

8300101484  
VMA0350CSNDS

# EC axial panel fan - AxiEco

with guard grille for short nozzle

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Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

|                          |                   |            |
|--------------------------|-------------------|------------|
| Item                     | 8300101484        |            |
| Motor                    | E07432-18         |            |
| 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 <sup>-1</sup> | 1180       |
| Power consumption        | W                 | 85         |
| Current draw             | A                 | 0.7        |
| Max. back pressure       | Pa                | 95         |
| Max. back pressure       | in. wg            | 0.38       |
| Min. ambient temperature | °C                | -25        |
| Max. ambient temperature | °C                | 60         |

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · oe = Customer equipment  
Subject to change

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## Technical description

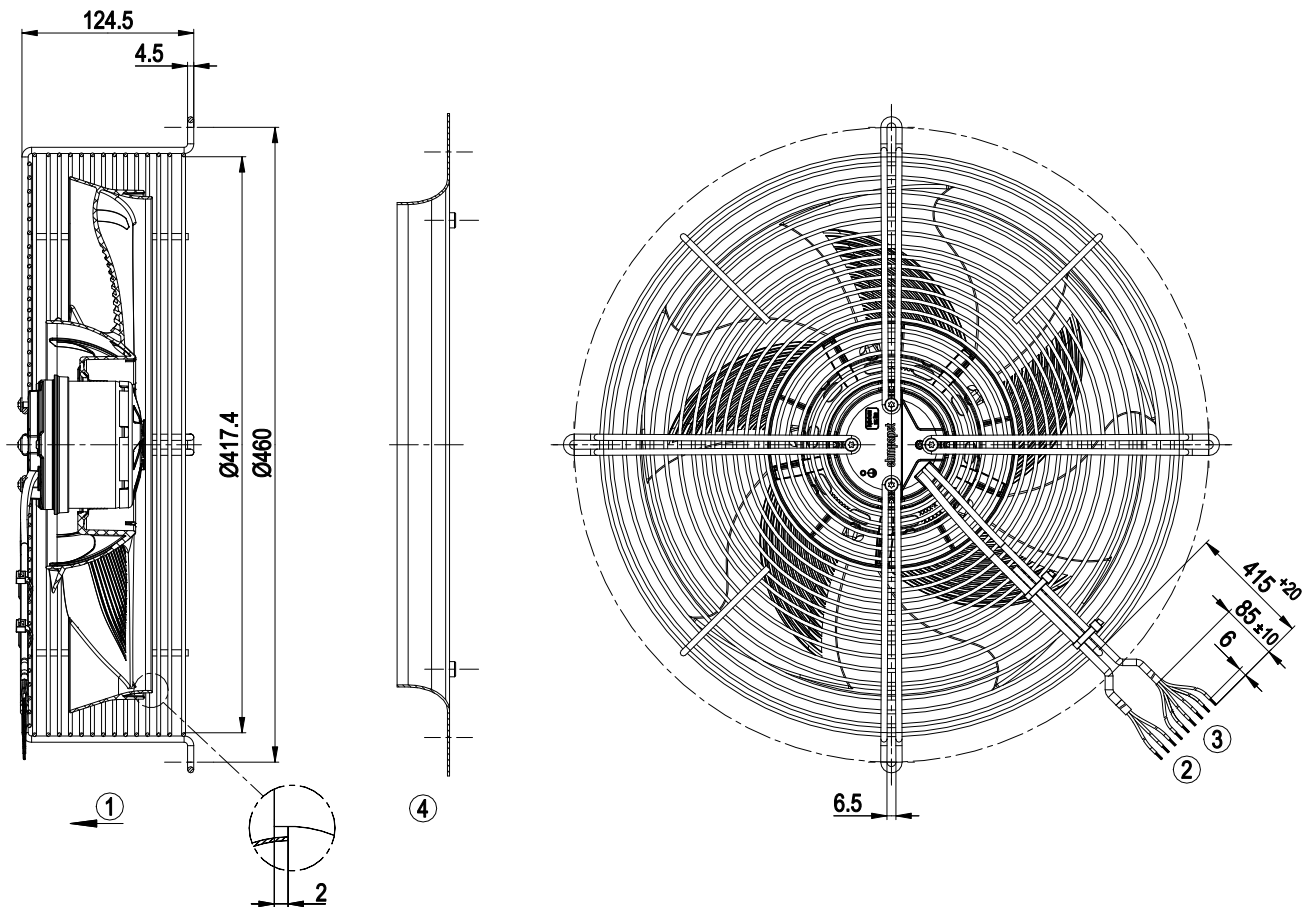
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                                                       | 350 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Motor size                                                                 | 74                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Rotor surface                                                              | Galvanized                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 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                                                         | <ul style="list-style-type: none"><li>- Output 10 VDC, max. 1.1 mA</li><li>- Locked-rotor detection</li><li>- Tach output</li><li>- Speed control</li><li>- Power limiter</li><li>- Motor current limitation</li><li>- Soft start</li><li>- Control input 0-10 VDC / PWM</li><li>- Control interface with SELV potential safely disconnected from the mains</li><li>- Overvoltage detection</li><li>- Thermal overload protection for electronics/motor</li><li>- Line undervoltage detection</li></ul> |
| 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.<br>The built-in component has several local protection class assignments.<br>The final protection class is determined by the intended installation.                                                                                                                                                                                                                                                                                                              |
| Conformity with standards                                                  | EN 60034-1; EN 60204-1; EN 60335-1; UKCA; CE                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Comment on CE                                                              | Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.                                                                                                                                                                                                                                                                                                                                                                                           |

