

■ 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 Fuji Electric Co., Ltd. FRN1C-Mini
Output Power	Motor Type	Model Name	Model Name
750 W	Combination type	BL2M6750CHP-□S, BL2M6750CHP-□FRS	FRN0.75C2S-2J
	Round shaft type	BL2M6750CHP-AS	(Three-phase 200 V type)

● 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.

Parameter	Setting Value	Content
Maximum output frequency 1	F03	334 Maximum output frequency (Hz)
Base frequency 1	F04	250 Frequency at rated speed (Hz)
Base frequency voltage 1	F05	124 Motor rated voltage (V)
Electronic thermal 1	F10	1 Operation (for general-purpose motors)
	F11	5.4 Rated Currentx1.5 (A)
Frequency Limiter (upper limit)	F15	334 Frequency Limiter (Hz)
Carrier frequency	F26	16 Carrier frequency (kHz)
Control method selection 1	F42	11 V/f Control (synchronous motor)
Motor 1 Capacity	P02	0.75 Rated output power (kW)
Rated current	P03	3.6 Motor current (A)
No load current	P06	0.37 No-load current (A)
Armature resistance	P60	1.1 Line resistance (Ω)
d-axis inductance	P61	3.86 d-axis inductance (mH)
q-axis inductance	P62	4.11 q-axis inductance (mH)
Induction voltage	P63	125 Induction voltage (V)
Motor 1 selection	P99	20 Selection of the motor to combine (synchronous motor)

■ Speed-Torque Characteristics (Reference)

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

