**8300100067**

VMA0300CSLES

# EC axial fan - AxiEco

with guard grille

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## Nominal data

| | |
|---|---|
| **Item** | **8300100067** |
| **Motor** | **E06001-23 (M3G060-CD)** |

| | | |
|---|---|---|
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Nominal voltage range | VAC | 200 .. 240 |
| Frequency | Hz | 50/60 |
| Method of obtaining data | | ml |
| Status | | prelim. |
| Speed (rpm) | $min^{-1}$ | 1425 |
| Power consumption | W | 85 |
| Current draw | A | 0.7 |
| Max. back pressure | Pa | 102 |
| Max. back pressure | in. wg | 0.41 |
| 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

| | |
|---|---|
| **Size** | 300 mm |
| **Motor size** | 60 |
| **Rotor surface** | Thick-film passivated |
| **Electronics housing material** | Die-cast aluminum |
| **Impeller material** | PP plastic |
| **Guard grille material** | Steel, coated with black plastic (RAL 9005) |
| **Number of blades** | 5 |
| **Airflow direction** | V |
| **Direction of rotation** | Clockwise, viewed toward rotor |
| **Degree of protection** | IP54 |
| **Insulation class** | "B" |
| **Moisture (F) / Environmental (H) protection class** | H1 |
| **Max. permitted ambient temp. for motor (transport/storage)** | + 80 °C |
| **Min. permitted ambient temp. for motor (transport/storage)** | - 40 °C |
| **Installation position** | Any |
| **Condensation drainage holes** | None, open rotor |
| **Mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Output 10 VDC, max. 1.1 mA<br>- Locked-rotor detection<br>- Tach output<br>- Speed control<br>- Power limiter<br>- Motor current limitation<br>- Soft start<br>- Control input 0-10 VDC / PWM<br>- Control interface with SELV potential safely disconnected from the mains<br>- Overvoltage detection<br>- Thermal overload protection for electronics/motor<br>- Line undervoltage detection |
| **Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)** | <= 3.5 mA |
| **Motor protection** | Electronic motor protection |
| **With cable** | Variable |
| **Protection class assignment** | I; If a protective earth is connected by the customer<br>This component for installation may have several local protection classes. This information relates to this component's basic design.<br>The final protection class is based on the component's intended installation and connection. |
| **Conformity with standards** | EN 60034-1; EN 60204-1; EN 60335-1; CE |

