



MR-J3-B-RJ006 Servo Amplifier Specifications: 100VAC/200VAC

Servo amplifier model MR-J3-□-RJ006		10B	20B	40B	60B	70B	100B	200BN	350B	500B	700B	11KB	15KB	22KB	10B1	20B1	40B1	
Output	Rated voltage	3-phase 170VAC																
	Rated current (A)	1.1	1.5	2.8	3.2	5.8	6.0	11.0	17.0	28.0	37.0	68.0	87.0	126.0	1.1	1.5	2.8	
Main circuit power supply	Voltage/frequency (Note 1, 2)	3-phase 200 to 230VAC 50/60Hz or 1-phase 200 to 230VAC 50/60Hz (Note 10)					3-phase 200 to 230VAC 50/60Hz								1-phase 100 to 120VAC 50/60Hz			
	Rated current (A)	0.9	1.5	2.6	3.2	3.8	5.0	10.5	16.0	21.7	28.9	46.0	64.0	95.0	3.0	5.0	9.0	
	Permissible voltage fluctuation	For 3-phase 200 to 230VAC: 3-phase 170 to 253VAC For 1-phase 200 to 230VAC: 1-phase 170 to 253VAC (Note 10)					3-phase 170 to 253VAC								1-phase 85 to 132VAC			
	Permissible frequency fluctuation	±5% maximum																
Control circuit power supply	Voltage/frequency	1-phase 200 to 230VAC 50/60Hz (Note 10)					1-phase 200 to 230VAC 50/60Hz								1-phase 100 to 120VAC 50/60Hz			
	Rated current (A)	0.2					0.3					0.4						
	Permissible voltage fluctuation	1-phase 170 to 253VAC (Note 10)					1-phase 170 to 253VAC								1-phase 85 to 132VAC			
	Permissible frequency fluctuation	±5% maximum																
	Power consumption (W)	30					45					30						
Interface power supply		24VDC ±10% (required current capacity: 0.15A (Note 7))																
Load-side encoder interface	Serial interface		Mitsubishi high-speed serial communication															
	Pulse train interface	Input signal	A/B/Z-phase differential input signal															
		Minimum phase difference	200ns															
Tolerable regenerative power of regenerative resistor (W) (Note 3, 4)	Built-in regenerative resistor		—	10	10	10	20	20	100	100	130	170	—	—	—	—	10	10
	External regenerative resistor (Standard accessory) (Note 5, 6)		—	—	—	—	—	—	—	—	—	—	500 (800)	850 (1300)	850 (1300)	—	—	—
Control system		Sine-wave PWM control/current control system																
Dynamic brake		Built-in (Note 8, 11)										External option (Note 12)			Built-in (Note 8, 11)			
Safety features		Overcurrent shutdown, regeneration overvoltage shutdown, overload shutdown (electronic thermal), servo motor overheat protection, encoder fault protection, regeneration fault protection, undervoltage/sudden power outage protection, overspeed protection, excess error protection																
Structure (IP rating)		Natural-cooling open (IP00)					Fan cooling open (IP00)								Natural-cooling open (IP00)			
Environment	Ambient temperature (Note 9)		0 to 55°C (32 to 131°F) (non freezing), storage: -20 to 65°C (-4 to 149°F) (non freezing)															
	Ambient humidity		90% RH maximum (non condensing), storage: 90% RH maximum (non condensing)															
	Atmosphere		Indoors (no direct sunlight); no corrosive gas, inflammable gas, oil mist or dust															
	Elevation		1000m or less above sea level															
	Vibration		5.9m/s ² or less at 10 to 55Hz (directions of X, Y and Z axes)															
Mass (kg [lb])		0.8 (1.8)	0.8 (1.8)	1.0 (2.2)	1.0 (2.2)	1.4 (3.1)	1.4 (3.1)	2.1 (4.6)	2.3 (5.1)	4.6 (10)	6.2 (14)	18 (40)	18 (40)	19 (42)	0.8 (1.8)	0.8 (1.8)	1.0 (2.2)	

Notes: 1. Rated output and speed of a servo motor are applicable when the servo amplifier, combined with the servo motor, is operated within the specified power supply voltage and frequency. Torque drops when the power supply voltage is below the specified value.

2. For torque characteristics when combined with a servo motor, refer to the section "Servo motor torque characteristics" in this catalog.

3. Optimal regenerative resistor varies for each system.

4. Refer to the section "Options ●Optional regeneration unit" in this catalog for the tolerable regenerative power (W).

5. Servo amplifiers without an enclosed regenerative resistor are also available. Refer to "Servo Amplifier Model Designation" in this catalog for details.

6. The value in () is applicable when the external regenerative resistors, GRZG400-□Ω (standard accessory) are used with cooling fans (2 units of 92 × 92mm, minimum air flow: 1.0m³/min). Note that change in parameter No. PA02 is required.

7. 0.15A is the value when all of the input/output points are used. The current capacity can be stepped down according to the number of input/output points in use. Refer to "MR-J3-□B-RJ006 SERVO AMPLIFIER INSTRUCTION MANUAL" for details.

8. Special specification servo amplifiers without a dynamic brake are also available: MR-J3-□B(1)-RU006. When using the servo amplifier without a dynamic brake, the servo motor does not stop immediately at alarm occurrence or power failure. Take measures to ensure safety on the entire system.

9. MR-J3-350B-RJ006 or smaller servo amplifiers can be mounted closely. In this case, operate them at the ambient temperature of 0 to 45°C (32 to 113°F) or at 75% or less of the effective load ratio.

10. Special specification servo amplifiers for 1-phase 200 to 240VAC are also available: MR-J3-□B-RJ006U004. The permissible voltage fluctuation for MR-J3-□B-RJ006U004 is 1-phase 170 to 264VAC.

11. When using the built-in dynamic brake, refer to "MR-J3-□B SERVO AMPLIFIER INSTRUCTION MANUAL" for the permissible load to motor inertia moment ratio.

12. Use an optional external dynamic brake with the servo amplifier. Without the external dynamic brake, a servo motor does not stop immediately at emergency stop and falls in free-run status, causing an accident such as machine collision, etc. Take measures to ensure safety on the entire system.

Model designation

Servo motors

Servo amplifiers

Options

Peripheral equipment

MR-J3-BSafety

MR-J3W series

MR-J3W series

Servo support software

Cautions

Warranty

Global FA centers