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High Torque High RPM Brushless DC Motor

Model Number:	BLDC3.6-154
Type:	Brushless DC Motor
Output Power:	3.6KW
DC Voltage:	45V
Speed Range:	3200RPM
Poles:	4P, 6P, 8P...

Detailed information

Brand Name:	Volcano Electric	Model Number:	BLDC3.6-154	Type:	Brushless DC Motor
Output Power:	3600W	DC Voltage:	45V	Speed Range:	3200 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

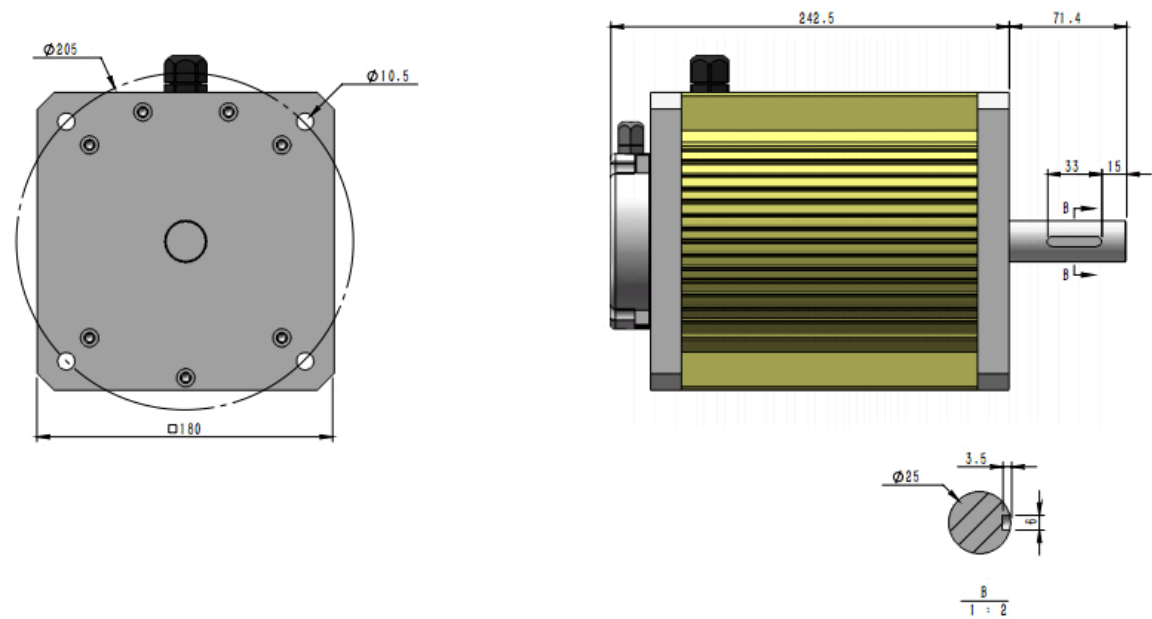
Volcano Electric engineers aim to optimize the torque output of the motor during the design phase. The key components involved in torque production of the motor are the magnet, winding and flux path. The energy content of the magnet drives the strength of the motor but a balance must be achieved between power and cost. Also, the higher the number of pole pairs in the magnet, the higher the amount of torque for the same dissipated power. Volcano Electric engineers optimize the design based on the physical size, energy content, pole pair count and geometry of the magnet.

Speed of a motor is the magnitude of the rotational velocity of the motor shaft. In a motion application, high RPM dictates how fast the axis rotates – the number of complete revolutions per unit time. Applications vary in their speed requirement, depending on what is being moved and the coordination with the other components of the machine. A balance must be achieved between speed and torque, as motors typically generate less torque when run at higher speeds.

High Torque High RPM Brushless DC Motor is a relative but not absolute. Typically Generate less torque when run at higher speeds. And to have a high torque, the motor should run at lower speeds.

This is BL154 Brushless DC Motor, the Series BLDC154 motors can be designed to operate in avoltage range from 24V to 380V DC, its outer diameter is 180mm.The Series BLDC154 motors cover a output power range from 1.5KWto 10KW, its torque range on continuous duty is 3-20Nm, on intermittent duty up to 7.5-50Nm.

