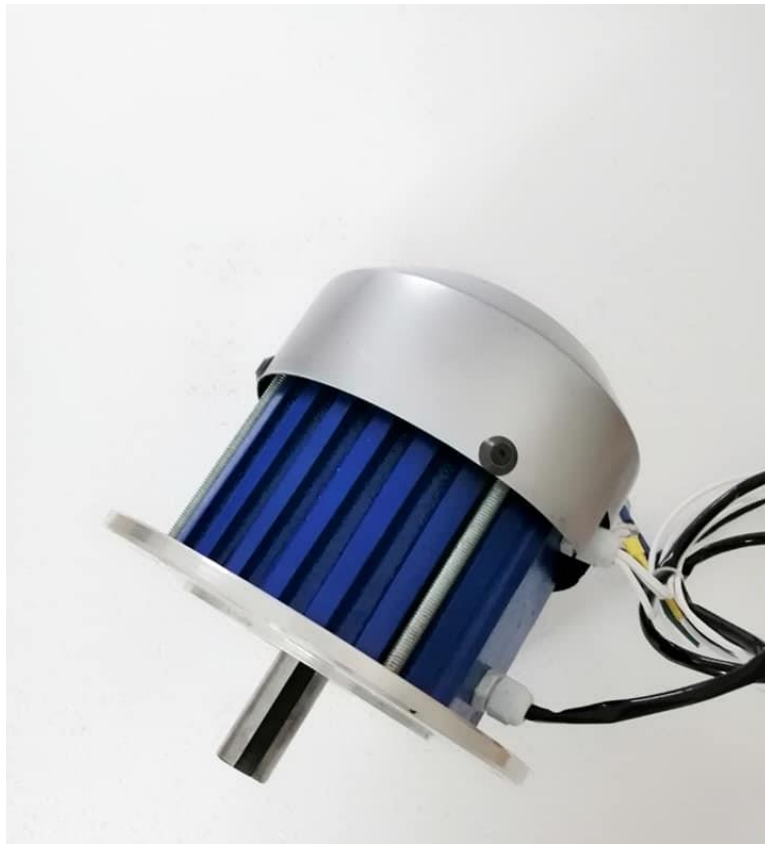


1 KW BLDC MOTOR SPECIFICATIONS



www.meghneel.co.in



© 2019 Megh Neel Renewable Power Systems Private Limited

JR120-1000W-3600RPM

Highlights

- ✓ 48VDC, 1000Watts, 3600 RPM Brushless DC Motor
- ✓ In-runner with shaft output and keyway
- ✓ External Control
- ✓ Built in Hall Sensors with Hall Effect Angle of 120 degrees
- ✓ Insulation Class F
- ✓ Operating temperature up to +80°C (Also available up to +150°C)

Specifications

Parameter	Value		
Rated Voltage (VDC)	48	60	72
Rated Current (A)	21	17	14
Rated Power (Output)	879 Watts		
Rated Speed (RPM)	3600 RPM		
Rated Torque (Nm)	2.31 Nm		
No Load Current (A)	<3.0 A		
No Load RPM	4500 RPM		
Current Density (A/square mm)	5 A/square mm		
Variable Speed Range	0-5000 RPM		
Motor Mounting	Flange / Face only		
Frame Size	IEC 90B5 (See below)		
Motor Diameter	160 mm		
Motor Length (ML)	117 mm (Compact Version) 143 mm (With cooling fan)		
Shaft Diameter	24 mm diameter		
Shaft Length	50 mm		
Finish	Powder Coated		
Weight	7.9 Kg (Approx)		

*Note:

