

SV7-C-CE

CANopen Servo Drive



Product Features

- Programmable digital servo drive with built-in CANopen networking
- DSP-based current control, sinusoidal commutation and jerk filter
- Operates from 24-80 VDC
- Provides motor current up to 7.0 A rms continuous, 14.0 A rms peak
- CANopen DS301 and DSP402 supported
- Profile position, velocity and torque modes
- Several homing modes
- Objects for Q programming and data registers
- 8 digital inputs, 4 digital outputs, all optically isolated
- 2 analog inputs, +/-10 volt range
- RS-232 port for programming and communications



Description


The SV series servo drives are suitable for a wide range of motion applications. They are built around a powerful digital signal processor coupled to an efficient MOSFET PWM amplifier. The SV drives include 12 optically isolated I/O points plus analog inputs. A sophisticated, yet easy to tune position loop has independent digital settings for proportional, integral and derivative gains plus velocity feedback and velocity and acceleration feedforward.

All SV drives are capable of running brushless, brushed, and linear servo motors. A timing wizard automatically configures the encoder and commutation timing for virtually any brushless or brushed DC motor. Tuning is easy with our Quick Tuner™ software, featuring a built-in digital oscilloscope

Specifications

Model Number	SV7-C-CE
Part Number	5000-160
Supply Voltage	24-80 VDC
Supply Voltage Type	DC
Control Modes	<ul style="list-style-type: none">• CANopen
Output Current, Continuous	7.0 A rms
Output Current, Peak	14.0 A rms
Communication Ports	<ul style="list-style-type: none">• RS-232• CANopen
Feedback	Halls + Incremental encoder
Setup Method	Software setup
Digital Inputs	8
Digital Outputs	4
Analog Inputs	1 differential or 2 single-ended
Dimensions	5 x 3 x 1.78 inches
Weight	10.0 oz
Operating Temperature Range	NA
Ambient Temperature Range	0 to 40 °C
Ambient Humidity	90% max, non-condensing
Status LEDs	1 red, 1 green
Circuit Protection	<ul style="list-style-type: none">• Short circuit• Over-voltage• Under-voltage• Over-temp

Software

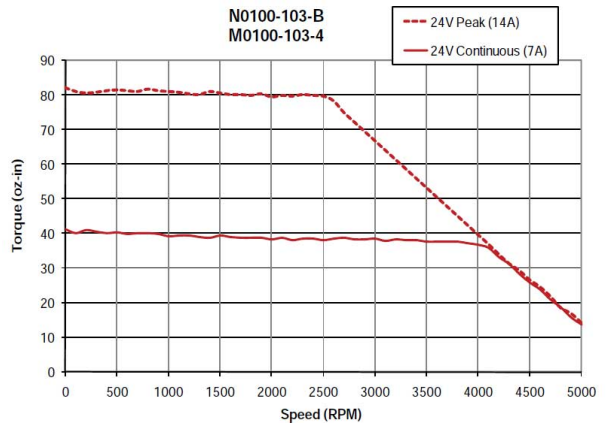
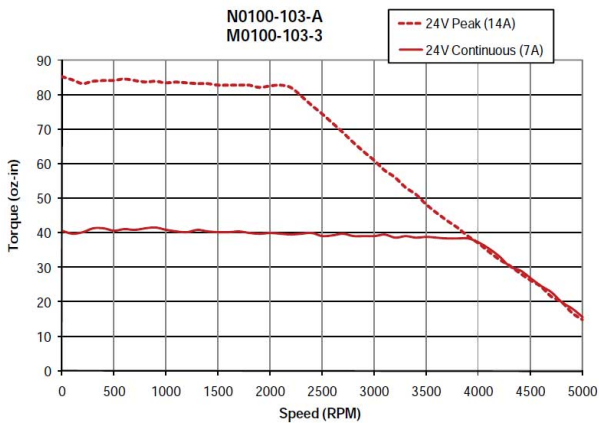
Software Downloads	<ul style="list-style-type: none">• DSP Firmware Downloader• Q Programmer™• Quick Tuner™
Sample Code	<ul style="list-style-type: none">•  CANopen Example.zip

