

SV Single-Axis Specifications

	Parameter	Value		
Performance	Resolver Accuracy Resolution	±10 arc min 2,048 or 4,096 post quadrature counts per rev		
Output Power		<b>SV2500S</b>	<b>SV4500S</b>	<b>SV8500S</b>
	Voltage Frequency Current • Cont. (max rms per phase) • Peak (max rms per phase) Power Dissipation	325VDC 10 kHz 6.3A 12.6A 80 W	650VDC 10 kHz 6.5A 13.0A 140 W	650VDC 10 kHz 12.5A 25.0A 250 W
Input Power	Voltage—AC Supply Frequency AC Supply Tolerance Voltage (Control) Fuses Input—AC Supply	230VAC, 1- or 3-Phase 50/60 Hz +10%, -15% +24VDC ±10%, ripple <1V p-p 10 amp	460VAC, 3-Phase 50/60 Hz +10%, -15% (+24V supply included) 10 amp	460VAC, 3-Phase 50/60 Hz +10%, -15% (+24V supply included) 16 amp
	Protection	Short Circuit Brownout Overvoltage Overtemperature I <sup>2</sup> t Safety Isolation	Phase to phase, Phase to earth Below 80VDC Will shut down when power dump capacity is exceeded Motor 170°C (330°F); Drive 85°C (185°F) Error generated if peak current >3 seconds VDE0160	
Inputs	Command Programmable • Enable, Brake, Auto Offset, • Mode Select, Limit ±15V Reference	±10V 20K ohms input impedance  24V nom. @ 10 mA high = 14-32V, low <7.5V Internal clamp w/ zener diode @ 6.8V, fully optically isolated, sink or source Available		
Outputs Digital	Encoder Programmable: Fault, Error Ready Contact Output	5V line driver (RS485) output, TTL compatible, source 60 mA max, requires external +5VDC supply @ 100 mA User selectable 2,048 or 4,096 ppr PNP type, sourcing only, rated for 24V @ 100 mA fully optically isolated, short circuit protected 125V, 500 mA, 30W maximums		
	Outputs Analog	Velocity (X8, pin 10) • (X8, pin 11) Motor Voltage (X8, pin 12) Current Monitor	Absolute: 8V = 6,000 rpm Normalized: +10V = max speed 0.7-10V = 70-1000VDC 1V = 1.2 A for SV2500S, SV4500S; 1V = 2.4 A for SV8500S	
Physical	Connections Drive-to-Servo Controller • Inputs/Outputs • RS232 • Encoder Output • Test Points • Fan • Drive-to-Motor • Resolver-to-Drive • Power	16 pin screw terminal, removable 16 pin screw terminal, removable 9 pin "D" type 15 pin screw terminal, removable 7 pin screw terminal, removable 2 pin screw terminal, removable 8 pin screw terminal 15 pin "D" type 4 pin screw terminal		
Environment	Drive temperature ambient Maximum heat sink temp Motor temperature ambient Maximum motor case temp Humidity Storage	0-45° C (32-113° F) 85° C (185° F) 0-40° C (32-104° F) 125° C (257° F) 0-95% non-condensing -30-85° C (-22-185° F)		
Tuning	Torque Mode Velocity Mode	Two bandwidth selections Offset, stiffness, damping, torque limit, bandwidth selection, frequency compensation		
Diagnostics	LEDs	Ready and Error LEDs 3 digit, 7 segment LED display will indicate 23 error conditions and 31 status messages		

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