350 W BLDC IN-RUNNER MOTOR SPECIFICATIONS





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TRI20-350W-1500 RPM

Highlights

- 350Watts (Input), 1500 RPM Brushless DC Motor \checkmark
- In-runner rotor \checkmark
- Operating temperature up to 80°C \checkmark
- External Control with Sensored commutation \checkmark
- Also available in 24 and 48 VDC \checkmark
- Made in Coimbatore, India \checkmark

Specifications

Parameter

Parameter	Value	
Rated Voltage	36VAC	
Rated Current	10 A	
Peak Current	20 A	
Rated Power (Input)	350 Watts	
Rated Speed (RPM)	1500 RPM	
Rated Torque (Nm)	1.9 Nm	
No Load Current (A)	< 1.0 A	
No Load RPM	1800+ RPM	
Current Density (A/square mm)	4 A/square mm	
Variable Speed Range	0-2000 RPM	
Motor Mounting	Face	
Motor Dimensions	150 mm diameter x 55 mm width	
Shaft Diameter	14 mm	
Shaft Length	20 mm length	
Finish	Powder Coated	
Weight	4 Kilograms (approx.)	



Dimensions





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Controller Specifications				
Parameter	Value			
Rated Voltage	24/36/48VDC			
Controller Current Limit	15 A			
Variable Speed	3 Pin Plug with analog voltage input from 0 to 5VDC			
	5VDC – Maximum Speed			
	0.8VDC – Start Motor			
	0VDC – Stop Motor			
Commutation	Sensored			
Reverse Option	2 Pin (Short the pins to enable half speed reverse)			

Connection Sequence

Supply: Connect the 24/36/48V Positive Supply to the Controller Red Wire via a key switch. Connect the Battery Negative terminal to the Controller Black Wire.

Motor Connection:

Connect the Controller Phase Wires to the respective wires from the motor as given below

Motor Phase Connection	Yellow	Blue	Green
Controller Phase Connection	Yellow	Blue	Green

Connect the 6 pin motor sensor plug to the controller sensor input plug. After powering ON the controller, connect the white "self study" male & female plugs to help the controller determine the right commutation sequence and motor running direction. Make sure that the motor is not loaded when performing this step. Once the motor starts running, disconnect the plugs. If you require the motor to run in the opposite direction, perform this step again.



Throttle / Accelerator

Connect the 3 pin connector (Red, Black, Green) to 3 pin on the board. While connecting, ensure that the color codes match as per the diagram provided. Red: +5 VDC, Black: Ground, Green: 0-5 VDC

Reverse

Short the 2 pins indicated in the diagram to achieve reverse direction.

Contact Information

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