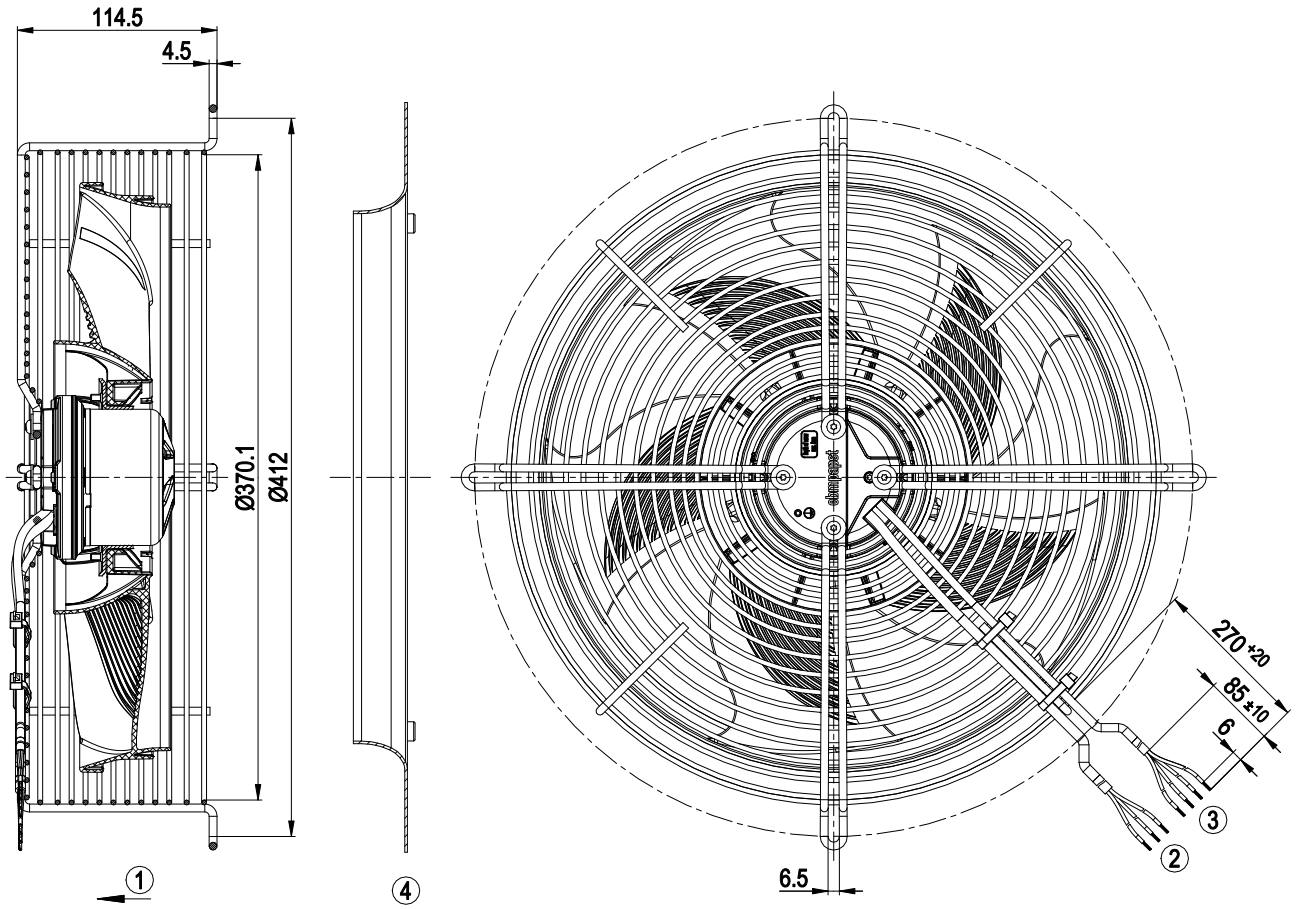


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## Product drawing




| | |
|---|---|
| 1 | Airflow direction "V" |
| 2 | Supply line (PWR) PVC AWG20 |
| | 3x splice |
| 3 | Control wire (CTRL) PVC AWG22 |
| | 4x splice |
| 4 | Accessory part: Inlet ring 30100-2-4013 not included in scope of delivery |

