

## AC Servo Sales and Service

### Combinations of MR-J4-DU900B(4)(-RJ) Drive Units and HG-SR/HG-JR Series AC Servo Motors of 7 kW Increase the Maximum Torque

Thank you for your continued patronage of the Mitsubishi Electric general-purpose AC servo. AC servo motors compatible with MR-J4-DU900B(4)(-RJ) drive units will support the function that increases the maximum torque when connected with the drive unit. The maximum torque will be increased higher than the initial state when the parameter setting of the drive unit is changed as follows:

#### 1. Target Model and Combination

Table 1. Combinations of drive units and AC servo motors that support the function

Drive unit model	AC servo motor model	Maximum torque (rated torque ratio)	
		Initial state	When the function is enabled
MR-J4-DU900B(-RJ)	HG-SR702(B)	300%	400%
	HG-JR703(B)	300%	350%
	HG-JR701M(B)	300%	350%
MR-J4-DU900B4(-RJ)	HG-SR7024(B)	300%	400%
	HG-JR7034(B)	300%	350%
	HG-JR701M4(B)	300%	350%

#### 2. Details of Added Function

MR-J4-DU900B(4)(-RJ) drive units will support the function that increases the maximum torque. To enable the function, set [Pr. PC23] to "\_ \_ 1 \_". Turn off the power for 1 s or more after setting, and then turn on the power again to enable the setting.

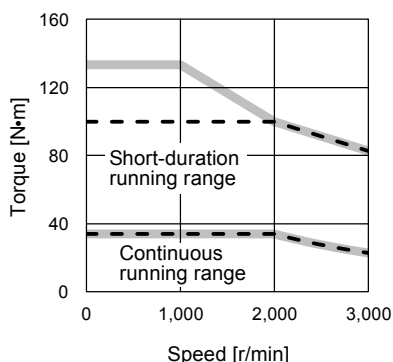
Table 2. Parameter setting

No.	Symbol	Name and function	Initial value [unit]	Setting range															
PC23	**COP7A	Function selection C-7A To increase the maximum torque of the target AC servo motors shown in Table 1, enable this function.	Refer to Name and function column.																
		<table border="1"> <thead> <tr> <th>Setting digit</th> <th>Explanation</th> <th>Initial value</th> </tr> </thead> <tbody> <tr> <td>_ _ _ x</td> <td>For manufacturer setting</td> <td>0h</td> </tr> <tr> <td>_ _ x _</td> <td> <b>Maximally increased torque function selection when drive unit is connected</b>            Setting "1" increases the maximum torque of the target servo motor. For the torque characteristics after the maximum torque is increased, refer to chapter 3.            0: Disabled            1: Enabled            When a servo motor that does not support this function is used, setting "1" will trigger [AL. 37 Parameter error].         </td> <td>0h</td> </tr> <tr> <td>_ x _ _</td> <td>For manufacturer setting</td> <td>0h</td> </tr> <tr> <td>x _ _ _</td> <td>For manufacturer setting</td> <td>0h</td> </tr> </tbody> </table>	Setting digit	Explanation	Initial value	_ _ _ x	For manufacturer setting	0h	_ _ x _	<b>Maximally increased torque function selection when drive unit is connected</b> Setting "1" increases the maximum torque of the target servo motor. For the torque characteristics after the maximum torque is increased, refer to chapter 3. 0: Disabled 1: Enabled When a servo motor that does not support this function is used, setting "1" will trigger [AL. 37 Parameter error].	0h	_ x _ _	For manufacturer setting	0h	x _ _ _	For manufacturer setting	0h		
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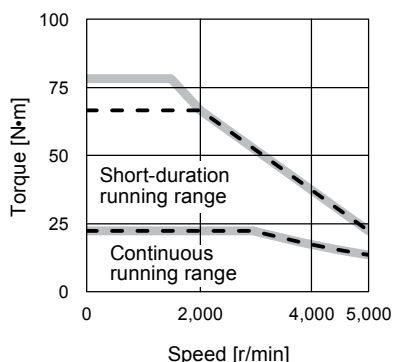
<b>Date of issue</b>	April 2017	<b>Title</b>	Combinations of MR-J4-DU900B(4)(-RJ) Drive Units and HG-SR/HG-JR Series AC Servo Motors of 7 kW Increase the Maximum Torque	Mitsubishi Electric Corp., Nagoya Works 1-14, Yada-minami 5-chome, Higashi-ku, Nagoya 461-8670 Tel.: +81 (52) 721-2111 Main line
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### 3. Torque Characteristics

