



3kw 48v BLDC Motor

Model Number:	BLDC3.0-154
Type:	BLDC Motor
Output Power:	3.0KW (4HP)
DC Voltage:	48V
Speed Range:	2650RPM
Poles:	4P, 6P, 8P...

Detailed information	
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Brand Name:	Volcano Electric	Model Number:	BLDC3.0-154	Type:	BLDC Motor
Output Power:	3000W (4HP)	DC Voltage:	48V	Speed Range:	2650 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

Physical Properties of a BLDC Motors [Brushless DC Motor](#)

The BLDC Motor consists of a rotating rotor, Neodymium Iron Boron magnets, and a stator. BLDC Motors are considered to be an "inside-out" version of a [Brush DC Motor](#); the commutator and brushes are nonexistent, and the windings are located externally, connected to the controller.

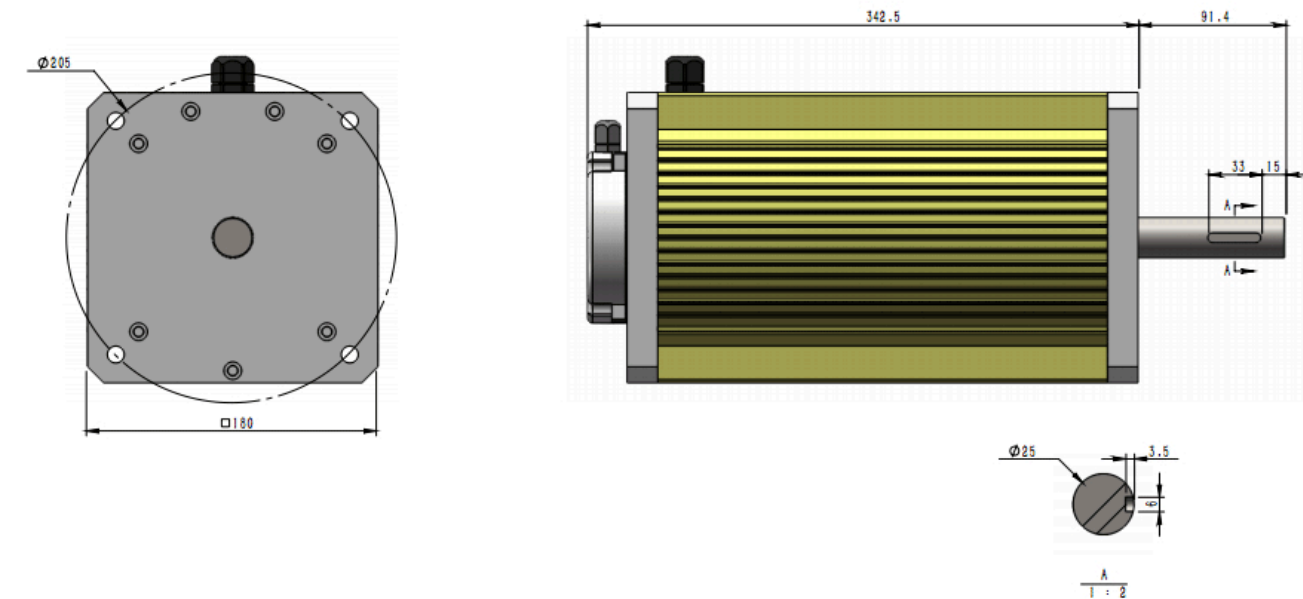
How is a BLDC Motor Controlled?

An electronic BLDC Controller (also known as a Driver, or Electronic Speed Controller), replaces the mechanical commutation system utilized by a Brush DC Motor, and is required by most [Brushless DC Motors](#) to operate. In a Brushless DC Motor controller, either a Hall Effect Sensor or Back EMF (Electromotive Force) is used to identify the position of the rotor. Understanding the orientation of the rotor is crucial to operating the BLDC Motor.

Optical Encoders can also be added to the Brushless DC Motor, allowing both direction and speed to be determined. More precise applications may use Optical Encoders with a third index signal, to determine pulse per revolution.

3kw 48v BLDC Motor is one of our BL154 Motor, These motors can be designed customized to operate in a voltage range from 24V to 380V DC, cover a output power range from 1.5KW to 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
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 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 3000W 48V 2650RPM 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 1.55 KW 4300 RPM High Speed BLDC Motor Next 72V 2 HP Brushless DC Motor

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