

Model No. A3P350-EC072-013

EC Axial Fan



Technical data

| | |
|---|---|
| Voltage ⁽¹⁾ | AC 230 [V] |
| Frequency | 50/60 [Hz] |
| Speed | 1380 \pm 10% [min ⁻¹] |
| Power nom. / Current nom. | 90 [W] / 0.65 [A] |
| Power max. / Current max | 111 [W] / 0.85 [A] |
| Air flow | max. 2811 [m ³ /h] |
| Noise | 57 [dBA] |
| Degree of protection | IP44 |
| Leakage current ⁽²⁾ | max. 3.5 [mA] |
| Dielectric resistance ⁽³⁾ | AC 1800V |
| Insulation class | B class |
| Control input ⁽⁴⁾ | 0-10V VDC/PWM |
| Output | +10VDC |
| Tach output ⁽⁵⁾ | 1 Pulse/R |
| Protected mode | Over-temperature / over-current / locked protected |
| Appearance | There should not be any defects and dirty which Spoil goods value |
| Mass | Approx 5.9 [kg] |
| Lead wire pulled Out strength | min. 20 |
| Balancing grade | G 6.3 |
| L10 life | min. 40.000 [h] |
| Impeller material | PA66 |

Power<125W, not subject to the ErP directive regulations

⁽¹⁾ AC 200 – 277 V range

⁽²⁾ Testing conditions: AC 260 V, 3 s

⁽³⁾ Tripping current 10 mA, 1s

⁽⁴⁾ See Fig.1, Fig.2

⁽⁵⁾ Duty 30% ~ 70%, +10V, tach output 10K Ω , it needs 10K Ω pull-up resistance between +10V line and tach output line