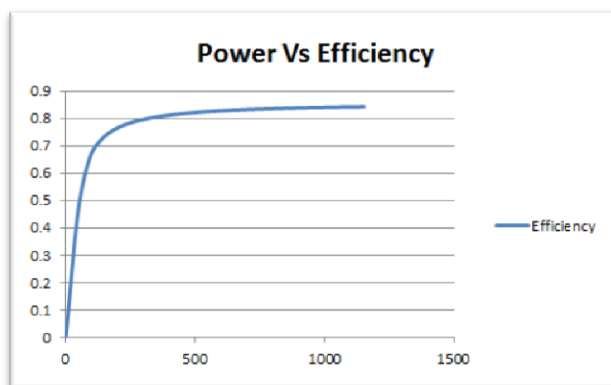
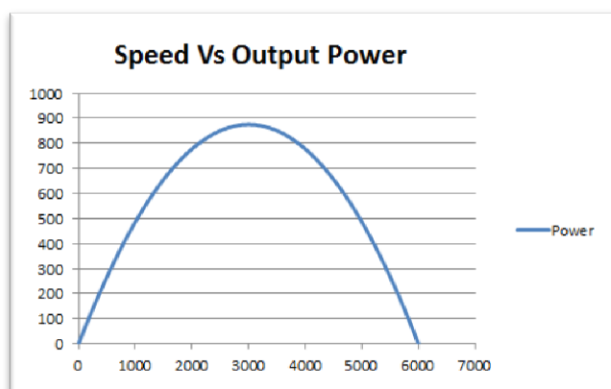
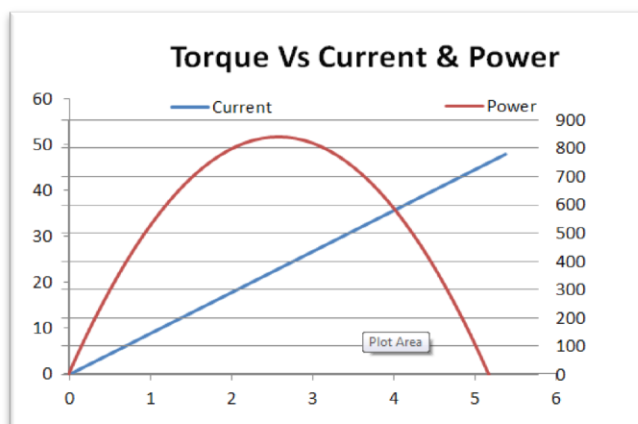
The following frame sizes are also available

- IEC 71B14 with 14 mm shaft
- IEC 80B5 with 19 mm shaft
- IEC 80B14 with 19 mm shaft
- IEC 90B5 with 24 mm shaft

Please refer to the drawings for exact dimensions and specify the frame size while ordering.



