Axial brushless DC fan plastic frame

DC09238024H11100

Dynetics

represents a broad range of axial- and radial-fans with an AC or DC-power supply for equipment cooling with a variety of axial instrument ventilators and radial blowers from leading manufacturers, such as Nidec Servo and Nidec Copal.

DC09238-series

- axial fans
- Plastic frame (94V-0) and plastic impellor (94V-0)
- sizes 92x92x38mm
- bearing system: 2 ball bearings
- available in 12-; 24-; or 48V/DC
- The BLDC fans weight 216g,
- 300mm leadwire,

Optional:

- a Lock detection: (Suffix “-RD” or “RRD”) for Rotation Detector Function.
- a “Speed signal” or speed detection : (Suffix “-FG”) for a Signal-Frequency Generator Function (also called for Frequency Generator Function.
- speed control by PWM: (Suffix “-PWM”.) for automatic speed Controls via an external input signal.
- Speed Control by Voltage : speed controll by applying an external DC Voltage signal. from 0V to 10V(standard value is 0 to 5V).The speed will vary linear and is proportional to the % change of the "Vin" value,.
- Temperature Control: (Suffix “-T”) with a built in thermistor that detects the ambient temperature, and controls the speed of the fan accordingly.
- High Temperature Environments: Suffix basic “-HT” for temperature operating ranges -10~90 °C

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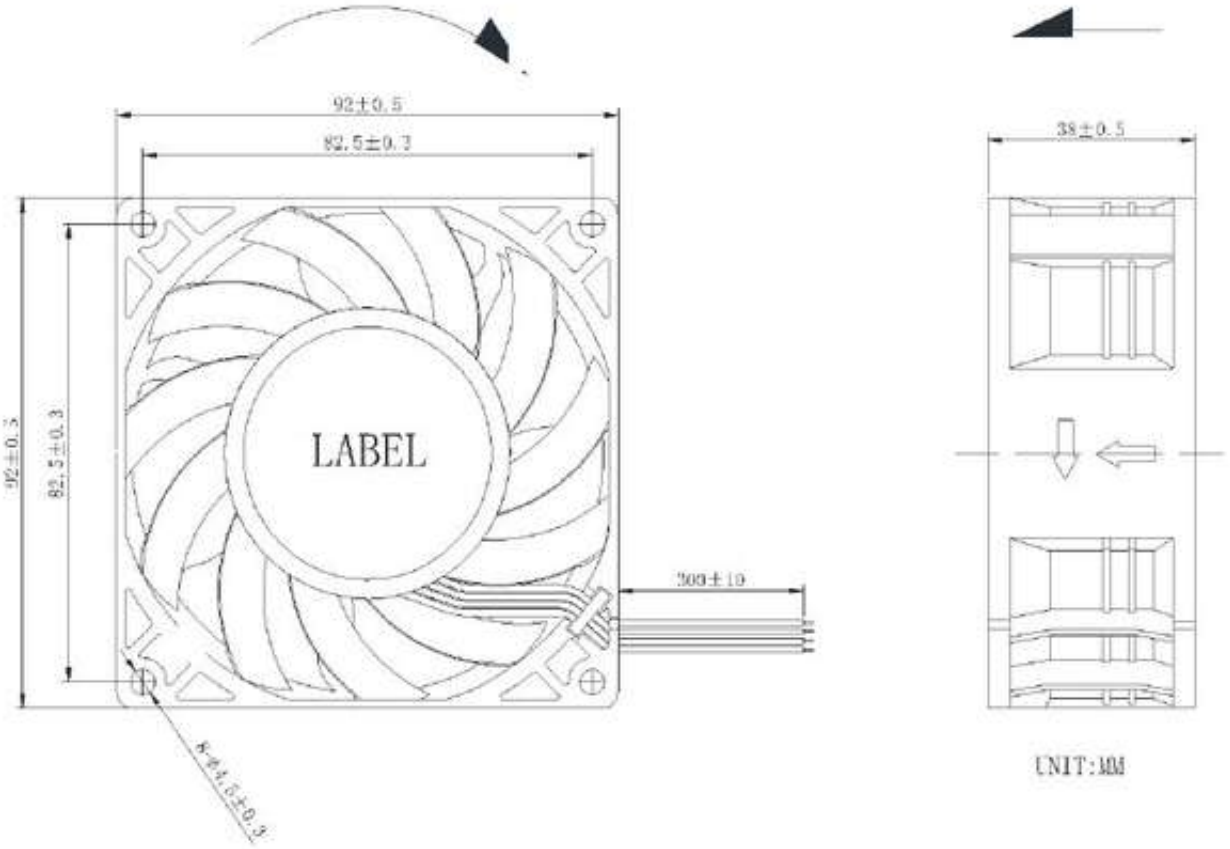
Germany

- Special IP Rating On Request

We can also customized the fan, like harness wire, different lead length, connector, etc