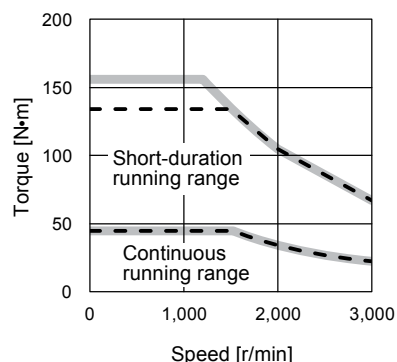
HG-SR702(B)



HG-JR703(B)



HG-JR701M(B)

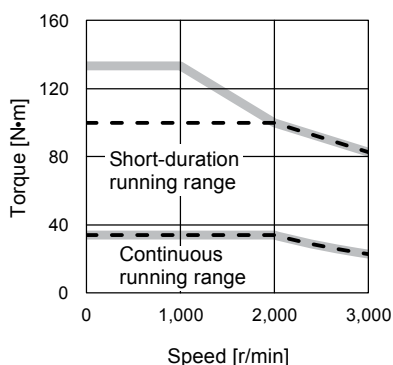


Note 1. — : When the function that increases the maximum torque is enabled (3-phase 200 V AC)

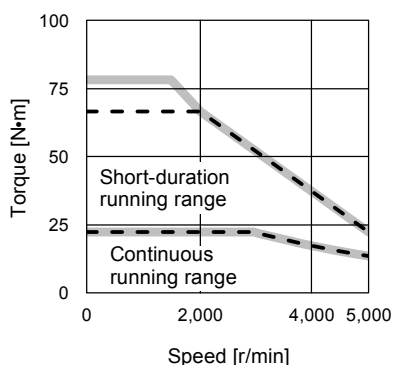
2. - - - : Initial state (3-phase 200 V AC)

\* Torque drops when the power supply voltage is below the specified value.

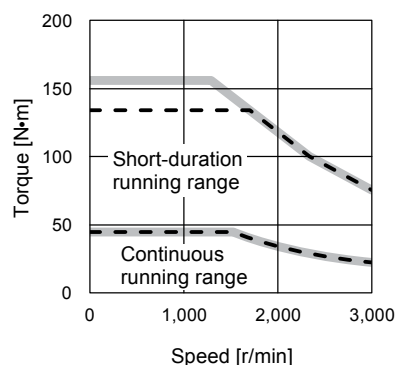
HG-SR7024(B)



HG-JR7034(B)



HG-JR701M4(B)



Note 1. — : When the function that increases the maximum torque is enabled (3-phase 400 V AC)

2. - - - : Initial state (3-phase 400 V AC)

\* Torque drops when the power supply voltage is below the specified value.

### 4. Supported Software Version and Schedule

#### (1) Drive unit

MR-J4-DU900B(4)(-RJ) drive units with software version D0 or later support the function that increases the maximum torque. The function will be added to the drive units sequentially from the April 2017 production. There may be cases where both the former and new products exist in the distribution stage.

#### (2) AC servo motor

The maximum torque of the HG-SR/HG-JR series AC servo motors of 7 kW can be increased regardless of the manufacturing data of the servo motors when the servo motors are used with the above-mentioned MR-J4-DU900B(4)(-RJ) drive units and the parameter setting is changed.

#### (3) Setup software

MR Configurator2 (SW1DNC-MRC2-E) with software version 1.64S or later supports the function. Contact your local sales office for updating your software.