Configuration



*CAN MAKE ACCORDING TO YOUR REQUIRMENT

Brushless motor list

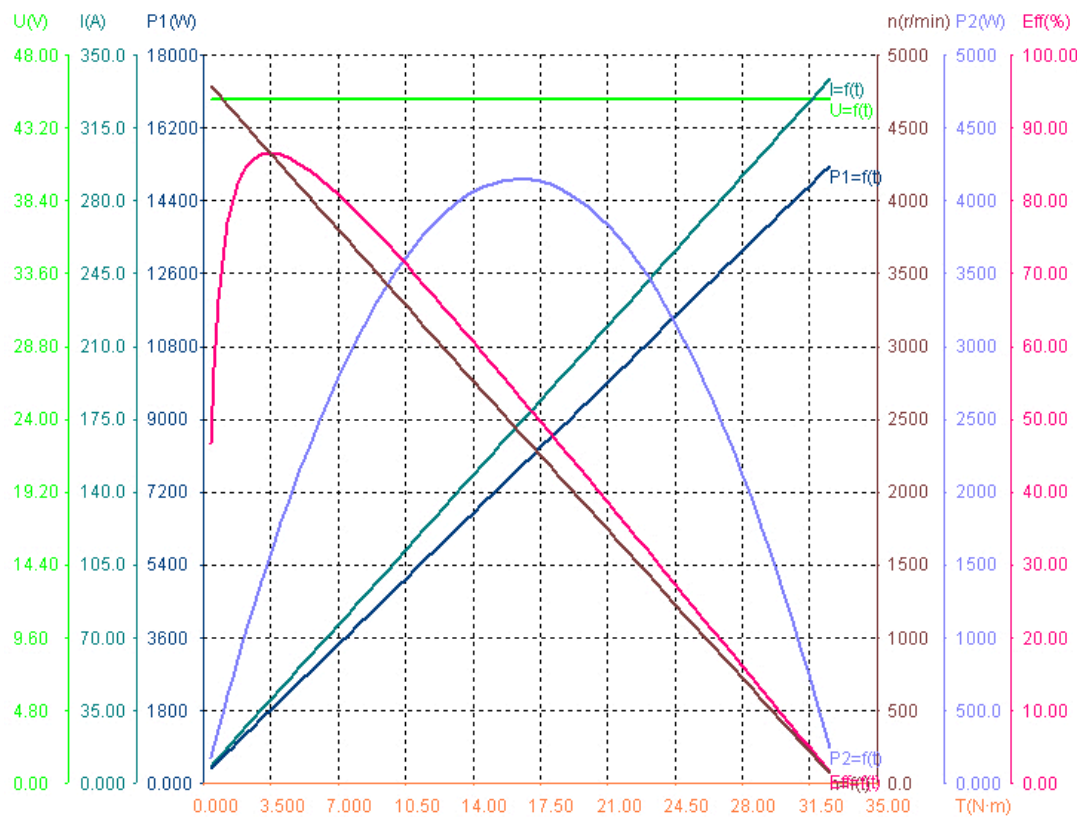
Motor type	Output	Voltage	Load	Speed	Rated Torque	Poles	Efficiency	Noise
	KW	V	A	RPM	N.m		%	dB
BLDC1.55-154	1.55	45	40	4300	3.44	8	86	60
BLDC1.8-154	1.8	60	32.6	1100	15.6	8	92	61
BLDC1.85-154	1.85	24	81.5	2100	8.41	8	92	60
BLDC2.7-154	2.7	60	48.9	1100	23.4	8	92	61.5
BLDC2.8-154	2.8	60	50.8	1100	24.3	8	92	61.5
BLDC2.8-154	2.8	48	67.8	2600	10.3	8	86	61
BLDC3.0-154	3.0	48	67.6	2650	10.81	8	92.5	61
BLDC3.0B-154	3.0	72	46.8	1850	15.5	8	89	61
BLDC3.5B-154	3.5	60	69.5	1680	19.9	8	84	61
BLDC3.6-154	3.6	45	111.1	3200	10.74	8	72	61

BLDC4.0-154	4.0	48	90.6	2580	14.81	8	92	62
BLDC5.5-154	5.5	72	85.6	3680	14.27	8	89.2	63

Advantage of Brushless DC motors

- Lower Maintenance 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 3600W 45V 3200RPM Brushless DC Motor





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.

You may like:

				
48V 90% Efficiency 1500W Hall Sensor EV Motor With Brake	310VDC 1500W 3500RPM BLDC Motor	2HP 24V 3500RPM Hall Sensor Brushless DC Motor	60V 3500W High Power BLDC Motor	3KW 3000RPM IEC 90 Brushless DC Motor

			
3.7KW 60V 3600RPM Electric Brushless DC Motor	2.5KW 72V Hall Sensor Brushless DC Motor	2.8KW 48V Sensorless BLDC Motor Driver	1.5 KW Brushless DC motors IEC 90L Frame


2000W 60V 3000RPM Brushless DC Motor