

■ Combination Data of Motor and Inverter

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

■ Conbinations

Brushless Motor		Inverter LENZE i550
Output Power	Model Name	Model Name
120W	BLM5120□-■	I55AP175A00701K7MS (Single-phase 120 V type)

- A character indicating the shaft type is specified where the box ■ is located in the product name.
- A character indicating the connection type and degree of protection is specified in place of the box □ in the product 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 (setting value: P327.04 : 1).

Parameter	Setting Value	Content
Max. frequency	P211.00 334	Maximum frequency (Hz)
Motor ctrl mode	P300.00 8	Motor control mode(8 : Sensorless control (SLSM-PSM))
Switching freq.	P305.00 18	Switching frequency (18 : 16kHz fixed / min. Pv)
Rated speed	P320.04 3000	Rated motor speed (r/min)
Rated frequency	P320.05 250	Rated motor frequency (Hz)
Rated power	P320.06 0.12	Rated motor power (kW)
Rated voltage	P320.07 110	Rated motor voltage (V)
Max. motor speed	P322.00 4000	Maximum motor speed (r/min)
Rated mot.curr.	P323.00 0.78	Rated motor current (A)
Motor moment of inertia	P335.01 0.23	Motor inertia 0.23 kg cm ²

■ Speed – Torque Characteristics (Reference)

This is the characteristic when the above parameters are set.

Speed : Drive frequency×12[r/min]

