VICON

Trove Input/Output Controller

Overview

The Vicon Access Control (VAX) system consists of a dedicated Vicon Access Control Server and the edge Controller(s). The Server contains the operating system, database engine, web server, application software and configuration data. The Controller communicates back to the Server over the network and provides an interface to readers, relay outputs, door locks, etc. Vicon offers unique controllers housed in Altronix® Trove™ lockable enclosures.

The VAX-TROVE-32I/O is a traditional style controller, designed to be easily scalable and provide seamless retrofits. This controller can be used to expand the number of input and output relays in the system. It consists of a Master Controller (VAX-MDK Master) and four (4) 8-I/O expansion boards (VAX-IO-EXP8-PCB). The master controller provides on-board communications and connects via a single TCP/IP to a local or external VAX server for configuration data and event management. The expansion boards connect via RS-485 in the same enclosure or remotely. The Trove1 enclosure includes a built-in eFlow6NB power supply that provides 12 VDC and a port for back-up battery. The controllers provide LED indicators for system status and an LCD display for system diagnostics. Configurable inputs and relay outputs are supported.

Product at a Glance

▶ Input/output master controller

▶ Controls up to 32 inputs/outputs

▶ Mounted in Altronix Trove enclosure with built-in eFlow power supply

▶ Includes MDK Master Controller and expansion boards

▶ Expanders can provide up to 64 inputs/outputs

▶ Port for battery backup (battery not included)

▶ Communicates via RS-485 protocol

▶ Supports user holiday groups

▶ Can be mounted in equipment rooms for control elsewhere in the system
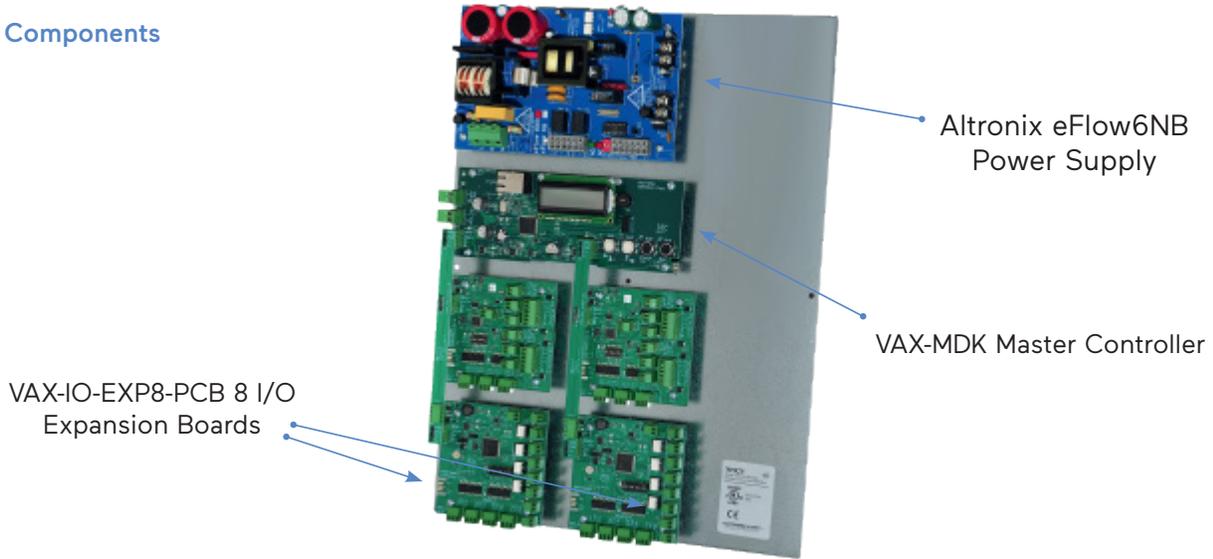
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Specifications

VAX-TROVE-32I/O	
Hardware	
Hardware Components:	1x VAX-MDK Master; 4x VAX-IO-EXP8-PCB; 1x Trove 1 enclosure; 1x eFlow6NB power supply
Processor:	32-bit microprocessor based
Power:	Supply: eFlow6NB. Input: 120 VAC, 60 Hz, 3.5A; Output: 12 VDC @ 6 A. Supervised fire alarm disconnect (NO/NC trigger), short circuit and overload protection and AC Fail supervision. Port for battery backup with built-in charging for standard 12 VDC 7 Ah dry cell battery (not included).
Communication:	Between Master controller and VAX web server: 1x Ethernet 10/100 Mbps. Between Master controller and VAX-IO-EXP8-PCB: RS-485 2-wire (daisy chain or star)
Network:	Speed: 10/100 Mbps Modes: Static or DHCP MAC: Unique Encryption (panel-server): 256 bit AES option 1 NIC port
I/O:	Inputs: Up to 32 dry contact ports (shared common between ports 1/2, 3/4, 5/6, 7/8); up to 500 ft (152 m) Outputs: Up to 32 configurable ports, (TV circuit limits 30 V) 500 A, normally open; up to 500 ft (152 m) Sound: Piezo buzzer
User Interface:	LED indicators: 5x power; 1x network; 5x heartbeat; 24x relay output; 5x on/off line; 2x RS-485; 4 input received LCD Display: 2-line 16-character
Schedules:	Output: 64 output time zones, 5 zones (11 boundaries) per day; 16 output holiday time zones, 2 zones (5 boundaries) per day. Input: 16 input time zones, 5 zones (5 boundaries) per day; 16 input holiday time zones, 2 zones (5 boundaries) per day.
Protection:	Over-current
Time Keeping:	Maintains up to 1 month; no battery required; automatic DST switch
Memory:	Flash Memory: 8.0 Mb
Housing and Backplane:	Steel (16 AWG) powder-coated lockable enclosure; THC1 backplane includes standoffs for eFlow6NB power supply and MDK controllers. 9x 1/2"-3/4" combination knockouts; 1x 1.5" knockout
Options:	24 VDC Converter: converts 12 VDC to 24 VDC Dry Contact Converter: converts wet to dry contact Expansion Port: supports serial, extra memory, I/Os for future expansion
Storage:	50,000 events stored in case of network failure
Mechanical & Environmental	
Dimensions:	W: 14.5 in. (368 mm); H: 18.0 in. (457 mm); D: 4.62 in. (117 mm)
Weight:	11.8 lb (5.35 kg)
Operating Temperature:	32 - 120° F (0 - 49° C)
Operating Humidity:	10% to 85% relative humidity, non-condensing
Approvals:	UL294; ULC S319-05; CE
Country of Origin:	Canada

