YASKAWA ELECTRIC CORPORATION

MECHATROLINK-III Σ-V series AC Servo Drives

Features

- Superlative Performance
  The best amplifier response in the industry slashes settling time. Standard use of high-resolution encoder has enabled high-precision positioning and fine processing.
- Simple Start-up
  New Tuning-less Function
  ——Get up and running quickly after hooking up the motor
  New Advanced Autotuning
  ——Realize optimal machine performance
  New “One-parameter” Tuning
  ——Get the most from your machine
- Outstanding Expandability
  Extensive variety of motors from 50W to 5kW. Support for linear servomotors, direct drive servomotors and linear sliders.
  Wide selection of option module will be released in the future.
  Type: SGDV-□□□□2□□ (□: dependent on a spec.)

Σ-V

Specifications

Item		Specifications
Performance		Speed Frequency Characteristics: 1.6kHz (load condition: load moment of inertia JL=Motor moment of inertia Jm)
		Tolrque control tolerance (repeatability): ±1%
MECHATROLINK Communications	Performance	Position control, speed control, and torque control through MECHATROLINK-III communications
	Command Input	MECHATROLINK commands (for sequence, motion, data setting/reference, monitor, adjustment, and other commands.)
Applicable servo motor capacity		50W to 5kW
Encoder resolution		20-bit (incremental/absolute encoder), 13-bit (only for incremental encoder of SGMJV servomotors)
Input Signals	Number of channels	7ch. Signal alllocations and positive/negative logics can be modified.
	Function	Forward run prohibited, Reverse run prohibited, Forward torque limit, Reverse torque limit, Extaernal latch signal, Homing deceleration switch signal
Output Signals	Number of channels	3ch. Signal alllocations and positive/negative logics can be modified.
	Function	Positioning completion, Speed coincidence detection, Servomotor rotation detection, Servo ready, Torque limit detection, Speed limit detection, Break interlock, Warning, NEAR
Protective Functions		Overcurrent, Overvoltage, Low voltage, Overload, Regeneratio error, Over speed, etc.
Option Module Functions		Serial encoder communication input for fully-closed loop control
Compliant Standards		UL*, CE marking (EMC directive, low voltage directive)*, Safety*, RoHS
Safety Functions		EN954 category 3 Stop category 0, IEC61508 SIL 2 Input : Power module base block signal. Output : Safety circuit status monitor

*: Planning

MECHATROLINK specifications

	M-III
Profile	Standard servo
Data size	32byte, 48byte
Transmission cycle	0.125ms to 4ms

Contact Information

Please access YASKAWA website (Please click. Then you can access.)
YASKAWA has sales and after-sales service all around the world.
America: U.S.A., Brazil, Canada, Mexico
Asia Pacific: China, Korea, Taiwan, Singapore, India
Europe: Germany, Sweden, Israel, Italy, France, Spain, Finland, Netherlands, Slovenia, Czech republic, Turkey