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## Product drawing



|   |                                                                           |
|---|---------------------------------------------------------------------------|
| 1 | Airflow direction "V"                                                     |
| 2 | Supply line (PWR) PVC AWG20<br>3x splice                                  |
| 3 | Control wire (CTRL) PVC AWG22<br>6x splice                                |
| 4 | Accessory part: Inlet ring 35100-2-4013 not included in scope of delivery |

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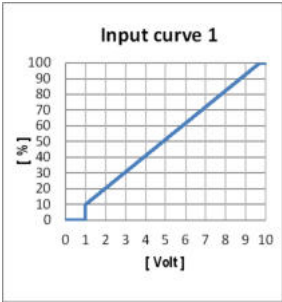
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Inlet ring 35100-2-4013

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## Connection diagram



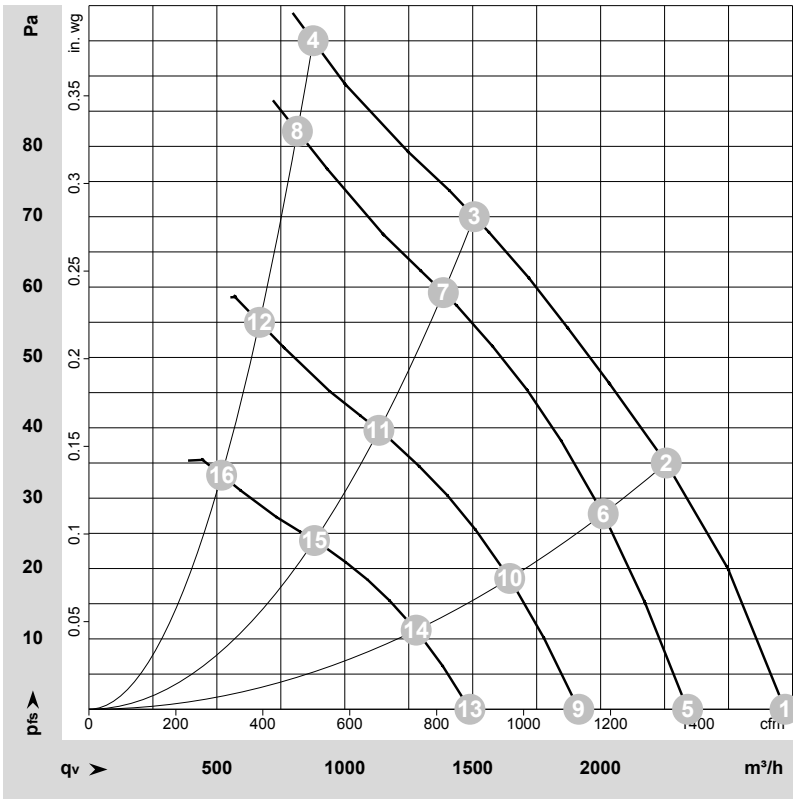
| No. | Conn. | Designation | Color        | Function/assignment                                                                                                                                                                                                                                              |
|-----|-------|-------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | 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       | Factory setting:<br>Analog input 0-10 V/PWM, Ri=100 KΩ, fPWM=1 kHz..10 kHz,<br>Function: Speed set value<br>Characteristic curve parameterizable (see "Input curve 1"), SELV<br>Function parameterizable at the factory (see Optional interface functions table) |
|     | CTRL  | IO2         | white        | Factory setting:<br>Open collector output, Umax=50 VDC, Imax= 10 mA, function: Tach output<br>1 pulse/revolution, SELV<br>Function parameterizable at factory (see table Optional interface functions)                                                           |
|     | 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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## Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-229690-1  
Date: 2023-11-17  
Housing: 35100-2-4013