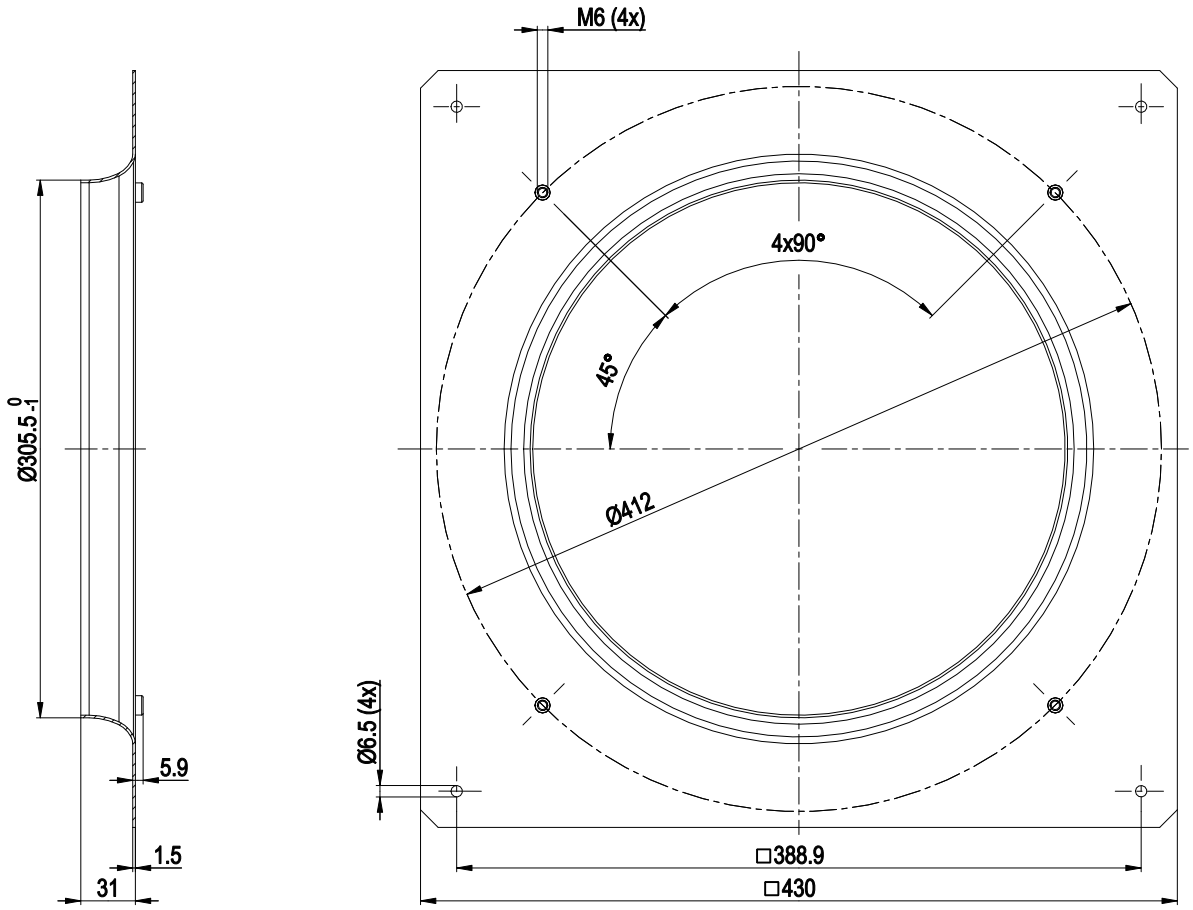


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## Accessory part

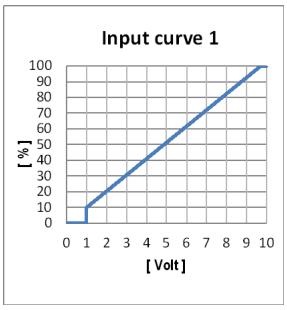



Inlet ring 30100-2-4013



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## Connection diagram




| No. | Conn. | Designation | Color | Function/assignment |
|---|---|---|---|---|
| | PWR | L | black | Power supply, phase, see nameplate for voltage range |
| | PWR | N | blue | Power supply, neutral conductor, see nameplate for voltage range |
| | PWR | PE | green/yellow | Protective earth |
| | | | | - |
| | CTRL | GND | blue | Reference ground for control interface, SELV |
| | CTRL | IO1 | yellow | Function parameterizable<br>Factory setting:<br>Analog input 0-10 V/PWM, Ri=100 kΩ fPWM=1 kHz..10 kHz, function: Speed set value<br>Characteristic curve parameterizable (see input characteristic curve “Input curve 1”), SELV |
| | CTRL | IO2 | white | Function parameterizable<br>Factory setting:<br>Open collector output, Umax=50 VDC, Imax=10 mA, function: Tach output<br>1 pulse/revolution, SELV |
| | CTRL | Vout | red | Voltage output 10 VDC +/-3%, Imax=1.1 mA<br>Not short-circuit-proof, power supply for external devices, SELV |



