

- 0.55 kW to 1800 kW
- 208–240 V, 380–500 V, 525-690 V
- Semiconductor technology
- Connections via multi-pole connector
- Remote mount with a fibre-optic cable
- Frame sizes 4–6 equipped with a built-in brake chopper as standard

# Power unit options:

- Input and output filters
- Brake resistors

### **Power supply**

- +10 V DC reference
- +24 V DC auxiliary
- Encoder (+15 V DC/+24 V DC)



Both frequency inverters pre-configured applications to minimise set-up time and

# Software Tools – Drag and drop configuration. Store and access whenever

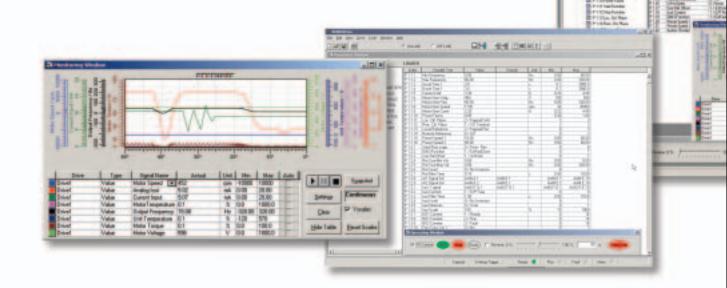
#### 9000XDrive

9000XDrive is a software tool that allows uploading and downloading drive parameters. Parameters can be changed, saved, and uploaded to any number of frequency inverters. The tool has the ability to print parameters or save them to a file for further use and reference. Parameters can be compared to preset values to determine drive setup. Using the user functions it is possible to set references, start and stop the drive, and to monitor signals and actual values. These values can be shown via a graphic display.

# 9000XEngine

Create IEC 61131-3 compliant custom applications with 9000XEngine. This graphical design tool customizes the control logic and parameters in the frequency inverter. Functional Block Diagram (FBD), Ladder Diagram (LD) and Structured Text (ST) are integrated functionalities. 9000XEngine enables the creation of parameters, fault messages and other application-related features.

SPX9000 and SVX9000 utilise a common software platform, start-up wizard and enhanced allow consistency of programming and commissioning.



• Multi step speed control

• Multi-purpose control

• Pump and fan control

• Easy connection of all power

and control connections

with auto change

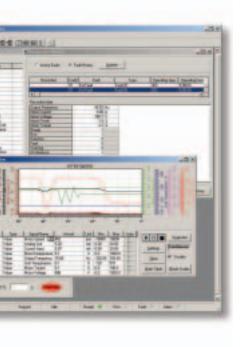
• PID control



# 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 frequency inverter.



# SVX9000 frequency inverters

The SVX9000 can be used for simple and complex applications.

Typical applications are, for example, pumps, ventilation systems and belt conveyors. The SVX9000 features integrated help functions that simplify parameterization of the frequency inverter. Enclosures are available with IP21 and IP54 degree of protection.

# The SVX9000 Series at a glance:

- Extensive range of power and voltage selections
- Start-up wizard
- Modular design concept
- The communication can be operated via external 24 VDC
- Built-in 3% line reactor
- 30-fault history with status at time of fault
- Easy operation

Rating (kW)	Voltage range	Enclosure
0.55–75	208–240	IP21, IP54
0.75-132	380-500	IP21, IP54
2.2–160	525-690	IP21, IP54



# SPX9000 frequency inverters

The SPX9000 can be used in high power and/or high performance applications. Typical applications requiring high performance are: synchronisation of multi-motor systems, positioning control applications, control and synchronisation of winder systems. The SPX9000 supports fast communication between several frequency inverters. Equipped with superior processing power, the SPX9000

frequency inverter can utilise an absolute encoder or rotational feedback, to provide precise motor control. Sensorless vector and simple frequency control are selectable by parameter setting. Enclosures are available with IP21, IP54 and IP00 degree of protection.

# The 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
- Master / Slave capability

Rating (kW)	Voltage range	Enclosure
0.55–75	208-240	IP21, IP54
0.75-1100	380-500	IP21, IP54 and IP00 modules
2.2-1800	525-690	IP21, IP54 and IP00 modules



Eaton's 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 userfriendly alphanumerical display and operating unit.

## 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 series. Separating the power and control units provides installation advantages and reduced spare parts requirements The SVX9000 and SPX9000 can be easily converted on-site from degree of protection IP21 to IP54 (sizes 4-6). The reduced dimensions equate to less panel space and easier retrofits.

#### Quick Start-up Wizard.

Even when unpowered, the frequency inverter lets you program and test the drive. The control logic module can be powered from an external +24 V DC source so you're ready to 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 and SPX9000 may be configured with several different communication protocols, making it easy to communicate with all commonly used control systems. The frequency inverter's powerful microprocessor can be used

for local control tasks, thereby freeing resources of the PLC. 9000XEngine, our versatile block-programming tool, eliminates the necessity for a PLC and significantly simplifies the control system.

# Optional I/O: Simplified configuration.

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



# Display and operating unit.

The display and operating unit offers the user full control over the drive. It provides the ability to view and change parameters, as well as monitor actual running values. Built in upload and download capability makes programming several frequency inverters child's play, cutting installation time. The three-line alphanumeric programmable display with status indicators uses localized text for parameters, status, and diagnostic messages without the use of codes and lookup tables. The display has large, clear characters easily visible in all lighting conditions.



# **Eaton Corporation**

Eaton is a leading energy management company. Eaton operates worldwide with products, systems and services in the electrical, hydraulic, aerospace, truck and automotive sectors.

### **Eatons Electrical Sector**

Eatons Electrical Sector is the worldwide leader in products, systems and services for energy distribution, safe electricity supply and automation in industrial, residential and purpose-built buildings, public facilities, energy providers, commerce and OEMs.

Eaton Electrical Sector includes the brands Cutler-Hammer®, Moeller®, Micro Innovation, Powerware®, Holec®, MEM®, Santak® and MGE Office Protection Systems<sup>TM</sup>.

www.eaton.com

Addresses worldwide: www.moeller.net/address

E-Mail: info-int@eaton.com Internet: www.moeller.net www.eaton.com

Publisher: Eaton Corporation Electrical Sector – EMEA

Eaton Industries GmbH Hein-Moeller-Str. 7–11 D-53115 Bonn

© 2010 by Eaton Industries GmbH Subject to alterations W8230-7624en ip 04/10 Printed in Germany (04/10) Article No.: 144111





