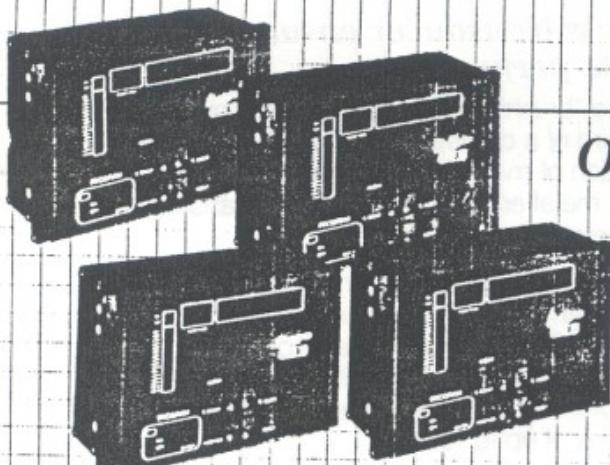


OMNI VI

OMNI VI gives you the power of four controllers in a single system.



OMNI VI... The 4-in-1 Programmable Limit Switch Controller.

The four-in-one answer

The OMNI VI Programmable Limit Switch System gives you the power to enter, store, and activate four entirely different "cam" switch programs—each with different scale factors, offsets and as many as 32 outputs.

The OMNI VI is microcomputer-based and fully electronic. It provides precise, accurate control of repetitive high-speed operations based on machine shaft position. The basic system consists of a resolver-based transducer and a programmable control unit.

Precision unmatched in the industry

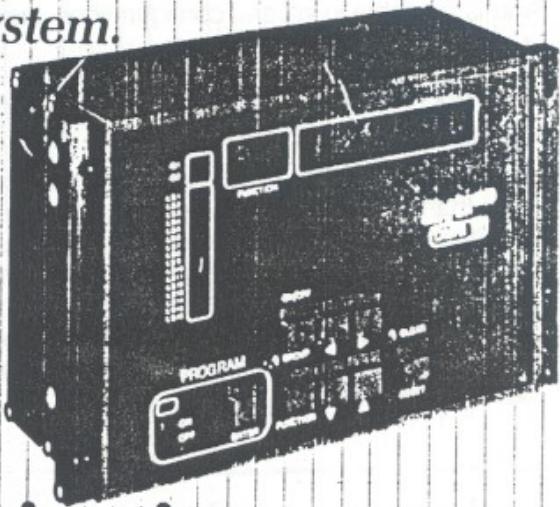
The OMNI VI gives you the precision and resolution to accurately control machines over long distances of travel. Or, you can gear-in to provide ultra-precision.

The system keeps track of up to 1,000 turns of the transducer. Each turn can be controlled to 1/1,000th of a revolution. Total system resolution is thus 0.000001 (one part in one million).

Does the work of 32 cam switches

The OMNI VI has 32 limit outputs. Outputs can be open collector, 3 AMP 115V AC, or 3 AMP 60V max DC.

Each output has 64 programmable limit points that



can be set to determine the on/off state.

Over the full travel of up to one million position counts the output can be cycled on and off up to 32 times. A single OMNI VI can replace 32 electromechanical cam-operated limit switches—and do their work far more reliably and accurately.

Stores up to four independent programs

The OMNI VI stores up to four entirely different programs in its EROM memory. This nonvolatile memory retains the programs even during power outages. No battery back-up required. New programming is easily entered using the control panel's keyboard and LED display.

High-speed operation

The OMNI VI has a scan time of 750 microseconds—much faster than programmable logic controllers. It is ideal for controlling presses and packaging machinery at high speeds—speeds where production is a blur to the human eye.

Full-scale offset at the touch of a key

Regardless of shaft position, the OMNI VI can be reset to zero simply by pressing a key on the control panel. There's no need to physically turn the shaft—no screws to set or tighten.

A tough, reliable system

Only the transducer is connected to the machine being controlled. The rest of the system—including the microcomputer, display, keyboard, and all of the electronics—is located in a separate, protected control unit. This unit can be mounted away from the sometimes harsh, abusive transducer environment, and is available in several configurations, including a compact NEMA-12 enclosure.

OMNI VI helps you control complex operations

The OMNI VI is ideal for applications that require more than 16 cams—for example, a large machine with many control points. Also, the stored programs allow you to reduce set-up time and quickly and easily adjust your production rates or reconfigure your process to handle new products. Typical areas of application include printing, packaging, and machine presses.

Technical specifications

Control unit

Power input: 115/230 VAC ±15%, 12VA 50/60 Hz

Operating temperature: 0° to +55°C

Storage temperature: -25° to +80°C

Outputs: 32 open collector, 3 AMP 115V AC, or 3 AMP 60V max DC

Maximum RPM: 600

Programmable factors: decimal point position, scale factor, number of turns, full-scale indication, 64 setpoints

Open Collector Limit switch load ratings

Working voltage: 3 to 45 VDC

Maximum on-current: 100 mA continuous

Off current: 100 µA

About NAMCO/C&A

NAMCO/C&A offers you a complete line of absolute rotary position control products to meet all your automation needs:

- Encoders to provide reliable shaft position data to all programmable controllers and computers
- Programmable limit switches more accurate and reliable than electromechanical cam-operated limit switches
- Sophisticated controllers for every conceivable packaging application.

All NAMCO/C&A products are designed to be easy to install, easy to program, and easy to use. They're ideal for a wide range of applications—everything from bending and bottle manufacturing, to material handling and molding, to welding and wrapping.

Brushless transducer ensures accurate performance

The unique "brushless" transducer detects position within a third of a degree of accuracy—three times the resolution of many other systems. A rugged NEMA-4X metal enclosure protects the transducer from the harshest of environments.

Unlike optical encoders, which have glass discs that shock can shatter, our transducer is virtually unbreakable. Optical encoders also contain electronics that are subject to failure; ours doesn't. And the OMNI VI transducer can operate at temperatures of up to 130°C.

Options available with the OMNI VI:

- Solid state or reed relay board—drives external AC or DC loads
- NEMA 12 enclosure with window and key lock

Transducer (model HT-11B)

Maximum starting torque: 1.0 oz-in

Moment of inertia: 15 gm-cm

Maximum slew speed: 3,000 RPM

Maximum operating speed: 2,000 RPM

Maximum axial shaft loading: 35 lbs

Maximum radial shaft loading: 75 lbs

Weight: 2 lbs

Operating temperature: -20° to +130°C

Vibration: 15 g's to 2,000 Hz

Shock: 50 g's for 11 msec

Here's how to get your hands on an Omni VI—today!

For a free, no-obligation demonstration of an Omni VI in your plant or office, contact your NAMCO/C&A sales representative.

Or call us direct, toll-free.

1-800-4CA-PROD

NAMCO

C & A PRODUCTS

An Acme-Cleveland Company

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