Applied Motion Products, Inc.
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Product Datasheet
www.Applied-Motion.com

SVAC3-Q-E220

Q Programmable Servo Drive w/ Ethernet

1pc. - $726.00
50pc. - $544.50



Product **Features**

- *Programmable digital servo drive in a compact package*
- *DSP-based current control*
- *Operates from 220 VAC*
- *Provides motor current up to 1.8 A rms continuous, 3.75 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-E220 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 220 VAC and the drive can output up to 1.8 A rms continuous, 3.75 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-E220 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™* 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 *Quick Tuner™* 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-E220
Part Number	5000-225
Supply Voltage	108-242 VAC
Supply Voltage Type	AC
Control Modes	• Streaming Commands • Analog Positioning • Encoder Following • Q Programming
Output Current, Continuous	1.8 A rms
Output Current, Peak	3.75 A rms
Communication Ports	• Ethernet
Feedback	Halls + Incremental encoder
Setup Method	Software setup
Digital Inputs	12
Digital Outputs	6
Analog Inputs	1 single-ended
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 circuit • Over-voltage • Under-voltage • Over-temp

Software

Software Downloads	• ARM Firmware Downloader • DSP Firmware Downloader • Q Programmer™ • Quick Tuner™ • SCL Utility
Sample Code	• C_sharp_UDP_example.zip • VB6_UDP_example.zip • VB6_TCP_example.zip

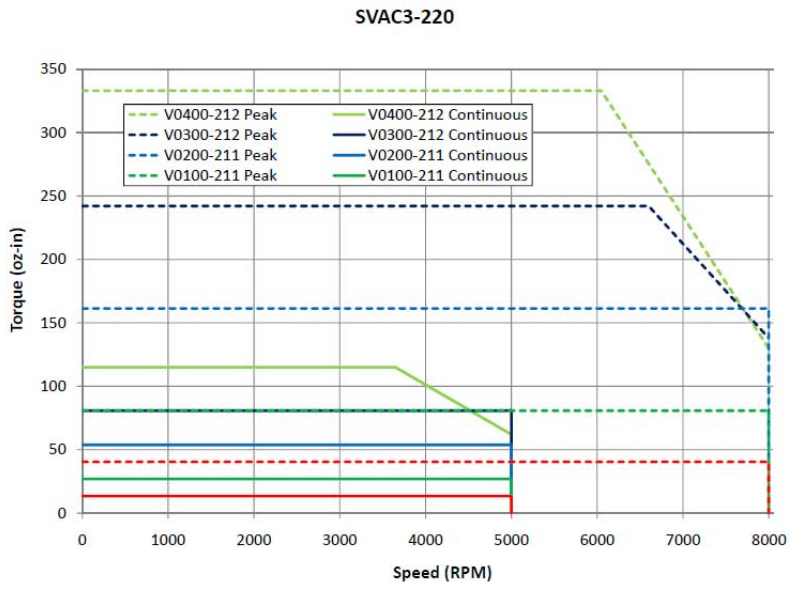
Downloads

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-Ethernet-Drive.zip APPN0019_Analog-positioning-using-Q-program.zip APPN0016_Simple-25-pin-mating-connections.pdf

Pricing

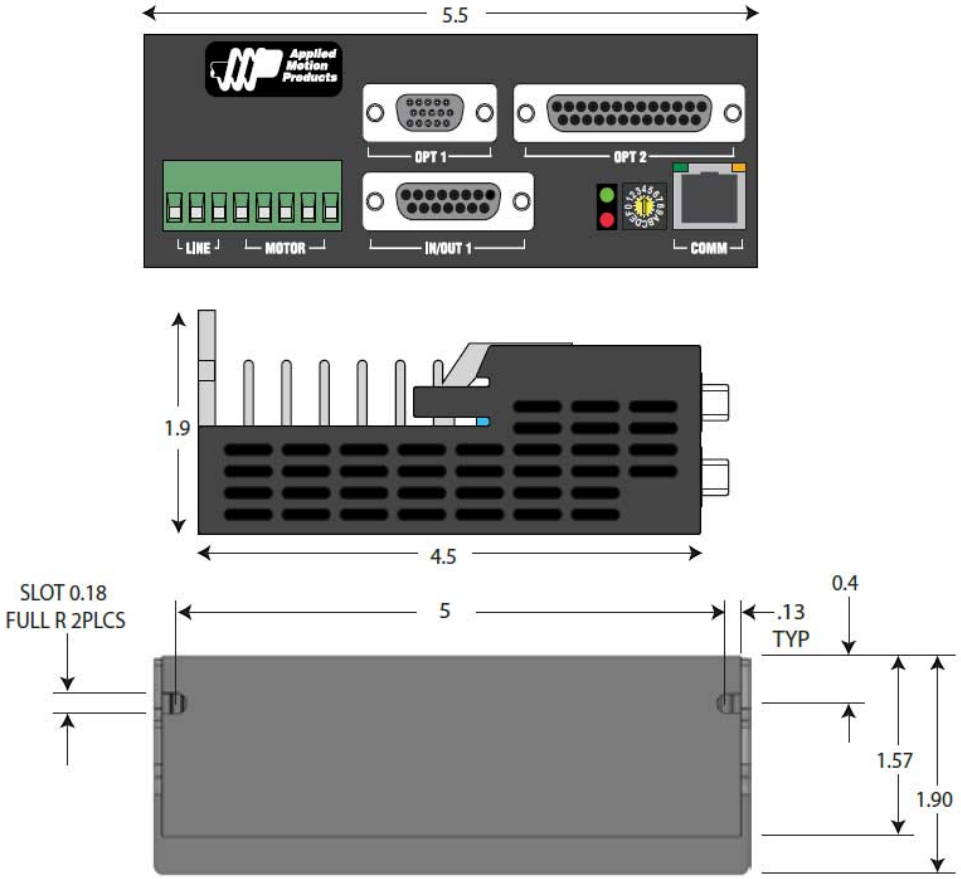
	SVAC3-Q-E220 Part No. 5000-225
1pc.	$726.00
25pc.	$624.36
50pc.	$544.50
100pc.	Contact us for 100+ piece pricing.

Torque Curves



2D Drawings

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