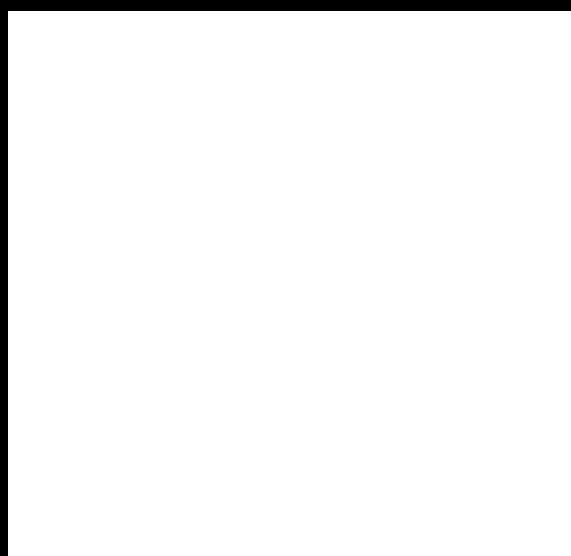
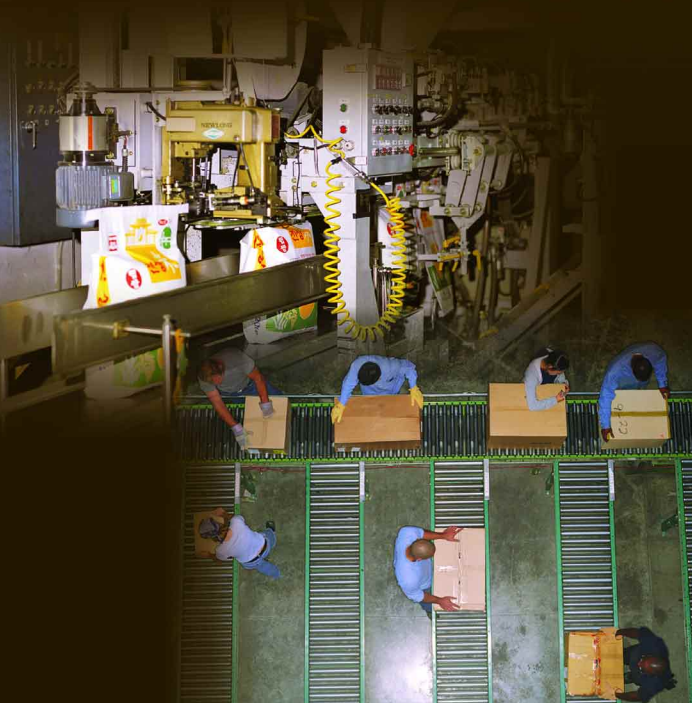


Drive the Solution

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EAT•N | Cutler-Hammer

AF Drives

MVX9000, SVX9000 Open & SVX9000 Enclosed Drives



EAT•N

Cutler-Hammer



MVX9000 Micro Drives

Cutler-Hammer® Model MVX9000 sensorless Vector Adjustable Frequency Drives from Eaton's electrical business are designed to provide adjustable speed control of 3-phase motors. These microprocessor-based, sensorless vector drives have standard features that can be programmed to tailor the drive's performance to suit a wide variety of application requirements. The MVX9000 sensorless vector product line utilizes a 32-bit microprocessor and Insulated Gate Bipolar

Transistors (IGBTs) which provide quiet motor operation, high motor efficiency and smooth low-speed performance. The size and simplicity of the MVX9000 make it ideal for hassle-free installation where size is a primary concern. Models rated at 480 volts, 3-phase, 50/60 Hz are available in sizes ranging from 1 to 10 hp CT. Models rated at 240 volts, single- or 3-phase, 50/60 Hz are available in sizes ranging from 1/2 to 7-1/2 hp CT. The standard drive includes a digital display, and operating and programming keys on a removable keypad. The display provides drive monitoring, as well as adjustment and diagnostic information. The keys are utilized for

digital adjustment and programming of the drive, as well as for operator control. Separate terminal blocks for control and power wiring are provided for customer connections. Other standard features provided include built-in dc braking, RS-485 serial communications and PID control.

Features

- Sensorless vector control with auto tuning and speed torque control.
- User-friendly keypad with four-character LED display, seven status indicating LEDs, speed potentiometer and six function keys.
- Two analog inputs.

- Six programmable, intelligent digital inputs.
- One programmable digital output.
- One programmable relay output.
- PID control of a process variable such as pressure, flow, temperature, liquid level, etc.
- Built-in dynamic braking chopper. Superior deceleration performance.
- Serial communication port (RS-485).
- Single-phase or 3-phase input capability on 240 Vac rated units, 3 hp CT and below.
- 115 Vac unit is now available.