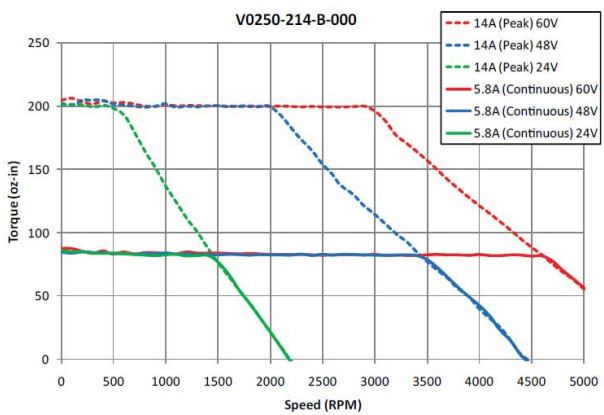
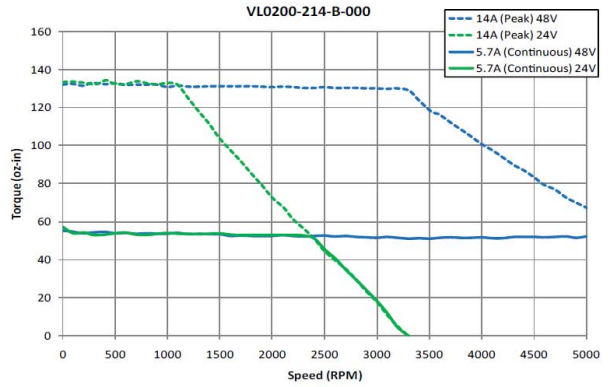
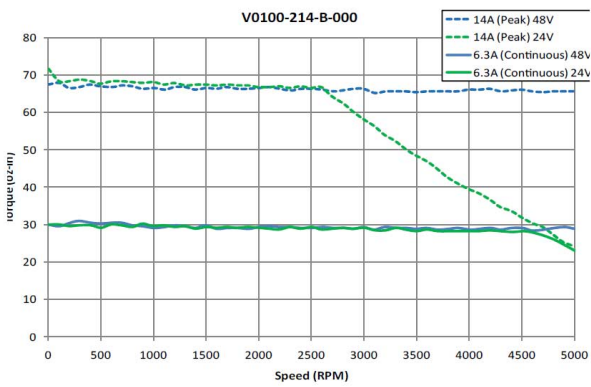
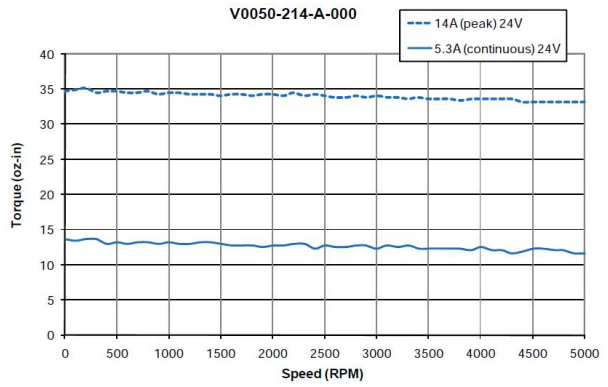
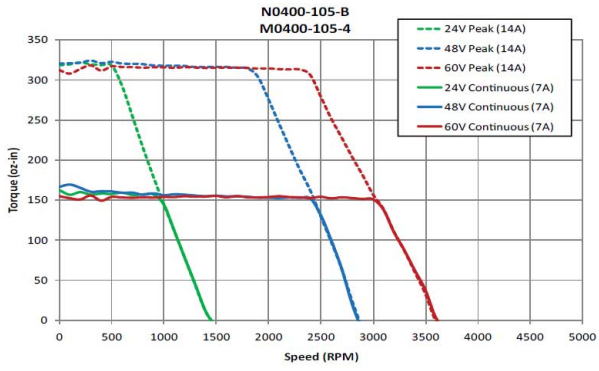
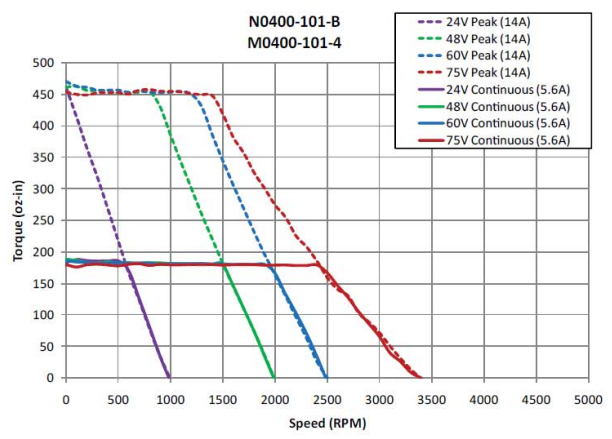
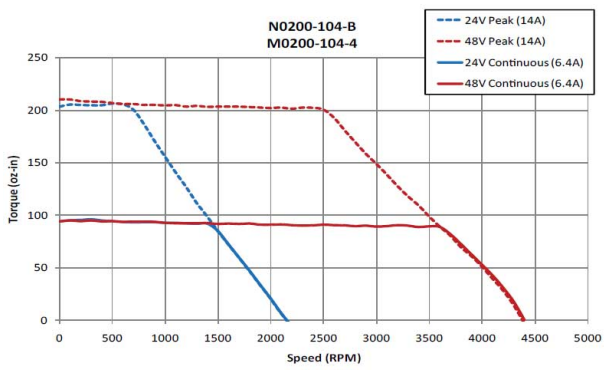
Downloads

