | PP plastic, fibreglass-reinforced                               |
| 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 44; Depending on installation and position as per EN 60034-5 |
| Insulation class                                                   | "B"                                                             |
| Humidity class                                                     | F1-2                                                            |
| 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                                                       |
| Cable exit                                                         | Axial                                                           |
| Protection class                                                   | I (if protective earth is connected by customer)                |
| Product conforming to standard                                     | EN 60335-1                                                      |
| Approval                                                           | CCC                                                             |

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## Product drawing

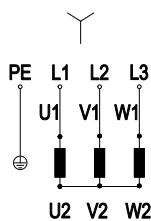


- |   |                                                            |
|---|------------------------------------------------------------|
| 1 | Direction of air flow "V"                                  |
| 2 | Connection line PVC 4G 0.5 mm², 4x brass lead tips crimped |

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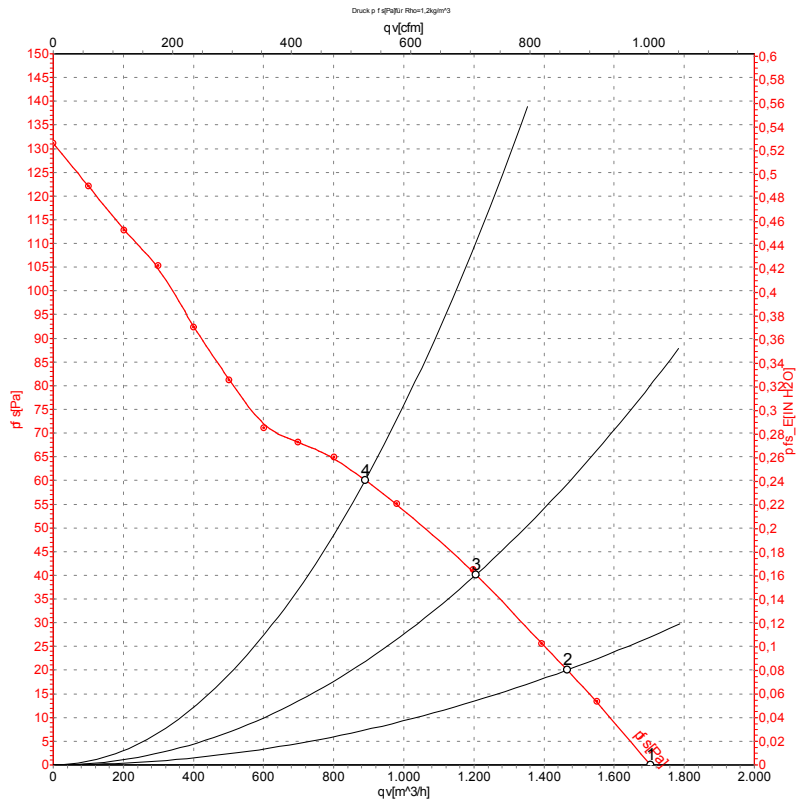
## Connection screen



|    |                 |    |              |    |      |
|----|-----------------|----|--------------|----|------|
| Y  | Star connection | L1 | black        | L2 | blue |
| L3 | brown           | PE | green/yellow |    |      |