Ordering Information

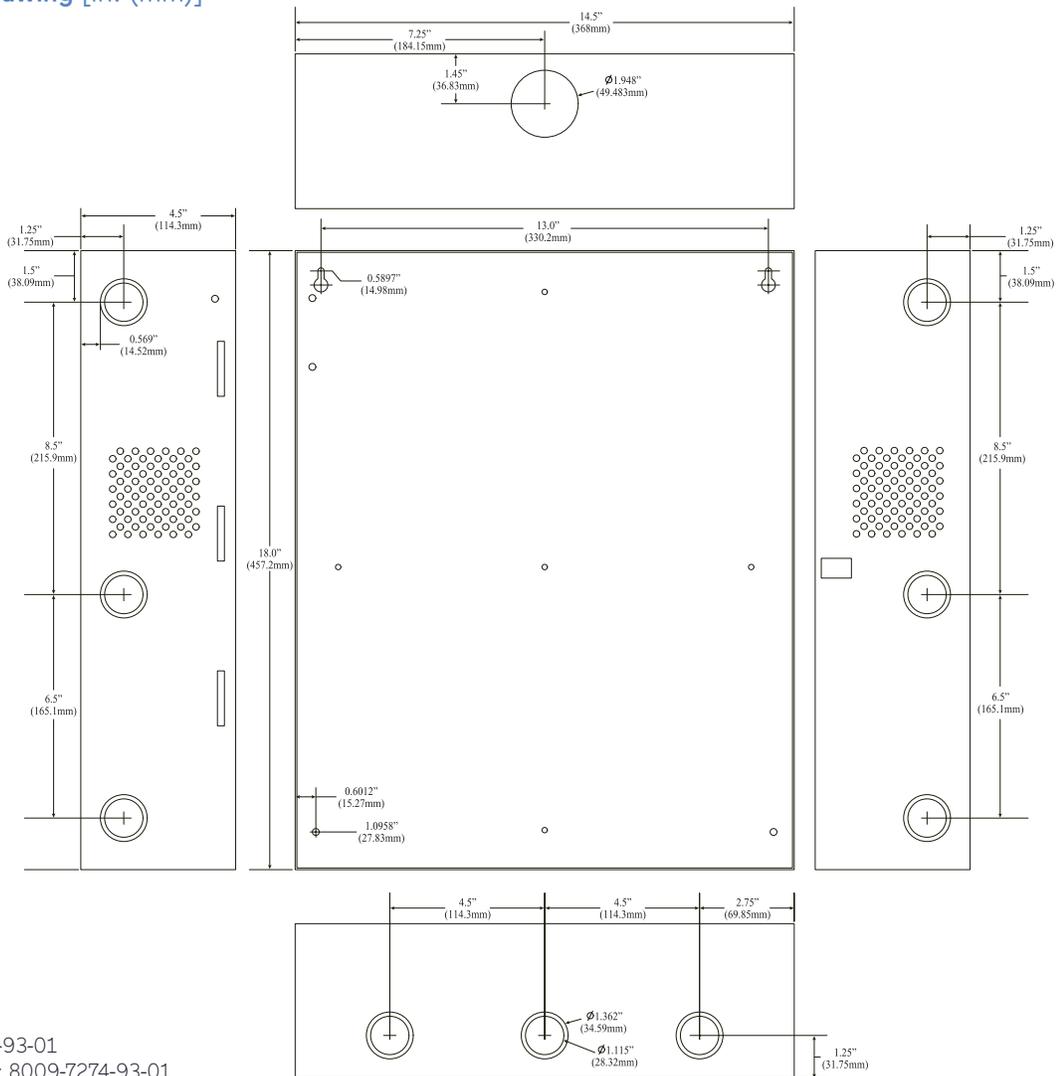| Description	Model Number
Thirty-two I/O kit; includes 1 master controller board, four (4) 8-I/O expansion boards and a 12 VDC @ 6A power supply in an Altronix Trove 1 lockable enclosure.	VAX-TROVE-32I/O
Starter kit; includes 1 master controller board, 1 8 I/O board and 2 3P strips (RS-485 power bus)	VAX-TROVE-I/O-STR

The VAX-TROVE-ENCL models provide flexibiliity for future expansion and customization of requirements. A Trove enclosure can be purchased and then a starter kit and/or explander boards can be installed onto the standoffs to meets almost any installation need.

Components

Altronix eFlow6NB
Power Supply

VAX-MDK Master Controller

VAX-IO-EXP8-PCB 8 I/O
Expansion Boards

Dimension Drawing [in. (mm)]

Data Sheet Number: V274-93-01
Vicon Data Sheet Number: 8009-7274-93-01

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