



Koala BEAR Muscle Build (KBMB01)
Proprioceptive Actuator

Properties & Specifications

Rev A

08/23/2023

1 Working Environment

Temperature of working environment:<45°C。

2 Technical Specs

Input Voltage	9~48V*
Max Phase Current	30A
Max Input Current	<15A
Continuous Torque**	6N.m
Peak Torque	≥ 18N.m
No-load Max Speed	7 RPM/V
Avrg. Backdrive Torque	≤ 1.2Nm
Weight	~285g
Pole Pair	20
Gear Ratio	20
Power Port	XT30 Male
Power Input	DC Power
Signal Port	Molex PicoBlade 53047 6Pin or similar (P=1.25mm)
Signal Protocol	RS485, 最高 8Mb/S
Winding Temperature Rating	180°C
Dimension	Hexagon Diameter of Inscribed Circle: 75mm Distance Between Sides: 67mm Height: 37.5mm
Absolute Position	Yes
Material	7075-T6
Protection	- Configurable torque limit - Configurable speed limit - Configurable acceleration limit - Configurable position limit - Two-stage over-temperature protection - Communication watchdog in Torque Mode
Standard iq/id PID	P = 0.3~0.4 (0.358) I = 0.03~0.077 (0.045) D = 0
Service Life ***	≥ 5000h

* When the input voltage exceeds 24V, the heat dissipation requirements may be more stringent.

** Under continuous torque output conditions, intermittent air cooling is necessary to maintain a certain air convection and heat dissipation efficiency.

*** Overloading and overheating can reduce service life.