Manuals	SV7 Hardware Manual 920-0012.pdf SV7-C QuickSetup 920-0064.pdf CANopen Manual 920-0025.pdf
Datasheet	Servo-Products-Datasheet-925-0008.pdf CANopen_FAQ2.pdf SV7-CANopen-EDS.eds
2D Drawing	SV7_simple_3D.pdf SV7_2D_Drawing.pdf
3D Drawing	SV7-S-AE_solid.igs
Speed-Torque Curves	SV7_speed-torque.pdf
Agency Approvals	SV7-S_Q_Si_CE_DOC.pdf
Application Notes	APPN0017_Wiring-integral-holding-brakes.pdf APPN0016_Simple-25-pin-mating-connections.pdf APPN0015_Make-a-serial-programming-cable.pdf



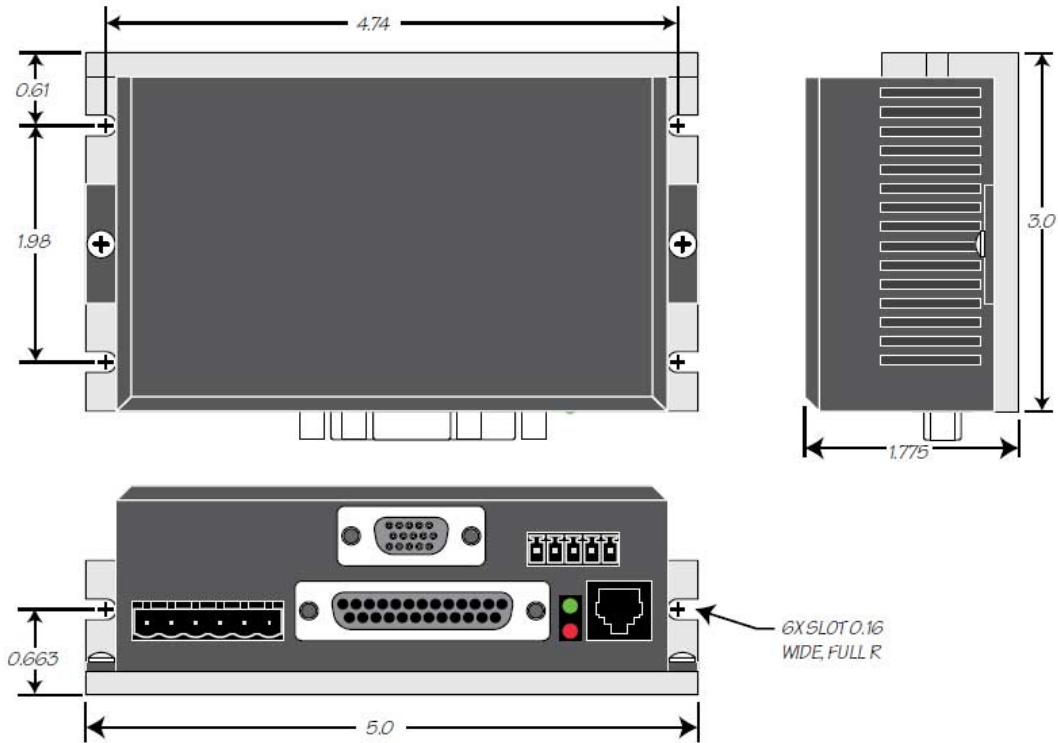
Torque Curves





2D Drawings

Mechanical Outline



Products in the Series *CANopen Products*

Model Number	Supply Voltage	Control Modes	Output Current, Continuous (A rms)	Output Current, Peak (A rms)	Communication Ports	
	12-48 VDC	CANopen	NA	NA	RS-232 CANopen	
	12-48 VDC	CANopen	NA	NA	RS-232 CANopen	
	12-70 VDC	CANopen	NA	NA	RS-232 CANopen	
	12-70 VDC	CANopen	NA	NA	RS-232 CANopen	
	12-70 VDC	CANopen	NA	NA	RS-232 CANopen	
	12-70 VDC	CANopen	NA	NA	RS-232 CANopen	
ST10-C-CE	24-80 VDC	CANopen	NA	NA	RS-232 CANopen	
ST10-C-CN	24-80 VDC	CANopen	NA	NA	RS-232 CANopen	
ST5-C-CE	24-48 VDC	CANopen	NA	NA	RS-232 CANopen	
ST5-C-CN	24-48 VDC	CANopen	NA	NA	RS-232 CANopen	
