

**SVX9000** Adjustable Frequency Drives

Modular,  
Configurable,  
Compact



**EATON**

*Powering Business Worldwide*

**Multiple communication protocols allow connectivity to any existing automation system**

- Modbus TCP
- EtherNet IP
- Modbus®
- PROFIBUS DP
- LonWorks
- CAN
- DeviceNet™

**Seven built-in applications**

Use for material handling, extruders, mixers, pumps, fans, cranes and more.

- Basic
- Standard
- Local/remote control
- Multi-step speed control
- PID control
- Multi-purpose control
- Pump and fan control with auto-changeover

**Power module**

- 3/4 hp to 2000 hp
- 208/230V, 480V, 575/690V
- Semiconductor technology
- Connections via multi-pole connector
- Remote mount with a fiber optic cable
- 208/230/480 Vac frame sizes 4–6 equipped with a built-in brake chopper

**Power unit options:**

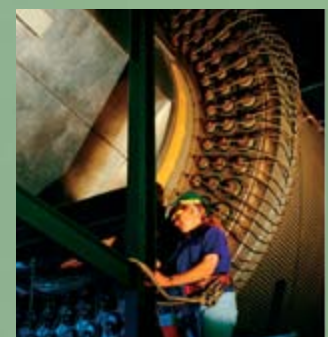
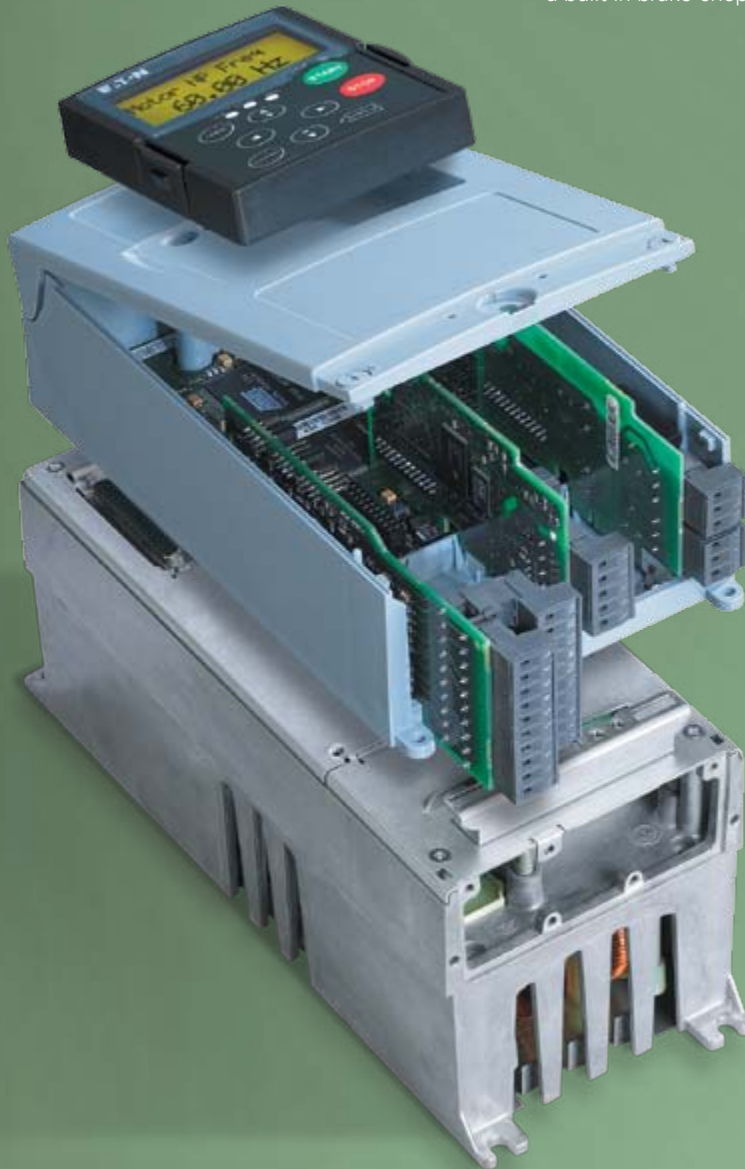
- Input and output filters
- Brake resistors
- NEMA Type 1 (IP21)
- NEMA Type 12 (IP54)
- Open chassis frame 10 and larger

**Power supplies**

- +10 Vdc reference
- +24 Vdc auxiliary
- Encoder (+15 Vdc/+24 Vdc)

**SVX9000 enclosures**

- Standard NEMA Type 1 (IP21)
- Sealed NEMA Type 12 (IP54)(Metal cover, internal fan, conduit plate)



# Modular, configurable and compact.



Eaton's SVX9000 adjustable frequency drives are the compact, modular solution to variable speed applications. They enable a broad range of new application capabilities. A complete selection of option cards allows you to configure the drive to meet any requirement. With its wide voltage range, high overload ability, and user-friendly alphanumeric keypad, SVX9000 drives are the smart decision for every user.

## **Modular design: convenient and cost effective.**

Just three screws link the control module to the power module. What's more, control units are interchangeable within frame sizes while software, control panels, I/O and communication cards are common throughout the line. Separating the power and control units provides installation advantages and reduced spare parts requirements. For convenience, the SVX9000 is field convertible from Type 1 to Type 12 (frames 4–6). Its reduced size equates to less panel space used and easy retrofits.

## **Quick start-up wizard.**

Even when the drive is unpowered, the SVX9000 can be programmed and tested. The control logic module can be powered from an external +24 Vdc source so you're ready to train, test and go live whenever needed. Whether you choose local or remote operations via the keypad, simple copy/paste functions streamline the process.