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 <sub>e</sub> | I    | LpA <sub>in</sub> | LwA <sub>in</sub> | q <sub>v</sub> | p <sub>fs</sub> | q <sub>v</sub> | p <sub>fs</sub> |
|----|-------|-----|----|-------------------|----------------|------|-------------------|-------------------|----------------|-----------------|----------------|-----------------|
|    |       | V   | Hz | min <sup>-1</sup> | W              | A    | dB(A)             | dB(A)             | m³/h           | Pa              | cfm            | in. wg          |
| 1  | 1~    | 230 | 50 | 1280              | 81             | 0.67 | 59                | 65                | 2720           | 0               | 1600           | 0.00            |
| 2  | 1~    | 230 | 50 | 1235              | 86             | 0.71 | 56                | 62                | 2255           | 35              | 1330           | 0.14            |
| 3  | 1~    | 230 | 50 | 1195              | 86             | 0.71 | 54                | 62                | 1505           | 70              | 885            | 0.28            |
| 4  | 1~    | 230 | 50 | 1185              | 86             | 0.71 | 57                | 65                | 875            | 95              | 515            | 0.38            |
| 5  | 1~    | 230 | 50 | 1100              | 51             | 0.42 | 55                | 61                | 2340           | 0               | 1375           | 0.00            |
| 6  | 1~    | 230 | 50 | 1100              | 61             | 0.50 | 53                | 59                | 2010           | 28              | 1185           | 0.11            |
| 7  | 1~    | 230 | 50 | 1100              | 67             | 0.55 | 52                | 60                | 1385           | 59              | 815            | 0.24            |
| 8  | 1~    | 230 | 50 | 1100              | 69             | 0.57 | 56                | 63                | 815            | 82              | 480            | 0.33            |
| 9  | 1~    | 230 | 50 | 900               | 28             | 0.23 | 50                | 56                | 1915           | 0               | 1125           | 0.00            |
| 10 | 1~    | 230 | 50 | 900               | 33             | 0.27 | 48                | 54                | 1645           | 19              | 970            | 0.08            |
| 11 | 1~    | 230 | 50 | 900               | 37             | 0.30 | 47                | 55                | 1135           | 40              | 665            | 0.16            |
| 12 | 1~    | 230 | 50 | 900               | 38             | 0.31 | 51                | 58                | 665            | 55              | 395            | 0.22            |
| 13 | 1~    | 230 | 50 | 700               | 13             | 0.11 | 43                | 50                | 1490           | 0               | 875            | 0.00            |
| 14 | 1~    | 230 | 50 | 700               | 16             | 0.13 | 41                | 48                | 1280           | 11              | 755            | 0.04            |
| 15 | 1~    | 230 | 50 | 700               | 17             | 0.14 | 41                | 48                | 880            | 24              | 520            | 0.10            |
| 16 | 1~    | 230 | 50 | 700               | 18             | 0.15 | 44                | 52                | 520            | 33              | 305            | 0.13            |

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase