

Faraday

External BLDC Driver

Introduction

The Mechtex brand external drivers are available in Sensor based and sensor less both. Our Faraday SPIN drivers are compact, easy to use, one stop solution for all your commercial and industrial grade motors.

Competitive Intelligence

- Sensorless adjustable speed curve
- Custom voltage and current configurations
- Open or Close loop speed control using PWM, Analog & I2C (Digital Interface)
- Protective features such as Over current, Over voltage, Abnormality Lock, Reverse polarity, etc.
- IEC 61000-4-2 compliance on request.

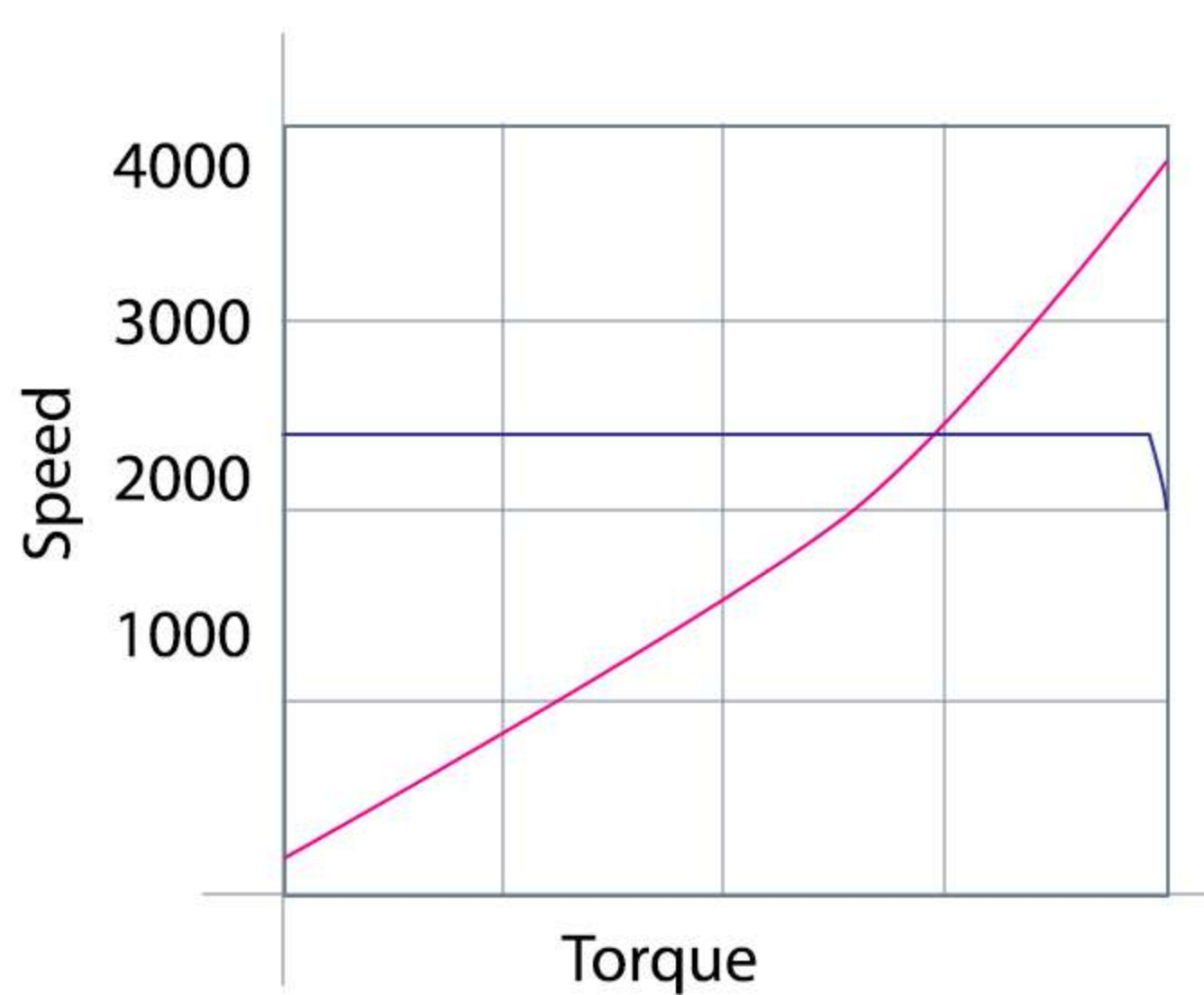


Specifications

Parameters	Value
Rated Output Power	100W
Max. Output Power	200W
Voltage Range	6V to 24V
Max Current	Up to 8A
Speed Control Mode	Open / Close Loop PWM, Analog, I2C
PWM Frequency	Max 200 kHz
Max. Efficiency	80 %

