

Vicon Access Control Elevator 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 an elevator controller that is used to incorporate elevator access into the VAX system. It provides elevator access control to a single elevator cab for up to 8 floors; it can be expanded to 64 floors on one elevator cab or 32 floors each on two elevator cabs with the addition of 7 VAX-IO-EXP8PCB floor/IO expansion boards. Additional enclosure (VAX-ENCL-ST-1) is required when adding more than 3 additional VAX-IO-EXP8PCB expansion boards. With the addition of 1 VAX-EXP-2D two-door board, up to 4 elevator cabs can be supported. For each elevator cab, one VAX-IO-EXP8PCB floor/IO expansion board is needed to cover 8 floors for a maximum of 16 floors per elevator cab.

Based on rules defined in the VAX system setup, access to an elevator and/or which floors can be accessed by any individual can be controlled. Functionally, the credential holder will present their credential to a reader mounted in the elevator cab. The Elevator Controller will then activate/deactivate relays or inputs to enable access to specific floors based on floors/user schedules via relay connection to elevator PLC/controller.

Product at a Glance

- ▶ Common master control panel, two-door board and 8 floor/IO board
- ▶ Elevator access control to one elevator cab for up to 8 floors
- ▶ I/O expander boards available to provide elevator access up to 64 floors
- ▶ Communicates using RS-485
- ▶ Housed in metal enclosure
- ▶ Customizable holiday user groups and holiday setup
- ▶ Powered by 12 VDC 5A power supply

Specifications

Controller Hardware	
Processor:	32-bit microprocessor based
Power:	Supply: 12 VDC 5A (not supplied) Reader: 12 VDC, 250 mA per port Auxiliary Output: 12 VDC, 200 mA (for expander boards)
Network:	Speed: 1X RJ-45 10/100 Mbps ethernet port Wire Spec: 500 ft (152 m) max distance, Cat5 or better Modes: Static or DHCP MAC: Unique Encryption (panel-server): 256 bit AES option
I/O on Expander:	Inputs: 8x dry contacts; can be software configured normally closed Outputs: 8x solid state relays which can switch up to 30VDC 500mA; can be software configured normally closed Wire Spec: 500 ft (152 m) max distance; 2 conductors, stranded 22 AWG, shielded
Readers:	Reader Port: 2x Wiegand (D0, D1); 1 per elevator cab Formats: magnetic stripe, biometric, bar code and Wiegand Wire Spec: 500 ft (152 m) max distance; 6 conductors, stranded 24 AWG or thicker, shielded
User Interface:	LEDs: 2x power indicator; 2x Ethernet status indicator LCD Display: 1x 16 channel; 2-line LCD with backlight Push Buttons: 4x tactile switch (keyboard for data entry) Sound: 1x 90 db Piezo
Support:	Up to 64 floors on one elevator cab or 32 floors each on two elevator cabs (split by interval of 8 floors) with additional 7 VAX-IO-EXP8PCB IO/Floor Boards Up to 16 floors per each of 4 elevator cabs (with one additional VAX-EXP-2D two-door board and 7 additional VAX-IO-EXP8PCB IO/floor boards) Button or non-button sensing 256 user time zones; 50 user holiday time zone groups, 50 holidays each 64 floor time zones 8 floor holiday time zone groups, 50 holidays each
Protection:	Configurable photo tamper sensor
Communications:	RS-485 protocol between the Master Controller panel and the elevator expander boards
Time Keeping:	Date/Time: 1x on-board real-time clock (no battery required, maintains up to 1 month)
Storage:	Stores up to 100,000 cardholders. Stores up to 50,000 events, first in first out queue
Mechanical and Environmental	
Dimensions:	W: 11.625 in. (295 mm); H: 17.25 in. (438 mm); D: 3.625 in. (92 mm)
Weight:	4.1 lb (1.9 kg)
Construction:	Metal enclosure
Operating Temperature:	32 - 122° F (0 - 50° C)
Operating Humidity:	10% to 90% relative humidity, non-condensing
Approvals:	UL; ETL listed (conforms to UL 294); certified to CSA-22.2 no. 205; CE

Ordering information

Model Number	Description
VAX-ELV-STR-2	ELEVATOR CONTROLLER; includes master controller board, one VAX-IO-EXP8PCB IO/floor board; one VAX-EXP-2D two-door board
VAX-ENCL-ST-1	EMPTY METAL ENCLOSURE; for use with expander boards
VAX-IO-EXP8PCB	8 FLOOR/IO EXPANDER; for elevator and I/O controller; no enclosure

Options	
VEVA-MC00N0-00	Vicon Access Control Server; for customized preinstallation of selected VAX software license; desktop model
VEAA-1U00N0-00	Vicon Access Control Server; for customized preinstallation of selected VAX software license; rack-mount model
VAX-PRS-STRIP	Interconnect strip; connects the Master Control Panel to door expansion board or I/O expansion board
VAX-EXP-2D	Two-door board; for supporting 2 additional elevator cabs

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Specifications subject to change without notice.
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