## **Communication flexibility.**

The SVX9000 may be configured with several different communication protocols, making it easy to communicate with all commonly used control systems. The control unit's powerful microprocessor can be used for local control tasks, thereby freeing resources of the control system for other control tasks. 9000XEngine, our versatile block-programming tool, eliminates the need for a PLC and significantly simplifies the control system.

## **Optional I/O: configuration simplified.**

Up to five plug-and-play I/O cards, each with unique input and output configurations, can be installed. Multiple analog and digital input and output cards and additional application-specific hardware are available.

# PC Tools—drag and drop configuration. Store and access whenever needed.

## 9000XLoad

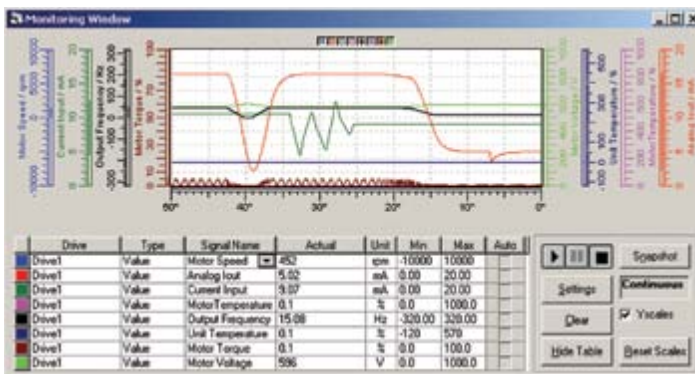
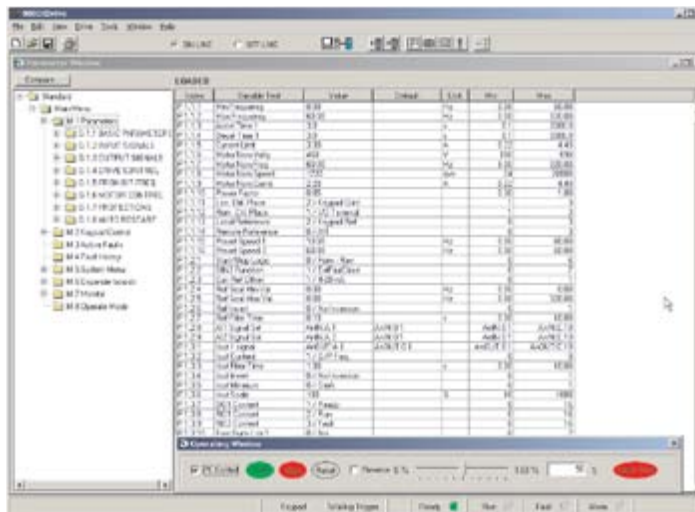
9000XLoad is an easy-to-use tool for uploading system, application and option card software intended for use by engineering, commissioning and service personnel. 9000XLoad is also suitable for loading custom applications to the SVX9000 drive.

## 9000XDrive

9000XDrive is a software tool that allows uploading and downloading drive parameters. Parameters can be changed, saved, and uploaded to any number of SVX9000 drives. The tool has the ability to print parameters or save them to a file for future use and reference. Parameters can be compared to default values to determine drive setup. Operator functions include the ability to set references, start and stop the drive, and to monitor signals and actual values. These values can be displayed via a graphic display.

## 9000XEngine

Create IEC 1131-3 compliant custom applications with 9000XEngine. This graphical design tool customizes the control logic and parameters in the SVX9000. Functional Block Diagram (FBD), Ladder Diagram (LD) and Structured Text (ST) are all part of the function set. 9000XEngine enables the creation of parameters, fault messages and other application-related features.



### SVX9000 Series at a glance:

- Wide range of horsepower and voltage selection
- Start-up wizard
- Modular design concept
- External +24 Vdc can be used to power the controller
- Built-in 3% line reactor
- Open and enclosed drives (CT/I<sub>h</sub> rated to 50°C)
- 30-fault history with status at time of fault
- Easy operation

### The SVX9000 keypad and display unit.

The SVX9000 keypad offers the user a full view into the drive. The keypad provides the ability to view and change parameters, as well as monitor actual running values. Built in upload and download capability makes programming several SVX9000 drives a snap, cutting installation time. The three-line alphanumeric programmable

display with status indicators uses English words for parameters, status, and diagnostic messages without the use of codes and lookup tables. The display has large, clear characters easily visible in any light condition.

### SPX9000 Series at a glance:

- High performance for demanding applications
- Increased micro-processing power (4 times more CPU capability)
- Encoder feedback
- High resolution analog inputs
- Speed and torque loop capability
- Customizable software
- Same ease of operation

Horsepower	Voltage Range	Enclosure Style
3/4 to 100 hp	208, 230V	Type 1, Type 12
1 to 200 hp	380, 480V	Type 1, Type 12
250 to 1900 hp	480V	Open Chassis
2 to 150 hp	575, 690V	Type 1, Type 12
200 to 2000 hp	575, 690V	Open Chassis

Compare parameter changes to default values

Display three monitor values simultaneously

Intuitive parameter menus

Bright LCD display

Copy parameters to other drives

3 LED status lights

Password protect parameters

Local/Remote button on keypad



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**Eaton Corporation**  
Electrical Sector  
1111 Superior Ave.  
Cleveland, OH 44114  
United States  
877-ETN-CARE (877-386-2273)  
[Eaton.com](http://Eaton.com)

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