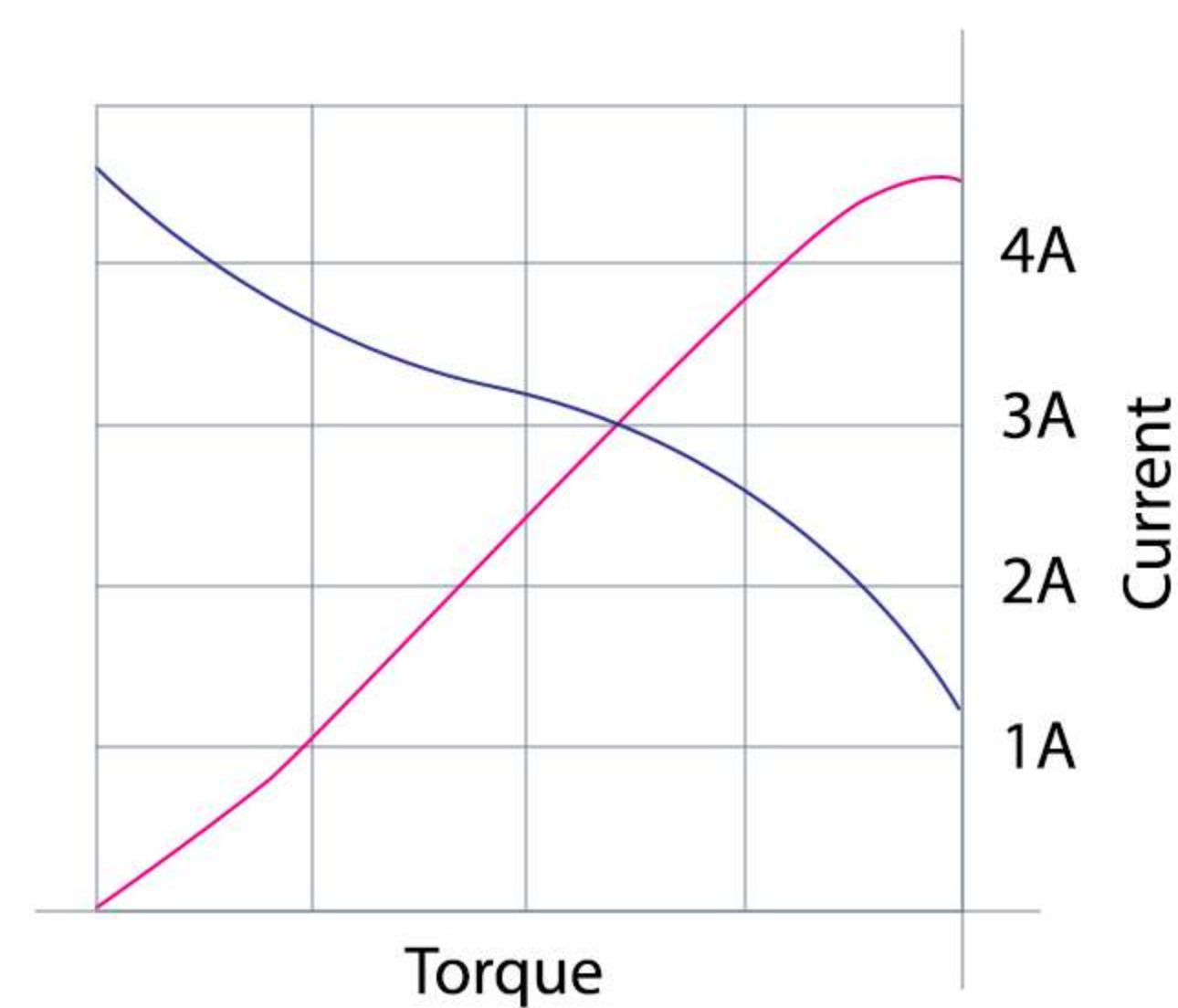
Close Loop

Speed & Current Vs Torque



Open Loop

Speed & Current Vs Torque



— Speed — Current

* The above plot varies as per the motor characteristics.

Electrical Connections

Control Signals

Pin #	Function	Description
1	BRK	High / Open ▶ Run, Low ▶ Stop, Default = Open
2	DIR	High / Open ▶ CW, Low ▶ CCW, Default = Open
3	SPD	PWM Speed control input, 1kHz - 100kHz VILMAX = 0.8V, VIHMIN = 2.1V
		Analog 1.5 to 4.0V
		I2C Programmable
4	FGO	Rotation Speed output = Customized (1, 2/3, 1/2, 2, 3, 2.4, 1/3)
5	FLT	High at fault, Low at Normal

Power

Pin #	Function
1	VM
2	GND

Phase Output

Pin #	Function
1	U
2	V
3	W

External BLDC Driver

Compatible With Motors



Connection Diagram

