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HXV SERIES

HIGH VOLTAGE / HIPOT SWITCHING SYSTEMS

The HXV Series of Computer Controlled Switching Systems are used in High Voltage and HIPOT applications. They consist of pre-wired Mainframes and Expansion Chassis which hold selected Switch Modules needed to furnish the required Matrix or Multiplexer configuration.

FEATURES:

- Hot switches up to 3500 volts or 3 amps, carries 5000 volts and 5 amps.
- Computer Control from IEEE488 and RS232; Ethernet LAN or USB are optional.
- Front Panel Display of Switchpoint Status with Status Feedback to the controlling computer.
- Manual Controls optionally available.

CHASSIS

All HXV Chassis are standard 19" rack mounting width and 15.6" deep. The following chassis are available:

HXV/32 Mainframe -- Holds up to four HXV Switch Modules.

HXV/96 Mainframe -- Holds up to 12 HXV Switch Modules.

HXV/128 Mainframe -- Holds up to 16 HXV Switch Modules

HXV/96-E and HXV/128-E Expansion Chassis -- Used for building larger systems. Up to 16 Expansion Chassis can be controlled from one MESA Control Chassis shown in the **MESA Bulletin**.

Chassis Heights:

HXV/32 = 5.25" **HXV/96** = 7" **HXV/128** = 10.5"

SWITCH MODULES

HXV/8x1-A -- Built with eight Form A (SPST) Normally Open Relays arranged as an 8x1 multiplexer.

HXV/8x1-B -- Has eight Form B (SPDT) Normally Closed Relays.

HXV/8-KA -- Provides eight individual Form A Relays.

HXV/8-KB -- Eight individual Form B Relays.

HXV/4x2 -- Has eight Form A Relays arranged as a 4x2 matrix.

CONNECTOR OPTIONS:

SHV - Similar to BNCs. Highest safety.

BP - Banana Plug & Binding Post Type. Lowest Cost.

RELAY SPECIFICATIONS

Contact Rating	200 Watts
Switch Voltage	3500 Volts
Switch Current	3.0 Amps
Carry Current	5.0 Amps
Breakdown Voltage	5000 Volts RMS
Operating Time	3.0 msec
Life Expectancy	100 million operations mechanical



HXV/32 Mainframe with PushButton Manual Control

LED DISPLAYS

HXV/32 Mainframes have relay status LED Displays built into the front panels.

HXV/96 and HXV/128 Mainframes and Expansion Chassis require one CL8 Display Module to drive each switch module. CL8 LEDs are visible at the front panel. These display modules must be purchased in addition to the switch modules.

CONTROL MODULES

IF-5 IEEE488/RS232

This Module has both the IEEE488 (Talk/Listen) and the RS232 features detailed in **Applications Bulletin AP-5**.

IF-6 LAN INTERFACE

This Module uses TCP/IP to allow control from a Local Area Network as detailed in **Applications Bulletin AP-5**.

IF-7 EXTERNAL USB/RS232 INTERFACE

This external cable plugs into a USB port on the controlling computer at one end and the Cytec Mainframe's RS232 Port on the other. Allows control via USB at up to 19,200 bps.

MANUAL CONTROL OPTIONS

Pushbutton Manual Controls are optionally available for the HXV/32 Mainframes. (Specify **PB/32**). Optional Keypad LCD Display Manual Controls are offered for the HXV/96 and HXV/128 Mainframes. (Specify **MC-2**).

SOFTWARE

Example/Driver programs are available free of charge, written in most common application languages, including LabView, LabWindows, Visual Basic and HP Vee.

WARRANTY

CYTEC Corp. warrants that all products are free from defects in workmanship and materials for a period of five years. Reed relays are guaranteed for 100 million operations when used within their published specifications.

CONTACT 1-800-346-3117 or WWW.CYTEC-ATE.COM FOR TECHNICAL ASSISTANCE

HXV CHASSIS

The HXV Chassis are 19" rack mounting chassis that are pre-wired to hold the HXV Series of Switch Modules. Mainframe chassis include built-in power supplies. The Switch Modules mount so that the signal I/O connectors protrude through the chassis' rear panel. Power and control connectors are also mounted on the rear panel. The front panel has LEDs that show power ON and switch status. Optional manual controls also mount on the front panel. The following units are available:

HXV/32 MAINFRAMES

This Chassis controls 32 switch points. A number of different switching configurations are possible. Add the required Switch Module(s) and a Control Module to complete the system. Standard Chassis depth is 15.6", and Chassis height 5.25". Note that the HXV/32 is not available as an expansion chassis.



