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1.2KW 24V 1700RPM Sensorless BLDC Motors

Model Number:	BLDC1.2-123
Type:	Brushless DC Motor
Output Power:	1200W
DC Voltage:	24V
Speed Range:	1700RPM
Poles:	4P, 6P, 8P...

Detailed information

Brand Name:	Volcano Electric	Model Number:	BLDC1.2-123	Type:	Brushless DC Motor
Output Power:	1200W	DC Voltage:	24V	Speed Range:	1700 RPM
Controller:	Customized, Optional	Braker:	Optional	Insulation Class:	Class B/F/H
Enclosure:	IP44 / IP54	Poles:	4P, 6P, 8P...	Wire:	100% copper
Housing:	Aluminum	Efficiency:	IE 4.0		
Duty:	S1 (continuous)	Place of Origin:	Zhejiang, China (Mainland)	Standard:	IEC / NEMA standard
Application:	Boat, Car, Electric Bicycle, Fan, Home Appliance, Traction Motor, Solar Pump DC systems, bus A/C systems ,Other				

Product Description

Difference between sensorless and sensored brushless motor

Sensored Motors uses the "Hall Effect" to detect the rotor inside the motor and transmit the data to the ESC through a sensor wire. It allows the ESC to control the rotation and the speed of the motors precisely.

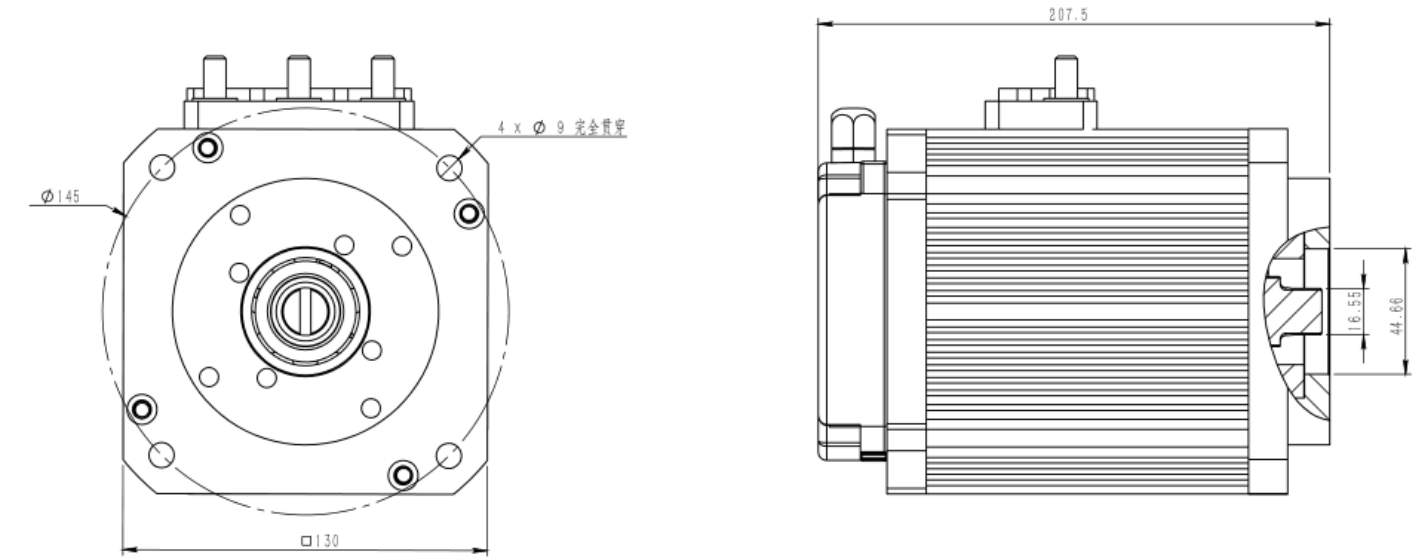
Sensorless Motors uses back/counter EMF (Electromotive Force) that detects the rotor position by receiving and interpreting feedback current that was generated by motor as the rotor spins. Basically, it is a contact-less system that is similar to Sensored motors, but uses magnetic field force. In addition, Sensorless motors are more efficient when running at a high RPM than Sensored motors. It would have no friction without the contact and have no heat produced. Unlike Sensored motors that need open space for ventilation, Sensorless motors do not need that so it is usually sealed to prevent dirt or small particles to get in.

In general, sensed motor is smoother compared to a Sensorless motor with the wire connected, and the signals are sent and received correctly. It is noticeable that Sensed motors are smoother especially in the lower end of the motors operations. when the motor is running at low speed, Sensorless motor would occasionally causes cogging, because there isn't enough EMF (Electromotive Force) to send out for the ESC to receive.

Where sensorless brushless motor used?

The 1.2KW 24V 1700RPM Sensorless BLDC Motors are designed for solar pump systems. There are many sensorless brushless motor used in solar pumps systems, which has lower cost compared to sensed brushless motors, and same efficiency.