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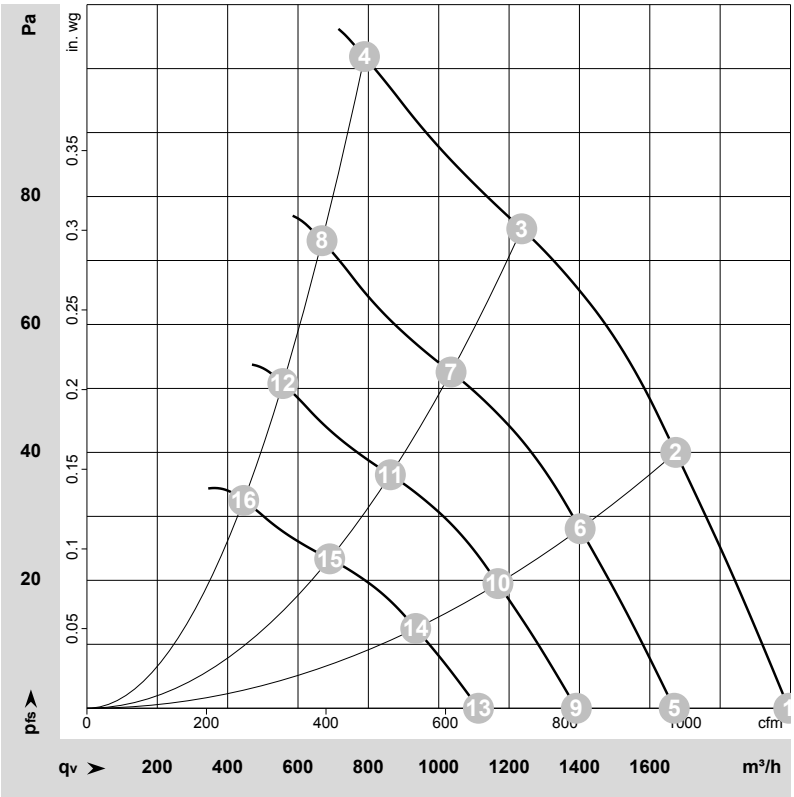
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## Curves: Air performance 50 Hz




ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-219512-1

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

| | Wired | 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 | in. wg |
| 1 | 1~ | 230 | 50 | 1425 | 59 | 0.50 | 58 | 64 | 1995 | 0 | 1175 | 0.00 |
| 2 | 1~ | 230 | 50 | 1425 | 72 | 0.61 | 55 | 62 | 1675 | 40 | 985 | 0.16 |
| 3 | 1~ | 230 | 50 | 1425 | 82 | 0.68 | 54 | 61 | 1235 | 75 | 725 | 0.30 |
| 4 | 1~ | 230 | 50 | 1425 | 85 | 0.70 | 56 | 64 | 790 | 102 | 465 | 0.41 |
| 5 | 1~ | 230 | 50 | 1200 | 35 | 0.30 | 53 | 60 | 1670 | 0 | 985 | 0.00 |
| 6 | 1~ | 230 | 50 | 1200 | 43 | 0.36 | 51 | 57 | 1400 | 28 | 825 | 0.11 |
| 7 | 1~ | 230 | 50 | 1200 | 48 | 0.40 | 49 | 57 | 1035 | 53 | 610 | 0.21 |
| 8 | 1~ | 230 | 50 | 1200 | 51 | 0.42 | 52 | 59 | 670 | 73 | 395 | 0.29 |
| 9 | 1~ | 230 | 50 | 1000 | 20 | 0.17 | 49 | 55 | 1390 | 0 | 820 | 0.00 |
| 10 | 1~ | 230 | 50 | 1000 | 25 | 0.21 | 46 | 53 | 1170 | 20 | 685 | 0.08 |
| 11 | 1~ | 230 | 50 | 1000 | 28 | 0.23 | 45 | 52 | 865 | 37 | 510 | 0.15 |
| 12 | 1~ | 230 | 50 | 1000 | 29 | 0.24 | 47 | 55 | 555 | 51 | 330 | 0.20 |
| 13 | 1~ | 230 | 50 | 800 | 10 | 0.09 | 43 | 49 | 1115 | 0 | 655 | 0.00 |
| 14 | 1~ | 230 | 50 | 800 | 13 | 0.11 | 40 | 47 | 935 | 12 | 550 | 0.05 |
| 15 | 1~ | 230 | 50 | 800 | 14 | 0.12 | 39 | 46 | 690 | 23 | 405 | 0.09 |
| 16 | 1~ | 230 | 50 | 800 | 15 | 0.12 | 42 | 49 | 445 | 33 | 265 | 0.13 |

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · $P_e$ = Power consumption · I = Current draw · $LpA_{in}$ = Sound pressure level intake side · $LwA_{in}$ = Sound power level intake side
$q_V$ = Air flow · $p_{fs}$ = Pressure increase



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