SVAC3-Q-E120

Q Programmable Servo Drive w/ Ethernet





Product Features

- Programmable digital servo drive in a compact package
- DSP-based current control
- Operates from 120 VAC
- Provides motor current up to 3.5 A rms continuous, 7.5 A rms peak
- Fast 10/100 Ethernet for programming and communications
- 744 lines of stored Q program capability
- Math calculations using analog and digital parameters
- Supports all SVAC3-S control modes as well
- UDP & TCP support
- 12 digital inputs, 6 digital outputs, all optically isolated
- 1 analog input, +/-10 volt range
- Jerk filter for S-curve acceleration ramps







Description

The SVAC3-Q-E120 is a compact and cost-effective servo drive that is compatible with a variety of servo motors and a great choice for many OEM applications. Its all-digital design and DSP-based current control allow for smooth motion and a quick response from the specially matched set of Applied Motion motors available with it. Power to the drive comes from single-phase 120 VAC and the drive can output up to 3.5 A rms continuous, 7.5 A rms peak to the servo motor. The drive also has built-in protection features like over-voltage, over-temperature, and over-current, which prevent damage to the drive while running in adverse conditions.

The SVAC3-Q-E120 can operate in all of the same control modes as a SVAC3-S drive (analog torque/velocity, pulse & direction, streaming commands), plus it has the ability to run stand-alone Q programs stored in non-volatile memory. Q programs are created using the Q-Programmer $^{\text{TM}}$ software, and provide multi-tasking, math functions, conditional processing, data register manipulation, and more features in a robust yet simple text-based programming language. Initial setup of the drive, including selecting the control mode, tuning the servo motor and configuring the drive is done with the Q-uick T-uner $^{\text{TM}}$ software.

For connecting to external devices such as limit switches, proximity or photoelectric sensors, PLC I/O, lamps, and other devices, the drive comes with 12 digital inputs, 6 digital outputs, and 1 analog input. The drive also features an Ethernet port for configuration and communications. The Ethernet port is fast 10/100 Mbit, and the drive supports both TCP and UDP communication protocols.

This servo motor drive is UL Recognized (File No. E332730), CE approved, and RoHS compliant.

Specifications

Model Number	SVAC3-Q-E120				
Part Number	5000-224				
Supply Voltage	108-132 VAC				
Supply Voltage Type	AC				
Control Modes	 Streaming Commands Analog Positioning Encoder Following Q Programming 				
Output Current, Continuous	3.5 A rms				
Output Current, Peak	7.5 A rms				
Communication Ports	• Ethernet				
Feedback	Halls + Incremental encoder				
Setup Method	Software setup				
Digital Inputs	12				
Digital Outputs	6 1 single-ended				
Analog Inputs					
Dimensions	5.5 x 4.5 x 2.0 inches				
Weight	22.4 oz				
Operating Temperature Range	0 to 70 °C				
Ambient Temperature Range	0 to 55 °C				
Ambient Humidity	90% max, non-condensing				
Status LEDs	1 red, 1 green				
Circuit Protection	Short circuitOver-voltageUnder-voltageOver-temp				

Software

Software Downloads	ARM Firmware Downloader				
	DSP Firmware Downloader				
	 Q Programmer[™] 				
	Quick Tuner™				
	• <u>SCL Utility</u>				
Sample Code	 C sharp UDP example.zip VB6 UDP example.zip VB6 TCP example.zip 				

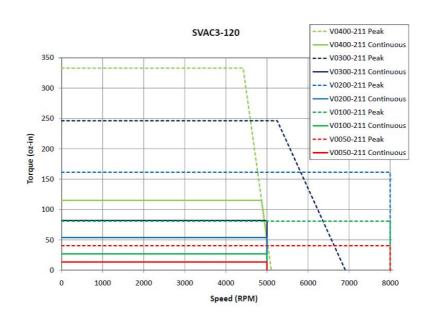
Downloads

Manuals	SVAC3 Hardware Manual 920-0028.pdf SVAC3 QuickSetupGuide 920-0052.pdf Host Command Reference Rev I.pdf eSCL Comm Reference.pdf		
Datasheet	Servo-Products-Datasheet-925-0008.pdf		
2D Drawing	SVAC3.pdf		
3D Drawing	SVAC3.igs		
Speed-Torque Curves	SVAC3 speed-torque.pdf		
Agency Approvals	STAC5 SVAC3 CE DOC.PDF		
Application Notes	APPN0020-Maple-Systems-with-Ethemet-Drive.zip APPN0019 Analog-positioning-using-Q-program.zip APPN0016 Simple-25-pin-mating-connections.pdf		

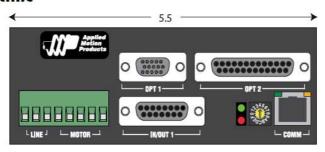
Pricing

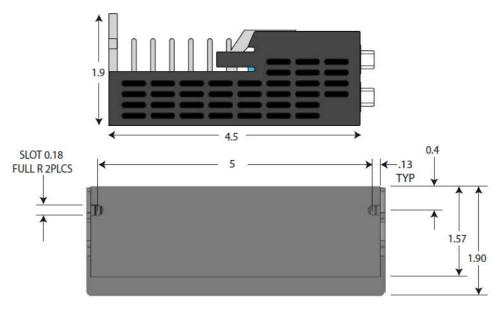
	SVAC3-Q-E120 Part No. 5000-224
1pc.	\$726.00
25 pc.	\$624.36
50pc.	\$544.50
100pc.	Contact us for 100+ piece pricing.

Torque Curves



Mechanical Outline





Products in the Series SVAC3 Servo Drives

* Closeout priced products are highlighted in green. * Items with web only pricing are highlighted in yellow.

Model Number	Supply Voltage	Control Modes	Output Current, Continuous (A rms)	Output Current, Peak (A rms)	Communication Ports	1pc./50pc.
SVAC3-IP-E120	108-132 VAC	Streaming Commands Q Programming EtherNet/IP	3.5	7.5	Ethernet EtherNet/IP	\$710.00 / \$532.50
SVAC3-IP-E220	108-242 VAC	Streaming Commands Q Programming EtherNet/IP	1.8	3.75	Ethernet EtherNet/IP	\$710.00 / \$532.50
SVAC3-Q-E120	108-132 VAC	Streaming Commands Analog Positioning Encoder Following Q Programming	3.5	7.5	Ethernet	\$726.00 / \$544.50
SVAC3-Q-E220	108-242 VAC	Streaming Commands Analog Positioning Encoder Following Q Programming	1.8	3.75	Ethernet	\$726.00 / \$544.50
SVAC3-S-E120	108-132 VAC	Step & Direction Analog Torque / Velocity Streaming Commands	3.5	7.5	Ethernet	\$471.00 / \$353.25
SVAC3-S-E220	108-242 VAC	Step & Direction Analog Torque / Velocity Streaming Commands	1.8	3.75	Ethernet	\$471.00 / \$353.25