

# FTMBL 48-10 SPECIFICATION

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## GENERAL DESCRIPTION

- FTMBL48-10 is a four quadrant motor control board for three phase BLDC Motors rated up to 48V.

## OVERVIEW

- Controls Three Phase BLDC Motor upto 48V, 500W
- Four quadrant operation

## GENERAL FEATURES

- In built braking circuit
- Analog control input
- Status LED's indicate Run and Fault condition

## OPERATIONAL SPECIFICATION

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PARAMETER NAME	MIN	NOM	MAX	UNIT
Power Supply	24	-	48	V
Switching Frequency	-	22	-	kHz
Speed Range(Depends on motor)	500	-	-	rpm
Continuous Output Current (At 25°C)	-	-	10	A
Operating Temperature Range	0	-	70	°C
Storage Temperature Range	-25	-	85	°C
Analog Input Range	0	10	-	V
Hall Sensor Supply	-	-	5	V

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## POTENTIOMETER

- The speed of the motor will vary by rotating the Potentiometer.

## DIRECTION

- By connecting the Direction Pin to ground the direction of the motor can be changed.

## ANALOG SPEED CONTROL

- By applying an Analog Voltage (0-10V) in the Analog Input, speed of the motor can be varied from MIN to MAX. Note : The Potentiometer should be at zero position.

## BRAKE

- By connecting Brake Pin to Ground the motor can be stopped.

## ENABLE/DISABLE

- By applying +5V to the Enable Pin we can ENABLE the motor. To DISABLE the motor, ground the Pin.

## TACHO

- In order to know the speed of the motor, a square pulse (0-5V) is available at the TACHO Pin.

## LED's

- Error LED - It is ON, Colour RED
- Run LED - Three RED LED's will glow, corresponding to the Phases
- Power LED - It is ON, Colour GREEN

## FTMBL48-10 CONNECTION DIAGRAM

Figure shows power, motor and peripheral connections.