## Charts: Air flow 50 Hz



Measurement: LU-114649

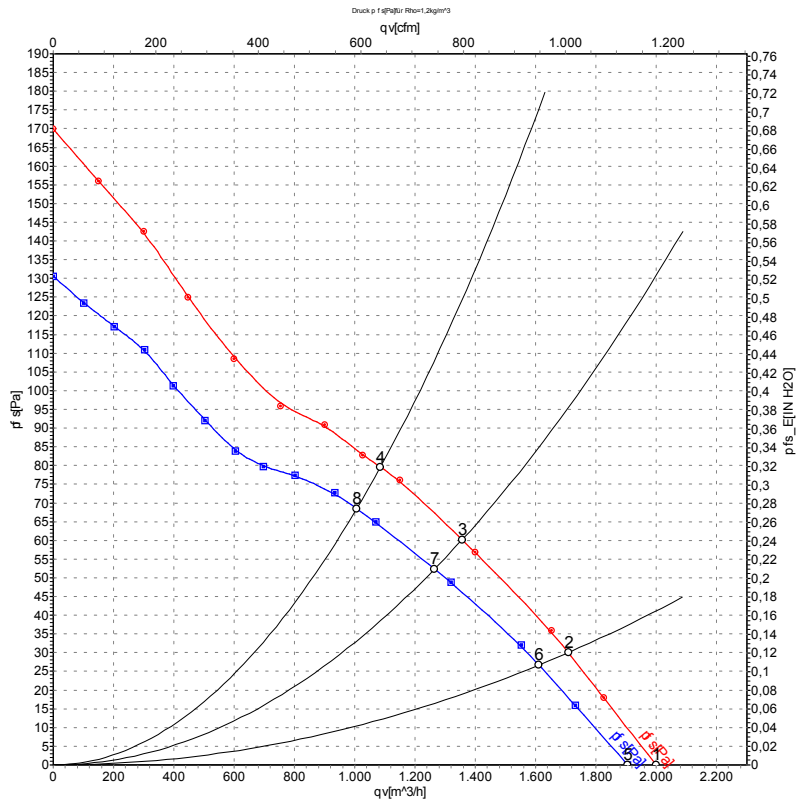
Air performance measured as per ISO 5801  
Installation category A. For detailed  
information on the measuring set-up, please  
contact ebm-papst. Suction-side noise  
levels: L<sub>wA</sub> measured as per ISO 13347 /  
L<sub>pA</sub> measured with 1m distance to fan axis.  
The values given are valid 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 <sub>e</sub> | I    | L <sub>pA<sub>in</sub></sub> | L <sub>wA<sub>in</sub></sub> | qv   | p <sub>ts</sub> |
|---|-----|----|-------------------|----------------|------|------------------------------|------------------------------|------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | dB(A)                        | dB(A)                        | m³/h | Pa              |
| 1 | 400 | 50 | 1350              | 55             | 0.13 | 52                           | 59                           | 1705 | 0               |
| 2 | 400 | 50 | 1350              | 57             | 0.13 | 51                           | 58                           | 1465 | 20              |
| 3 | 400 | 50 | 1335              | 61             | 0.13 | 51                           | 58                           | 1205 | 40              |
| 4 | 400 | 50 | 1300              | 68             | 0.14 | 56                           | 64                           | 890  | 60              |

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · L<sub>pA<sub>in</sub></sub> = Sound pressure level inlet side · L<sub>wA<sub>in</sub></sub> = Sound power level inlet side · qv = Air flow  
p<sub>ts</sub> = Pressure increase

## Charts: Air flow 60 Hz



Measurement: LU-114654  
Measurement: LU-114653

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: L<sub>wA</sub> measured as per ISO 13347 /  
L<sub>pA</sub> measured with 1m distance to fan axis.  
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standard set-up, the specific values have to  
be checked and reviewed with the unit  
installed.

## Measured values

|   | U   | f  | n                 | P <sub>e</sub> | I    | L <sub>pA<sub>in</sub></sub> | L <sub>wA<sub>in</sub></sub> | qv   | p <sub>ts</sub> |
|---|-----|----|-------------------|----------------|------|------------------------------|------------------------------|------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | dB(A)                        | dB(A)                        | m³/h | Pa              |
| 1 | 480 | 60 | 1600              | 80             | 0.15 | 56                           | 64                           | 2000 | 0               |
| 2 | 480 | 60 | 1580              | 86             | 0.15 | 56                           | 64                           | 1710 | 30              |
| 3 | 480 | 60 | 1560              | 92             | 0.15 | 56                           | 64                           | 1355 | 60              |
| 4 | 480 | 60 | 1510              | 105            | 0.16 | 56                           | 64                           | 1085 | 80              |
| 5 | 400 | 60 | 1500              | 70             | 0.13 | 55                           | 62                           | 1905 | 0               |
| 6 | 400 | 60 | 1495              | 75             | 0.14 | 54                           | 61                           | 1610 | 27              |
| 7 | 400 | 60 | 1460              | 80             | 0.14 | 54                           | 61                           | 1265 | 52              |
| 8 | 400 | 60 | 1400              | 90             | 0.15 | 58                           | 66                           | 1005 | 68              |

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · L<sub>pA<sub>in</sub></sub> = Sound pressure level inlet side · L<sub>wA<sub>in</sub></sub> = Sound power level inlet side · qv = Air flow  
p<sub>ts</sub> = Pressure increase