



Effective Cooling Solutions for Mobility

BLDC Fans and Blowers

BLDC Fans for Mobility

Introducing our revolutionary BLDC axial fans and BLDC dual centrifugal fans with housing, setting new standards in commercial vehicle air conditioning. Designed to exceed comfort expectations, particularly in buses, these brushless marvels operate seamlessly, ensuring wear-free performance. With no need for additional maintenance or servicing, they epitomize the renowned reliability associated with Hiccol.



Benefits & Characteristics

- Over 40,000 operating hours
- Variable speed control
- Efficiency
- Low sound emission
- Compliance with the most stringent EMC requirements
- High moisture protection class
- Extended temperature range
- Long-life ball bearings



- Radiator Cooling
- BTMS Cooling
- Transport Refrigeration
- Cooling solution for all kind of mobility
- HVAC



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BLDC Fans - Technical Features

Soft Start

The motor starts at a low speed and reaches full speed after 20 seconds of running, reducing the power supply current surge.

Over-current protection

The fans have the over-current protection function.

Locked-rotor protection

Locks the loaded fan and applies the rated voltage (26VDC) and speed control voltage, ensuring that the input current remains below the rated value.

Polarity protection

The fan has polarity protection function.

Over-voltage and under-voltage protection function

When the input voltage is too high or too low, the fan will enter the shutdown protection state.

Speed Control

The fan speed can be controlled by following two methods:

Linear Voltage: 0~10VDC.

When the fan is stopped, the starting voltage is $1\pm0.2V$, and the speed reaches the maximum at $9.5\pm0.2V$. When the fan is under operation, the shutdown voltage os $0.8\pm0.2V$.

PWM signal (frequency 1k~10KHz, amplitude 10~12V): duty cycle 0%~100%

When the fan is stopped, the starting duty cycle is 10%±2%, and the speed reaches the maximum at 95%±2%. When the fan is under operation, the shutdown duty cycle is 8%±2%.





BLDC Axial Fans



Model	Category	Voltage (VDC)	Current (A)	Nominal Input Power (W)	Speed (RPM)	Airflow (M³/hr)	Noise (dBA)	Weight (Kg)
G3HD300-J1-100	BLDC Axial Fan	26	6.5	170	2800	2700	72	2.7





BLDC Axial Fans





Model	Category	Voltage (VDC)	Current (A)	Nominal Input Power (W)	Speed (RPM)	Airflow (M³/hr)	Noise (dBA)	Weight (Kg)
G3HD385-J1-100	BLDC Axial Fan	26	7.1	185	2550	3300	78	3.5





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BLDC Centrifugal Fan



Model	Category	Voltage (VDC)	Current (A)	Nominal Input Power (W)	Speed (RPM)	Airflow (M³/hr)	Noise (dBA)	Weight (Kg)
E3HD097-J1-100	BLDC Centrifugal Fan	24	11	265	3200	1050	65	2.5



170.5



480

Notes







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