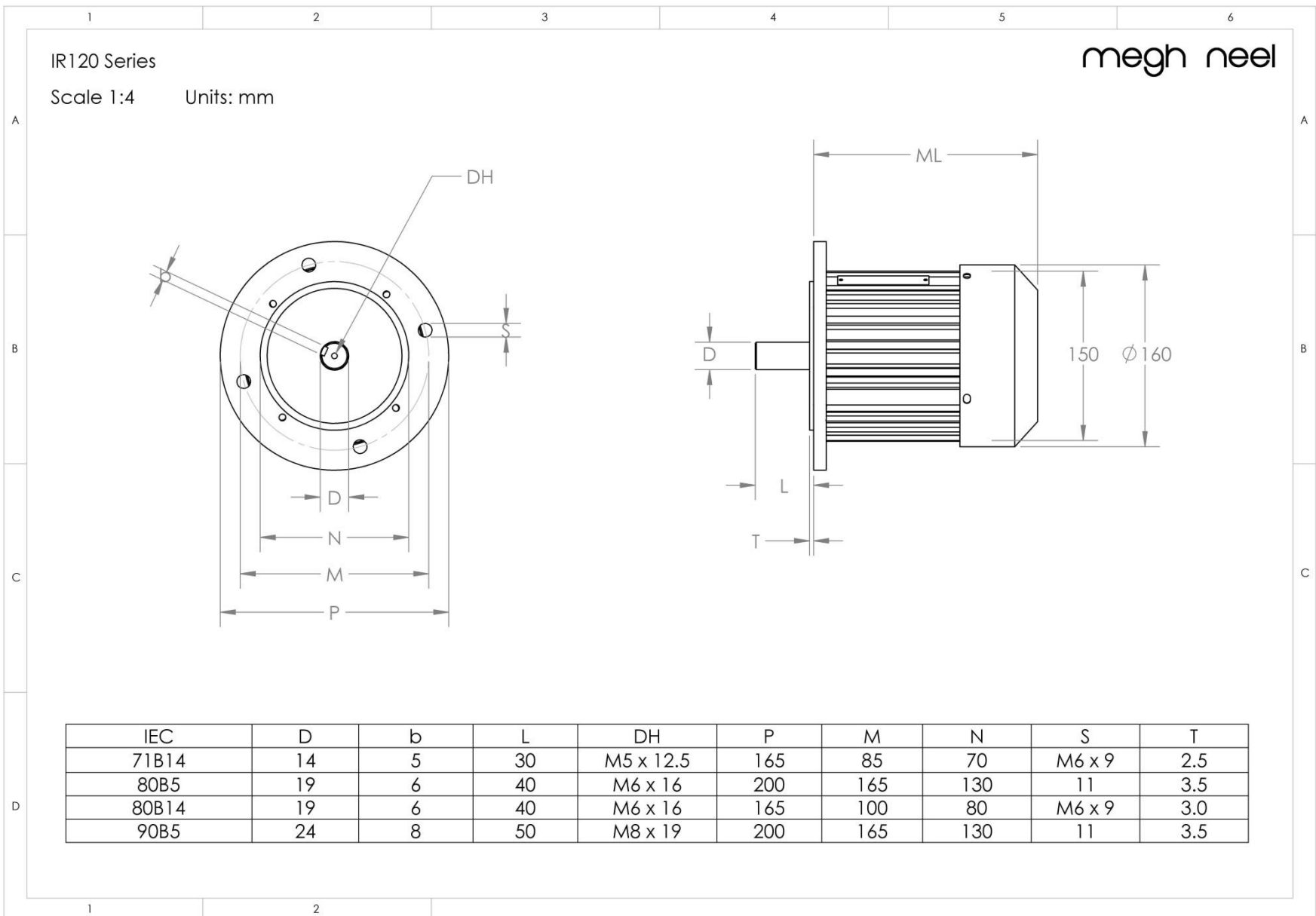
Performance Curves

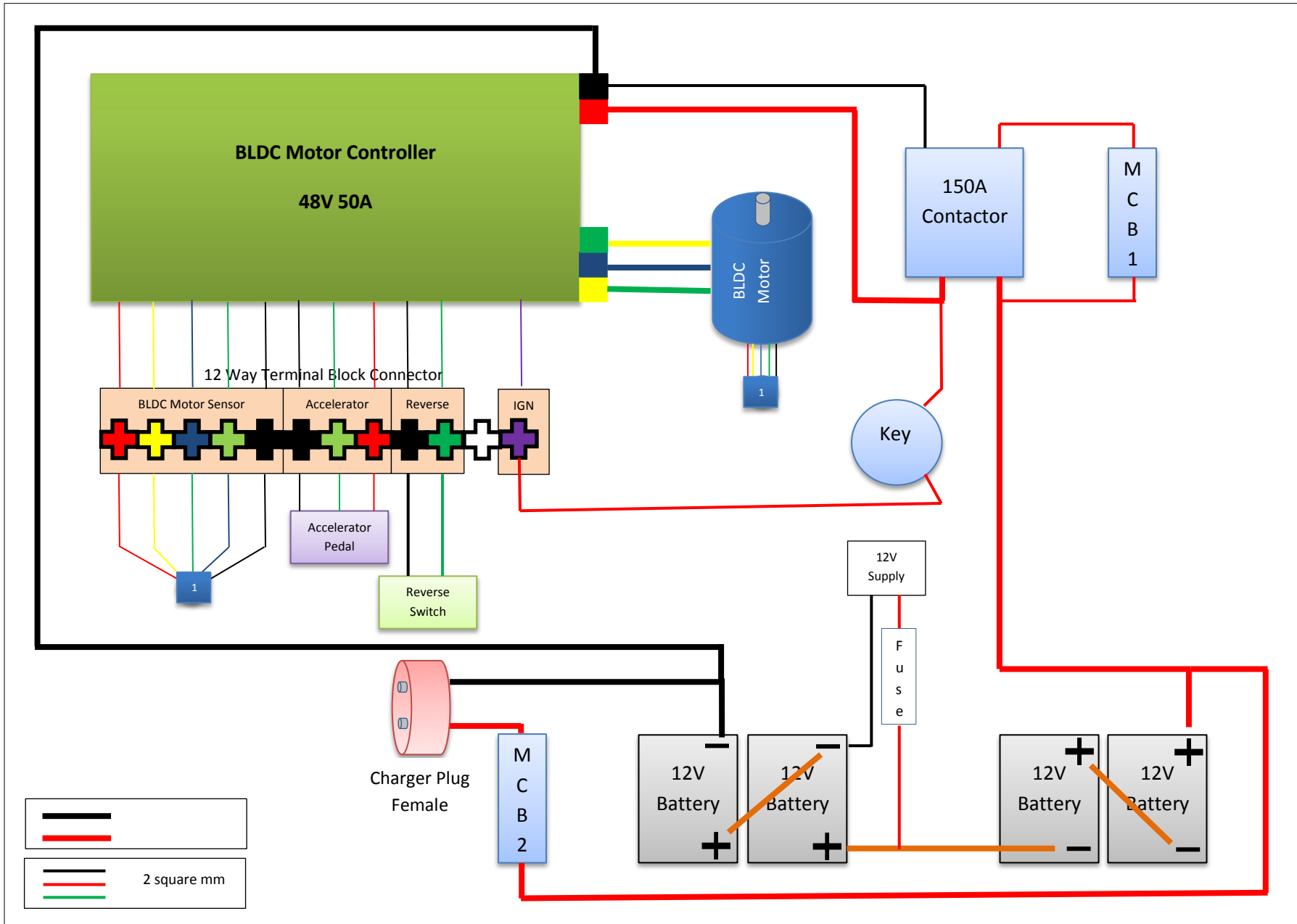


Note: Values indicated above are theoretically derived and may vary from actuals



Dimensions





Controller-Motor Connections

Ignition: Connect the 48V Battery Positive to the Controller Purple Wire Bullet Connector via a key switch.

Motor Direction:

Connect the Controller Phase Wires and the Hall Sensor wires to the respective wires from the motor as given below to achieve the desired direction

Direction – Clockwise (From the Shaft Side)

Motor Phase Connection	Yellow	Blue	Green		
Controller Phase Connection	Green	Blue	Yellow		
Motor Hall Sensor Connection	Yellow	Blue	Green	Red	Black
Controller Hall Sensor Connection	Yellow	Green	Blue	Red	Black

Direction – Anti-Clockwise (From the Shaft Side)

Motor Phase Connection	Yellow	Blue	Green		
Controller Phase Connection	Yellow	Blue	Green		
Motor Hall Sensor Connection	Yellow	Blue	Green	Red	Black
Controller Hall Sensor Connection	Blue	Green	Yellow	Red	Black

Throttle / Accelerator

Connect the 3 pin female connector (Red, Black, Green) to the throttle/accelerator plug. Ensure that the color codes match while connecting.

Red: +5 VDC, Black: Ground, Green: 0-3.4 VDC



Reverse

Option 1: From the BLDC Motor Controller, use the 2 pin female connector (Yellow/Green, Black) wires. Short the two wires using a switch or Joystick to achieve reverse direction. In this option, the motor run only at half the rated RPM of the motor.

Option2: From the BLDC Motor Controller, use the 2 grey colored wires. To achieve reverse, follow the below actions to achieve reverse at maximum rated RPM of the motor:-

- i) Switch OFF ignition switch
- ii) Short the two grey colored wires using a switch or Joystick
- iii) Switch ON ignition switch and apply throttle to run the motor in the reverse direction. Note that the motor runs at maximum rated RPM of the motor.

Contact Information

Registered Office:

Megh Neel Renewable Power Systems Private Limited,
2/19, Elite Avenue,
Near Shivaram Nagar, Ganapathy,
Coimbatore – 641006

Mobile: +91-98410 79631 (Navin), +91-7708066207 (Sales)

Land Line: +91-422-2510165

Email: sales@meghneel.co.in

Web: www.meghneel.co.in

Store: shop.meghneel.co.in