STAC6-C	94-135 VAC	CANopen	NA	NA	RS-232 CANopen	
STAC6-C-232	94-135 VAC	CANopen	NA	NA	RS-232	

STAC6-C-Z20	94-265 VAC	CANopen	NA	NA	CANopen
SV7-C-CE	24-80 VDC	CANopen	7.0	14.0	RS-232 CANopen

Products in the Series *SV7 Servo Drives*

Model Number	Supply Voltage	Control Modes	Output Current, Continuous (A rms)	Output Current, Peak (A rms)	Communication Ports
SV7-C-CE	24-80 VDC	CANopen	7.0	14.0	RS-232 CANopen
SV7-IP-EE	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	7.0	14.0	Ethernet EtherNet/IP
SV7-Q-AE	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	RS-232
SV7-Q-AF	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	RS-232
SV7-Q-EE	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	Ethernet
SV7-Q-RE	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	RS-232 RS-485
SV7-S-AE	24-80 VDC	Step & Direction Analog Torque / Velocity Streaming Commands SiNet Hub Compatible	7.0	14.0	RS-232
SV7-S-AF	24-80 VDC	Step & Direction Analog Torque / Velocity Streaming Commands	7.0	14.0	RS-232
SV7-S-RE	24-80 VDC	Step & Direction Analog Torque / Velocity Streaming Commands	7.0	14.0	RS-232 RS-485
SV7-Si-AE	24-80 VDC	Si Programming	7.0	14.0	RS-232
SV7-Si-AF	24-80 VDC	Si Programming	7.0	14.0	RS-232