

## Technical Specification and Model of Servo Drives

Servo Drive Model			ETS
Power Supply	Main Circuit		Three-phase AC200V~230V +10% -15% (50/60Hz)
	Control Circuit		Single-phase AC200V~230V +10% -15% (50/60Hz)
Control Method			SVPWM
Feedback			20 bit incremental encoder; 17 bit absolute encoder
Operating Conditions	Ambient / Storage Temperature		0~55°C / -20~85°C
	Ambient / Storage Humidity		Below 90%RH (Non-condensing)
	Vibration / Impact Resistance		4.9m/s <sup>2</sup> / 19.6m/s <sup>2</sup>
Configuration			Base Mounted
Speed Control	Set Speed Reference	Rotation Direction Selection	Switch the direction by /P-CON
		Speed Selection	Speed 1 to 7 selection
	Function	Soft Start Setting	0 to 10s (can be set individually for acceleration and deceleration)
Position Control	Reference Pulse	Type	Sign+pulse train, CCW+CW pulse train, or 90° phase difference 2-phase pulse (phase A + phase B)
		Form	Non-insulated line driver (+5V level), open collector
		Frequency	x1 multiplier: 4Mpps x2 multiplier: 2Mpps x4 multiplier: 1Mpps Open collector: 200kpps Frequencies drop when the duties have errors
	Set Position Reference	Position Setting	Can set 16 position reference
I/O Signals	Encoder Output Pulses		Phase A, phaseB, phase C: line driver output The number of dividing pulse: 1-16384; Default value: 16384
	Sequence Input	Channels NO.	8 channels
		Function	Signal allocations and positive/negative logics can be modified: Servo ON (/S-ON), P control (/P-CON), alarm reset (/ALM-RST), clear error pulse (/CLR), forward run prohibited (P-OT), reverse run prohibited (N-OT), forward torque limit (/P-CL), reverse torque limit (/N-CL)
	Sequence Output	Channels NO.	4 channels
Function		Signal allocations and positive/negative logics can be modified: Positioning completion (/COIN), speed agree detection (/V-CMP), motor rotation detection (/TGON), servo ready (/S-RDY), torque limit detection (/CLT), brake interlock (/BK), encoder C pulse (/PGC), over travel signal (/OT), Over-travel Return-to-Zero Complete(HOME), Servo Enabled motor Excitation	
Built-in Function	Dynamic Brake Functions(DB)		Operate during main power OFF, servo alarm, servo OFF or overtravel
	Protective Functions		Overcurrent, overvoltage, low voltage, overload, regeneration error, overspeed, etc.
	Utility Functions		Alarm trace back, JOG operation, Inertia detections, etc.
	Communications		RS-485 communication port, MODBUS protocol; CAN communication port, CANopen protocol;
	Display Functions		Charge x 1, Power x 1, 7-segment LED x 5, Pushbuttons x 5 Axis LED x 3