HXV/32 Mainframe (rear panel)

HXV/96 and HXV/128 MAINFRAMES

These Chassis control 96 or 128 switch points respectively. A variety of configurations are possible. CL8 Display/Driver Modules drive the associated Switch Modules and provide LED indication of switch status. Add Switch Modules, CL8s and a Control Module to complete the system. Standard Chassis depth is 15.6". The HXV/96 is 7" high, while the HXV/128 is 10.5" high. Purchasing larger Mainframes only partially filled allows for cost-effective future expansion.

HXV/96-E and HXV/128-E EXPANSION CHASSIS

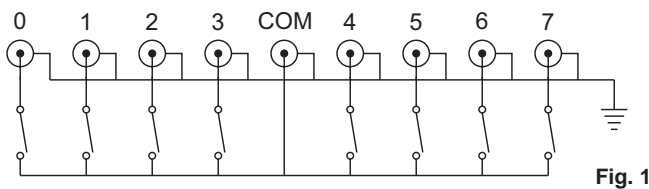
HXV/96 and HXV/128 units are also built as expansion chassis for use with a MESA Control Chassis shown in the **MESA Bulletin**. Multiple expansion chassis allow the configuration of large or complex systems having one point of control, which results in cost savings. Expansion Chassis do not include power supplies or control modules. Add the required switch modules and CL8 Display/Driver Modules as needed to complete the system.

HXV SERIES SWITCH MODULES

The HXV Series of Switch Modules are built with special High Voltage Reed Relays that switch up to 3500 Volts and carry 5000 Volts. Applications include HiPot testing, insulation breakdown testing and other extreme voltage requirements. External signal connectors are either SHV coaxial or Banana Plugs. The modules can be wired together internally to furnish larger configurations while eliminating external connections. For example, chassis can be supplied pre-wired as 32x1, 96x1 or 128x1 multiplexers, or , 16x2, 48x2 or 64x2 matrices.

HXV/8x1-A or -B

This switch module has eight Form A (Normally Open) or Form B (Normally Closed) relays arranged in an 8x1 configuration as shown in Fig. 1. A screw terminal connector is built into the module so that the COM connections may be wired together inside the chassis to form larger multiplexers.



HXV/8x1-A Switch Module

HXV/4x2-A

This switch module is built with eight Form A (SPST) relays arranged in a 4x2 matrix configuration as shown in Fig. 2. Built-in screw terminal connectors allow the two COM connections to be wired together among multiple modules within the chassis to form larger matrices such as 8x2, 16x2, etc.

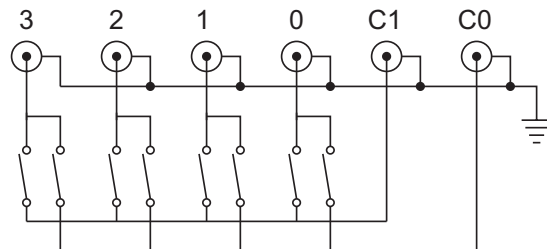
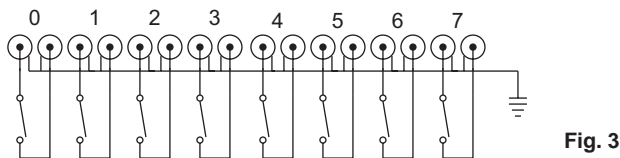


Fig. 2

HXV/8-KA or -KB

This module has eight individual Form A (Normally Open) or Form B (Normally Closed) relays wired out to 16 connectors as shown in Fig. 3. It requires a double slot in the chassis.



HXV/8-KA Switch Module

CUSTOM SYSTEMS

CYTEC Corp. takes pride in building custom systems that meet non-standard or special customer specifications. Please call 1-800-346-3117 or email sales@cytec-ate.com to contact an Application Engineer and discuss details.