Images



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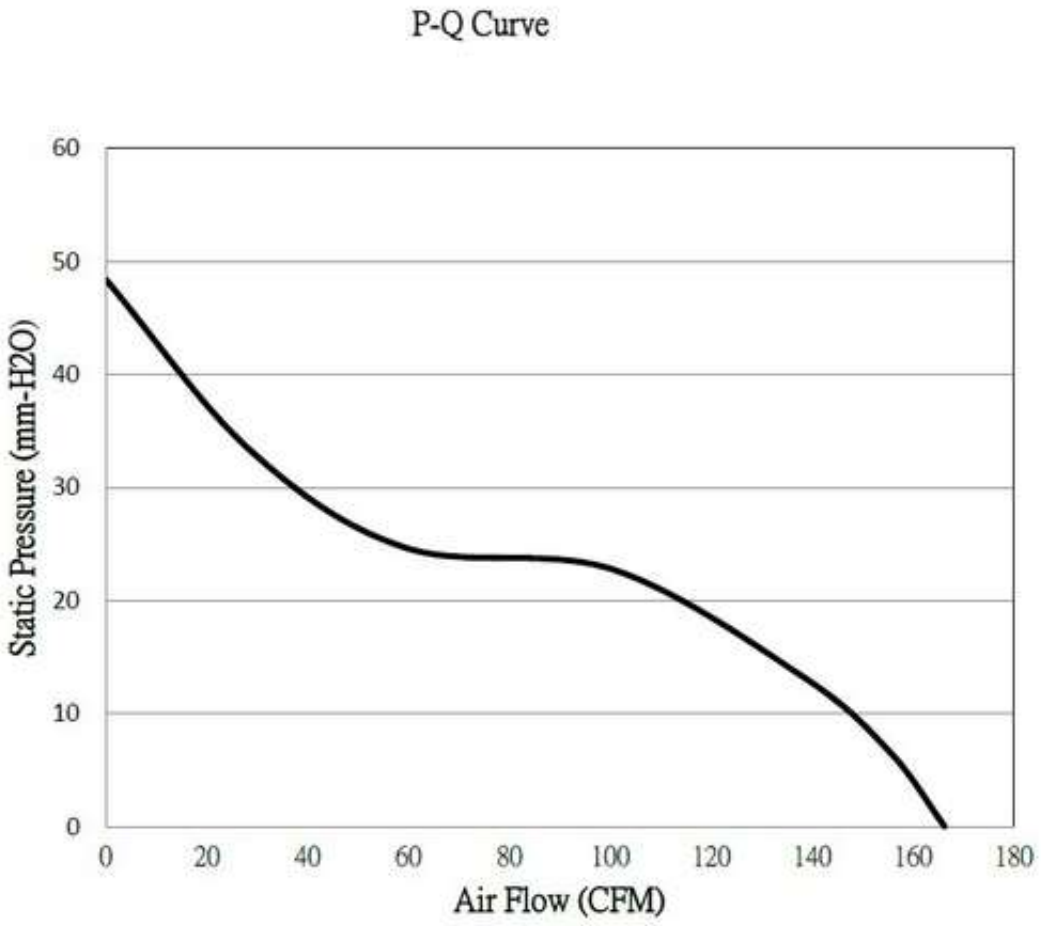

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Details

DC09238024H11100 Axial brushless DC fan plastic frame; 4-wire, with PWM speed control, Pulse sensor; IP44; RoHs compliant

Max. Airflow	4,71	m3/min
Max. Airflow	166,37	CFM

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Max. Static pressure	474,64	Pa
Max. Static pressure	48,40	mmH2o
noise	35,0	dB
speed	8000	rpm
input	33,84	W
Voltage	24	V
Current	1410	mA
sizes	92 x 92 x 38	mm
operating Voltage range	14 - 26,2	V
operating temperature	min10 - +70	°C

HOUSING	Thermoplastic PBT, UL94V-0
IMPELLER	Thermoplastic PBT, UL94V-0
BEARING	Ball
OPERATING TEMPERATURE	-10°C to + 70°C
DIELECTRIC STRENGTH	5mA Max. at 500 VAC for 1 minute
INSULATION RESISTANCE	10M Ω min. @500 VDC
WEIGHT	0,216 kg
ROHS COMPLIANCE	Yes
IP LEVEL	IP44 (Special IP Rating On Request)
life expectation	L10 life 70.000 hours at 40 deg.C; room humidity 15%-65%RH
Insulation class	UL: class A

Lead wires: UL1007#24AWG

- Colour code:
  - Black wire (-)
  - Red wire (+)
  - Yellow wire (FG)
  - Blue wire (PWM)

PWM speed control: Signal description (yellow wire)

- input low level Voltage: Max. <0,8V
- input high level Voltage: at min. >2,6V; max. <5V

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- PWM frequency range: 100Hz to 100KHz.
- Max. sink current: 8mA
- Impedance: 10K Ohm min.

Fan speed control (blue wire):

- Fan input Voltage: 26,2V
- The fan should run at full speed at PWM 100% duty cycle input.
- The fan should have a zero speed at PWM signal between 0% to 15% duty cycle
- The fan will run at full speed when the control wire (blue) is disconnected

Pulse signal Specifications:

note: prevent that the lead wire of the FG signal touches the positive or negative leadwire

Output: open collector

- V FG Maximum Voltage = 26,2V (the powersource is from customer's system)
- IC maximum current: 5mA
- low level Voltage = 0,5V max.
- R ≥ V FG / Ic
-

Protection:

- Locked rotor potection:
  - Impedance of motor winding protects motor from damage in 72hours of locked rotor condition at rated Voltage.
  - After auto power off, circuit attempt to restart in 3 to 8 seconds
- Polarity protection:
  - capable to withstanding a reverse connection of positive and negative leads

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Specifications

Product type	DC09238024H1 1100	**Max. Airflow**	4.71 m3/min	**Max. Airflow**	166.37 CFM
Max. Static pressure	474.64 Pa	**Max. Static pressure**	48.4 mmH2o	**Noise**	35 dB
Speed	8000 rpm	**Input**	33.84 W	**Voltage (rating)**	24 V
Current (rating)	1410 mA	**Size frame**	92 mm	**Supplier**	Dynetics
Operating temperature	-10 - +70 Degrees Celcius				

This PDF-document has been generated from a selection of the available details from the manufacturer. In case the contents of the PDF-file is incomplete or difficult to read, we apologize for the inconvenience and ask you to contact us (info@dynetics.eu)

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