Configuration



*CAN MAKE ACCORDING TO YOUR REQUIRMENT

BL123 Brushless motor list

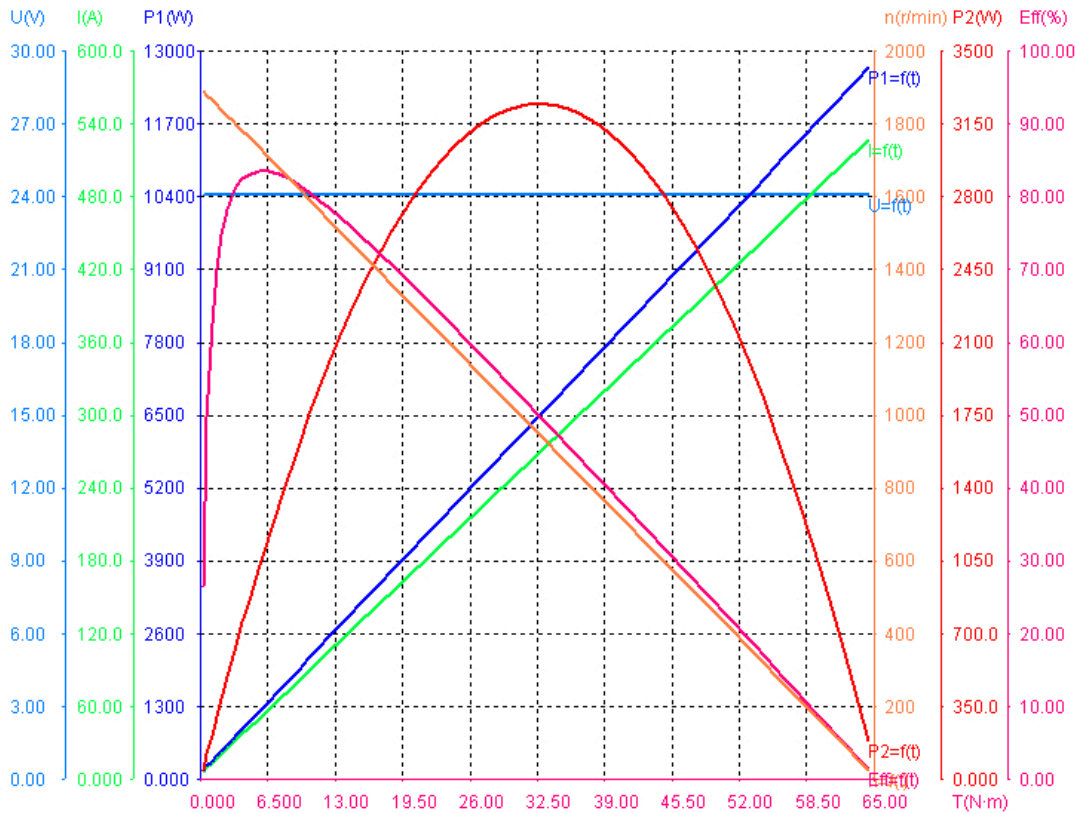
Motor type	Output	Voltage	Load	Speed	Rated Torque	Poles	Efficiency	Noise
	KW	V	A	RPM	N.m		%	dB
BLDC0.65-123	0.65	24	32.2	1700	3.65	8	84	60
BLDC1.2-123	1.2	24	59.5	1700	6.74	8	84	60
BLDC1.25-123	1.25	24	62	1350	8.85	8	84	60
BLDC1.4-123	1.4	24	69.45	1560	8.57	8	84	60
BLDC1.8-123	1.8	48	44.2	2000	8.59	8	85	60

Advantage of Brushless DC motors

- Lower Maintainance and longer lifetime - no brush and commutator erosion
- Lower noise - the elimination of brush contact
- Higher power to weight ratio

- Higher efficiency (in general higher than 90%)
- Lower temperature rise - more efficient heat dissipation due to winding construction
- Reduction of EMI

Performance of 1200W 24V 1700RPM BLDC Motors



For customized DC Motors, please contact our technician, Ordinary, we have to know the following information to get a professional proposal:

- **Brushed or Brushless** Customer preference
- **Output power (W)** Horsepower/watts/torque rated at full load speed
- **Voltage (V)** i.e 12v DC 220v AC
- **Motor speed (RPM)** Revolutions per minute of the shaft at full load Voltage
- **Application** e.g. traction, airconditioning, etc.
- **Duty** Most motors are rated continuous. Some applications however may use motors designed for intermittent duty
- **Configuration/Frame** Our products are according to IEC standard, we also can customize the flange and shaft according to the customer drawing
- **Controller function** e.g. forward/reverse, variable speed, acceleration profile, etc.

[Previous 24V Hall Sensors Brushless DC Motor](#)

[Next 1.4KW 24V 4 Pole Brushless DC Motor](#)

You may like:

 	 	 	 	 
220V 750W 3000RPM 6P Brushless DC Motor	48v 1kw 3000rpm Brushless Dc Motor For Electric Vehicle	48V High Torque 1000W Hall Sensor EV Motor	30V 1000W IP54 Brushless DC EV Motor With Hall Sensor	BLDC 24V 1200W 2300RPM EV Motor High Efficiency

 
48V 1000W IP54 Brushless DC Motor Hall Sensor

 	 	 	 
24V Brushless DC Motor 3000rpm for Vehicle	24V 750W 3000RPM Brushless DC Motor	High efficiency 1000w 110v 1500rpm Brushless DC Motor	Custom 1.5KW 48V 1800RPM Brushless DC Motor

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