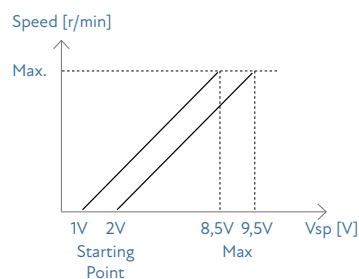


Fig. 1

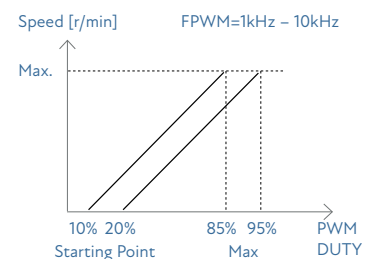


Fig. 2

Environmental requirement

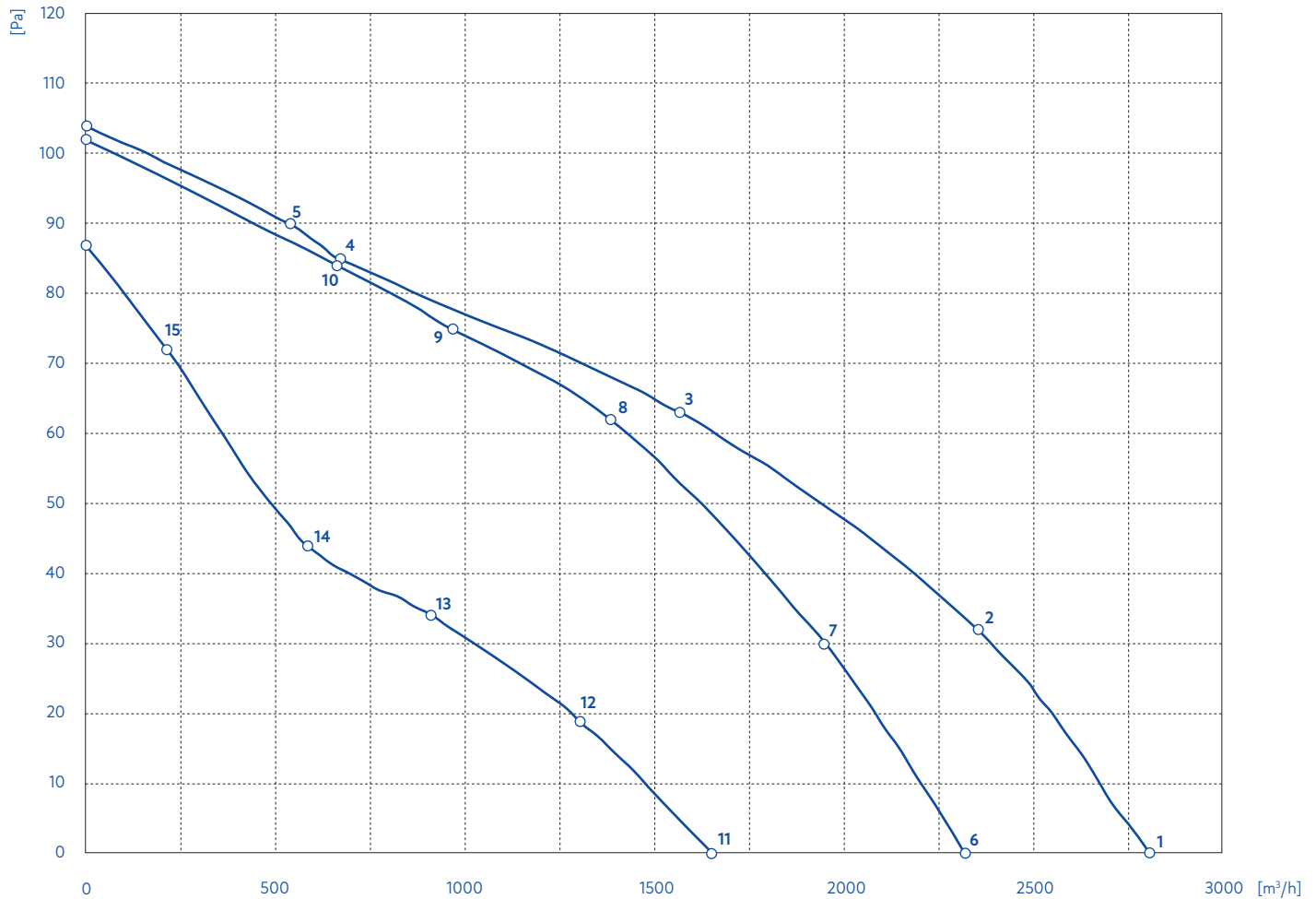
| | |
|------------------------------------|---|
| Storage temperature range | -25 – 60 [°C] |
| Operating, storage humidity | 30 – 95 [%] RH non condensing -25 – 60 [°C] |
| Operating temperature range | heat sink of ic 115 [°C] max other electronic parts 85 [°C] max ball bearing 80 [°C] max coil 120 [°C] max |

| Angle Tolerance | Classification of a shorter side of subjected angle | | | |
|-----------------|---|----------------|-----------------|------------------|
| | X \leq 10 | 10<X \leq 50 | 50<X \leq 120 | 120<X \leq 400 |
| Tolerance | $\pm 1^\circ$ | $\pm 30'$ | $\pm 20'$ | $\pm 10'$ |

| General Tolerance | Classification of basic dimension | | | |
|-------------------|-----------------------------------|---------------|----------------|------------------|
| | X \leq 6 | 6<X \leq 30 | 0<X \leq 120 | 120<X \leq 400 |
| Tolerance | ± 0.1 | ± 0.2 | ± 0.3 | ± 0.5 |

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Air performance



| Item | Voltage [V] | Frequency [Hz] | Speed [min ⁻¹] | Power [W] | Current [A] | Airflow [m³/h] | Pressure [Pa] | Vsp [V] |
|------|-------------|----------------|----------------------------|-----------|-------------|----------------|---------------|---------|
| 1 | 230 | 50 | 1377 | 110 | 0.84 | 2811 | 0 | 10 |
| 2 | 230 | 50 | 1303 | 111 | 0.85 | 2355 | 32 | |
| 3 | 230 | 50 | 1196 | 107 | 0.82 | 1567 | 63 | |
| 4 | 230 | 50 | 1032 | 95 | 0.74 | 670 | 85 | |
| 5 | 230 | 50 | 1002 | 93 | 0.72 | 538 | 90 | |
| 6 | 230 | 50 | 1139 | 62 | 0.5 | 2327 | 0 | 7 |
| 7 | 230 | 50 | 1141 | 76 | 0.6 | 1949 | 30 | |
| 8 | 230 | 50 | 1141 | 93 | 0.73 | 1387 | 62 | |
| 9 | 230 | 50 | 1113 | 105 | 0.78 | 969 | 75 | |
| 10 | 230 | 50 | 1025 | 95 | 0.73 | 663 | 84 | |
| 11 | 230 | 50 | 802 | 23 | 0.21 | 1653 | 0 | 5 |
| 12 | 230 | 50 | 802 | 27 | 0.24 | 1304 | 19 | |
| 13 | 230 | 50 | 802 | 33 | 0.28 | 910 | 34 | |
| 14 | 230 | 50 | 802 | 38 | 0.34 | 585 | 44 | |
| 15 | 230 | 50 | 801 | 57 | 0.47 | 212 | 72 | |