Benefits

- Provides 200% starting torque and advanced low speed torque control.
- Most informative operator's interface in this class of VFD, provided as standard. All parameters, diagnostic information and metering values are displayed with a bright four-character LED display.
- Enhanced application flexibility.
- Eliminates requirement for separate set point controller.
- Operates 3-phase motor with single-phase supply.
- Direct connection to serial communications networks.

SVX9000 Open Drives

Cutler-Hammer SVX9000 Series Adjustable Frequency Drives are the next generation of drives specifically engineered for today's commercial and industrial applications. The power unit makes use of the most sophisticated semiconductor technology and a highly modular construction that can be flexibly adapted to the customer's needs. The input and output configuration (I/O) is designed with modularity in mind. The I/O is compromised of option cards, each with its own input and output

configuration. The control module is designed to accept a total of five of these cards. The cards contain not only normal analog and digital inputs but also field bus cards. These drives continue the tradition of robust performance, and raise the bar on features and functionality, ensuring the best solution at the right price.

Features

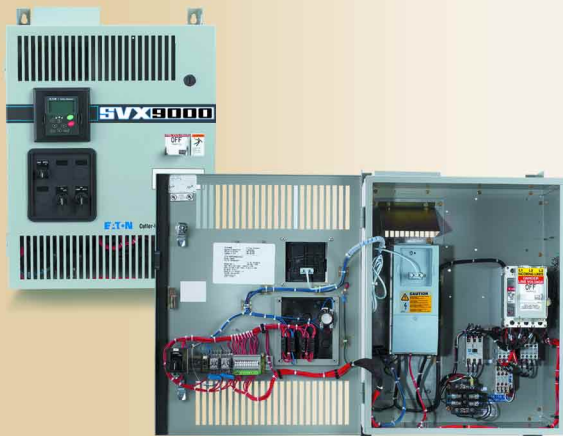
- 1 – 1000 hp CT / 380 – 500 volts; 3/4 – 100 hp CT / 208 – 230 volts; 2 – 700 hp CT / 525 – 690 volts.
- NEMA® Type 1 and 12 enclosures available.

- 3% line reactors standard on drives through FR9.
- EMI/RFI Filters H standard up to 200 hp CT / 480 volts; 100 hp CT / 230 volts.
- Simplified operating menu and Quick Start Wizard built into the programming of the drive.
- Keypad can display up to three monitored parameters simultaneously.
- Local/remote operation from keypad.
- Copy/Paste function allows transfer of parameter settings from one drive to the next.
- Standard NEMA Type 12 keypad on all drives.

- Can be flexibly adapted to a variety of needs using our pre-installed "Seven in One" Precision application programs.
- Additional I/O and communication cards.
- UL®, cUL® and CE listed.
- Hand-held auxiliary power supply allows programming/monitoring of control module without applying power to the drive.
- Control logic can be powered from an external auxiliary control panel, internal drive functions and field bus if necessary.
- Brake chopper standard from 1 – 30 hp CT / 380 – 500 volts; 3/4 – 15 hp CT / 208 – 230 volts.

Benefits

- Robust design based on SV9000 design.
- Modular design for ease-of-use and flexibility.
- Controller is standard up to FR9.
- Quick Start Wizard ensures smooth and easy startup.
- Reduced size means less panel space.
- Additional I/O cards provide plug and play functionality.



SVX9000 Enclosed Drives

Cutler-Hammer SVX9000 Enclosed Drives are available in three offerings to meet your application requirements. Standard Enclosed, Modified Standard Enclosed and Custom Engineered... you have the choice, Eaton has the solution.

Standard Enclosed — covers a wide range of the most commonly ordered options. Pre-engineering eliminates the lead-time normally associated with customer-specific options.

Modified Standard Enclosed — applies to specific customer requirements that vary from the Standard Enclosed offering, such as the need for an additional indicating light or minor modifications to drawings.

Custom Engineered — for those applications with more unique or complex requirements, these are individually engineered to the customer's needs.

Features

- NEMA Type 1, 12 and 3R enclosures.
- Input voltage: 208, 230, 480 and 575 volts (future release).
- Complete range of control, network and power options.
- Horsepower range:
 - 208 volts: 3/4 – 75 hp CT; 1 – 40 hp VT.
 - 230 volts: 3/4 – 75 hp CT; 1 – 40 hp VT.
 - 480 volts: 1 – 200 hp CT; 1-1/2 – 250 hp VT.
- HMCP padlockable.
- UL and cUL listed.

Benefits

- Flexible options provide configurable-engineered solutions.
- Full range of power distribution and power control.
- NEMA and IEC combination motor starters.
- Reduced voltage soft starts.
- Easy startup with Quick Start Wizard.
- Reduced size means less panel space.

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