■Combination Data of Motor and Inverter

Here is an explanation of the settings and speed-torque characteristics when combining a brushless motor with an inverter. Set the parameters listed below.
Parameters for exhibiting the characteristics and for safe use are listed.

■Combinations

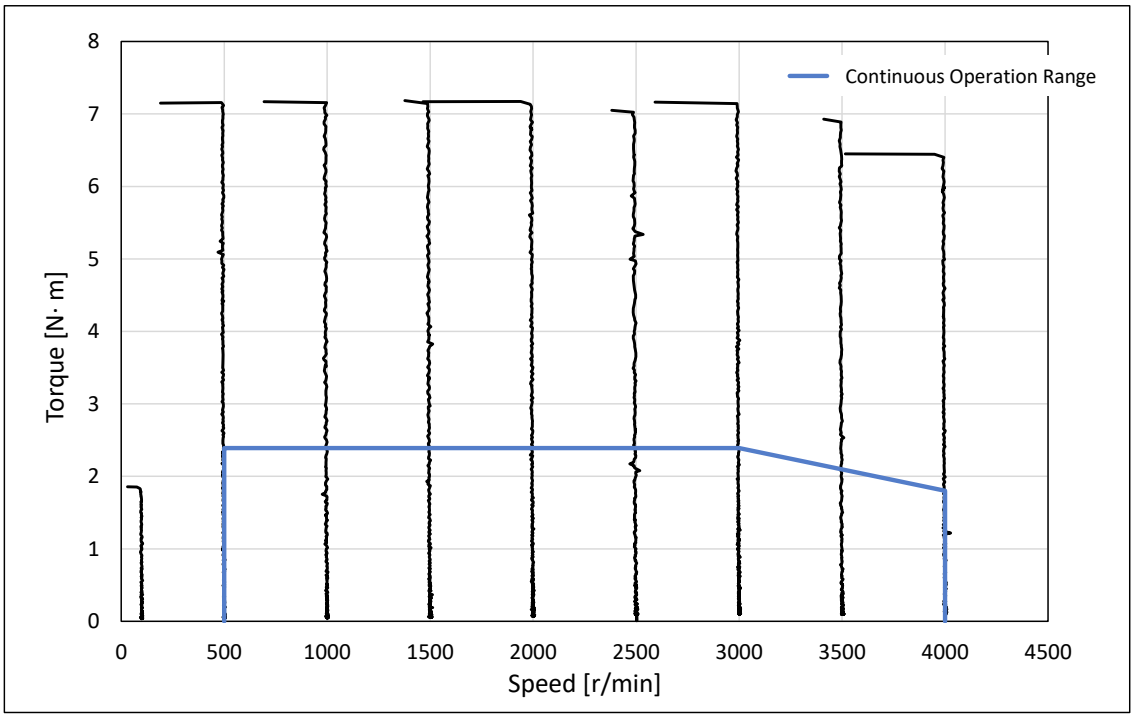
Brushless Motor			Inverter Mitsubishi Electric Corporation E-800
Output Power	Motor Type	Model Name	Model Name
750 W	Combination type	BL2M6750CHP-□S, BL2M6750CHP-□FRS	FR-E820-0.75K-1 (Three-phase 200 V type)
	Round shaft type	BL2M6750CHP-AS	

●Enter the gear ratio in the box (□) within the model name.

■Basic Parameter Setting

This setting assumes continuous operation of the motor (reference) and the ability to protect the motor from overheating with electronic thermal protection.
Perform auto-tuning of motor constants when combining an inverter (Pr. 96:1).

Parameter		Setting Value	Content
Upper limit frequency	1	4000	Maximum speed (r/min)
Electronic thermal	9	5.4	Rated currentx1.5 (A)
High-speed upper limit frequency	18	4000	Maximum speed (r/min)
Unit conversion from frequency to speed	53	1	Changed from Hz indication to r/min indication
Applicable Motor	71	9090	9090 when using a SPM motor
PWM frequency	72	15	Value closest to carrier frequency 16 kHz
Motor capacity	80	0.75	Rated output power (kW)
Number of motor poles	81	10	Number of magnet poles
Motor rated frequency	84	3000	Rated speed (r/min)
Control method	800	10	PM sensorless vector control

■Speed-Torque Characteristics (Reference)

Characteristics when combined with an inverter whose parameter settings have been changed. (Motor output shaft)
Speed: Drive frequency x 12 [r/min]