



## Servo Amplifier MR-J3-700A

URL: <https://www.sxplc.com/servo-amplifier-mr-j3-700a>

### Product data sheet

Servo amplifier model		MR-J3-500A	MR-J3-700A
Main circuit power supply	Voltage / frequency (Note 1)	3-phase 200 to 230VAC 50/60Hz	
	Permissible voltage fluctuation	3-phase 170 to 253VAC	
	Permissible frequency fluctuation	± 5% maximum	
Control circuit power supply	Voltage / frequency	1-phase 200 to 230VAC 50/60Hz	
	Permissible voltage fluctuation	1-phase 170 to 253VAC 50/60Hz	
	Permissible frequency fluctuation	± 5% maximum	
	Power consumption (W)	45	
Interface power supply		24VDC ± 10% (required current capacity : 300mA (Note3))	
Control system		Sine-wave PWM control / current control system	
Dynamic brake		Built-in (Note 2)	
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	
Position control mode	Maximum input pulse frequency	1Mpps (when using differential receiver), 200kpps (when using open collector)	
	Positioning feedback pulse	Resolution per encoder / servo motor rotation: 262144 p/rev	
	Command pulse multiple	Electronic gear A/B multiple, A: 1 to 1048576, B: 1 to 1048576 1/10 < A/B < 2000	
	Positioning complete width setting	0 to ± 10000 pulses (command pulse unit)	
	Excess error	± 3 rotations	
	Torque limit	Set by parameters or external analog input (0 to +10VDC, maximum torque)	
Speed control mode	Speed control range	Analog speed command 1:2000, internal speed command 1:5000	
	Analog speed command input	0 to ± 10VDC / rated speed (It is possible to change the speed in 10V using the parameter No.PC12.)	
	Speed fluctuation rate	± 0.01% maximum (load fluctuation 0 to 100%) 0% (power fluctuation ± 10%) ± 0.2% maximum (ambient temperature 25° C ± 10° C), when using analog speed command	
	Torque limit	Set by parameters or external analog input (0 to +10VDC, maximum torque)	
Torque control mode	Analog torque command input	0 to ± 8VDC maximum torque (input impedance 10 to 12kΩ)	
	Speed limit	Set by parameters or external analog input (0 to ± 10VDC, rated speed)	
Structure		Fan cooling open (IP00)	
Environment	Ambient temperature	0 to 55° C (non freezing), storage: -20 to 65° C (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 / Vibration	1000m or less above sea level / 5.9m/s <sup>2</sup> maximum	
Mass (kg)		4.6	6.2