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Note in use

- Since this motor has no reversing connection, to prevent motor damaged by over starting current, the peak current can not exceed 2.5A,
- Please do not perform extraction and insertion of the connector under revolution irrespective of power on and power off,
- Do not add shock to the ball bearing,
- Fan can be cooled by ventilation, please consider ventilated condition around the fan when using it,
- Do not carry with lead wires when handle a fan, if add huge strength to lead wires that the soldered part in fan may be shed,
- Do not use relay or other mechanical switch on power supply line, because impact voltage may damage the fan,
- Switch on/off the device by the control input,
- Evaluate the fan refer to this specifications. If the load or power supply voltage of the motor should be changed, please contact with us.

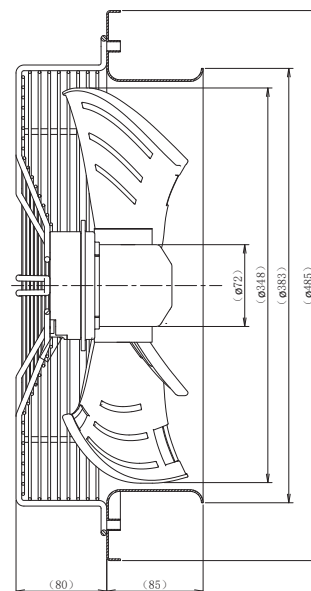
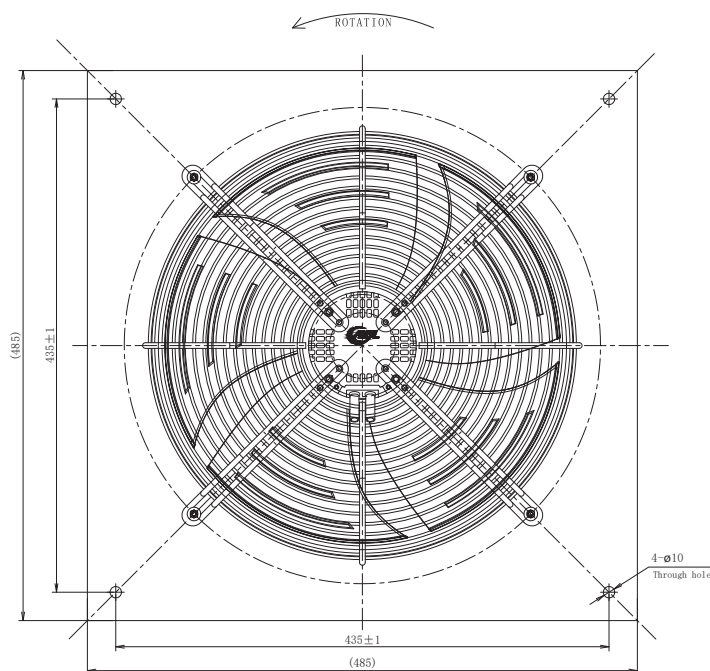
Others

- The intellectual asset of the fan in the form of patent belongs to our corporation so any patent problem will not be caused during the actual application. Our corporation will not be responsible for any patent dispute or problem that caused by the product method and new technique project which are developed by using this fan,
- It should be assured that this specification can not be revealed to any third party without the consent of our corporation,
- Materials of motor contain six substances Pb Cr (VI+) Cd Hg PBB and PBDE those contents comply with the RoHS instruction,
- The company reserves the right to make modifications and changes.

Product drawing

With wind guide panel

Model No. **A3P350-EC072-013** (blowing) 



| Line | Connection | Color | Function |
|------|------------|----------------|--|
| 1 | L | brown | Single-phase 50/60 Hz |
| | N | blue | |
| | PE | yellow / green | |
| 2 | +10V | red | +10V output |
| | 0-10V/PWM | yellow | Speed control input |
| | GND | blue | GND |
| | Tach | white | Tach output EC072, EC092: 1 pulse/R EC102, EC137: 12 pulse/R |

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Notes on various control possibilities and their applications

