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

		Toshiba Industrial Products and Systems Corporation VF-S15	
Output Power	Motor Type	Model Name	Model Name
750 W	Combination type	BL2M6750CHP-DS, BL2M6750CHP-DFRS	VFS15-2007PM
	Round shaft type	BL2M6750CHP-AS	(Three-phase 200 V type)

ullet Enter the gear ratio in the box (\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 at the time of combining the motor and inverter (F400: 2).

Parameter		Setting Value	Content
Electronic thermal	THR	5.4	Rated currentx1.5 (A)
Control method	PT	6	PM motor control
Maximum frequency	FH	334	Maximum value of frequency (Hz)
Upper limit frequency	UL	334	Upper limit of output frequency (Hz)
Base frequency	VL	250	Frequency at rated speed (Hz)
Base frequency voltage	VLV	124	Motor rated voltage (V)
Motor rated capacity	F405	0.75	Rated output power (kW)
Motor rated current	F415	3.6	Rated current (A)
Motor rated speed F417		3000	Rated speed (r/min)
PM control mode selection F915		0	0 when using a SPM motor

■ 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]



Oriental motor