How to Read Specifications

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Brushless DC Motor and Driver Package

Specifications table example FBLⅡ Series

	Model	Combination Type	FBL575AW-□	FBL575CW-□	FBL575SW-□	FBL5120AW-□	FBL5120CW-□	FBL5120SW-□
		Round Shaft Type	FBL575AW-A	FBL575CW-A	FBL575SW-A	FBL5120AW-A	FBL5120CW-A	FBL5120SW-A
①	Rated Output Power	W	75			120		
	Power Source: Voltage	VAC	Single-Phase100-115 ±10%	Single-Phase200-230 ±10%	Three-Phase200-230 ±10%	Single-Phase100-115 ±10%	Single-Phase200-230 ±10%	Three-Phase200-230 ±10%
	Power Source: Frequency	Hz	50/60					
	Power Source: Rated Input Current	A	2.3	1.4	0.75	3.0	1.8	1.0
②	Power Source: Maximum Input Current	A	2.6	2.0	1.2	3.8	2.7	1.6
③	Rated Torque	N·m	0.25			0.4		
		kgfcm	2.5			4.0		
④	Starting Torque	N·m	0.32			0.5		
		kgfcm	3.2			5.0		
⑤	Permissible Load Inertia※1	$J\times10^{-4}$ kg·m²	3.75			5.6		
		GD^2 kgfcm²	15			22.5		
⑥	Rated Speed	r/min	3000					
⑦	Variable Speed Range	r/min	300～3000					
⑧	Speed Regulation: Load		−1% Max. (0～rated torque, at 3000 r/min)					
	Speed Regulation: Voltage※2		±1% Max. (Power supply voltage ±10%, at 3000 r/min with no load)					
	Speed Regulation: Temperature		±1% Max. (0°C～50°C at 3000 r/min with no load)					

①Rated Output Power: This refers to, with the combination of motor and driver, the amount of work that can be performed by a motor in a given period of time. It also expresses the maximum output that can be produced continuously.
②Maximum Input Current: This refers to, with the combination of motor and driver, the maximum current sent into the driver.
③Rated Torque: This refers to, with the combination of motor and driver, the maximum torque created when they are in continuous operation.
④Starting Torque: This refers to, with the combination of motor and driver, the limit of torque that can be generated instantaneously.
⑤Permissible Load Inertia: This refers to, with the combination of motor and driver, the maximum load inertia that can be driven. The permissible load specified here is applicable only to round shaft type.
⑥Rated Speed: This refers to, with the combination of motor and driver, the maximum (limit) speed. It is the speed at rated output.
⑦Variable Speed Range: This refers to, with the combination of motor and driver, the range of variable speed.
⑧Speed Regulation: This shows how much the speed is affected by the change in load, voltage and temperature.

Permissible Overhung Load and Permissible Thrust Load for Motors

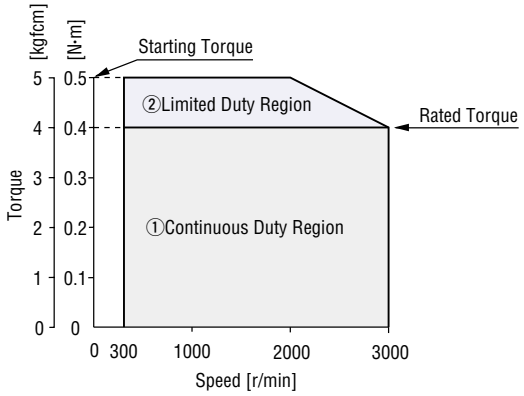
Similar to Standard AC Motors. Refer to "How to Read Specifications" for Standard AC Motors.

●"How to Read Specifications" for Standard AC Motors ➜ Page A-8

How to Read Speed-Torque Characteristics

Brushless DC Motor and Driver Package

Speed-Torque Characteristics example FBL5120AW-□
FBL5120AW-A



①Continuous Duty Region: This refers to the region where a motor can be operated continuously. The area is also used for the frictional load torque at the sliding portion of equipment.
②Limited Duty Region: This refers to the region which can be used for a short period of time. If operated for more than about 5 seconds in the limited duty region, the driver's overload protection function engages and the motor is automatically stopped. This area is also used as the acceleration torque which accelerates the load inertia up to the set speed at motor start-up.

How to Read Gearhead Specifications

Similar to Standard AC Motors. Refer to "How to Read Gearhead Specifications".

●"How to Read Gearhead Specifications" for Standard AC Motors ➜ Page A-9