

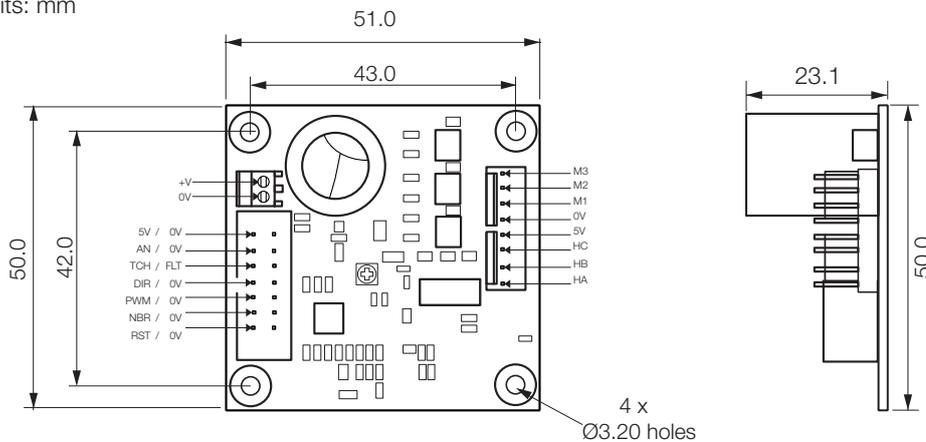
Brushless Motor Commutator

BLC4A

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The Rotalink BLC4A board is a simple brushless motor commutator capable of driving brushless motors with hall effect sensors up to 96W. The board provides both analogue and PWM speed control, Break, Direction and Reset inputs as well as a tacho speed output. These I/O have been fitted to a standard 0.1" header for easy connection to customer electronics or standalone use with pin jumpers (available on request). The board also features both a power and fault LED.

Units: mm



General Specification

Min Input	10vdc
Max Input	30vdc
Load	4A
Max Power	96W
Weight	approx. 50g
Connectors	Screw terminals for power connection
	8way molex MTA-100 for motor
	14way 0.1" header for I/O

I/O Specification

5V	5 volt supply for I/O (all I/O operate at 5V).
AN	Analogue 0-5V speed input. To ensure 0 to 100% power levels available speed change occurs linearly between ~0.5V to 4.5V.
TCH	One pulse (5v) output on every hall transition.
DIR	Connect low (0V) to reverse direction of rotation. CCW when connected low if rotalink motor wiring scheme adheard to.
PWM	PWM speed input. High (5V) turns drive on, low (0V) turns drive off. Maximum frequency 30khz. Before using the PWM input ensure AN is connected to 5V.
NBR	Applying 0V shorts the motor windings to ground, braking the motor.
RST	Applying a High (5V) disables the MOSFETS allowing the motor to coast. Pin internally held at 5V - must be connected to 0V for motor to turn.
0V	0V connection points for use with I/O
FLT	Fault output high (5V) when any of the following conditions are detected: <ol style="list-style-type: none"> 1- invalid hall input code 2- under voltage detected 3- thermal shutdown of MOSFET driver 4- Motor lead shorted to ground. If motor has stalled a Reset using the RST pin may be required.

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