VertX™ V300 Output Control Sub-Controller

Overview

The VertX products provide a complete and fully featured hardware/firmware infrastructure for access control software host systems. The V300 Output Control Sub-Controller contains 12 latching Form-C relays, which can connect up to 12 devices controllable by simple contact closures, such as logic inputs for process equipment, HVAC and elevator control panels, CCTV switchers, etc. Loads exceeding 2 A @ 30 VDC should be controlled via interposing relays. The V300 features on-board flash memory, allowing program updates to be downloaded via the network. The V300 connects to the V1000 through a high speed RS-485 network. The V1000 communicates with the system host via industry standard TCP/IP protocol over 10/100 Mbps Ethernet or the Internet. This architecture minimizes the impact on corporate LANs, by using only one TCP/IP address for every 32 sub-controllers and by handling low-level transactions on the RS-485 network.

Features

- Off-normal status programmable for each input point (NO or NC alarm devices may be used).

- 12 latching Form-C relays, contacts rated at 2A @ 30VDC.

- Connects to the V1000 via RS-485.

- Receives and processes real time commands from the V1000.

- Reports all activity to the V1000.

- Allows complex input/output linking when used with the V1000 and V200.

- Attractive polycarbonate enclosure protects components from damage.

- All connections and indicators are fully identified by silk-screened nomenclature on the cover.

- UL 294 and UL 1076 recognized component.

Visual Indicators

Communications LED flashes green for "transmit to host" and red for "receive from host." Power LED indicates that sufficient DC voltage is being provided to the unit.

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Features

Easily Interfaced

- Quick-disconnect screw terminal connectors
- Rotary address switch (0-15)
- Latching form-C relay outputs for 12 relay controllable devices
- Inputs for:
  - 2 auxiliary input circuits
  - AC Fail Monitor*
  - Battery Fail Monitor*
  - Enclosure Tamper*

*Can be configured as a general purpose input

Local Processing

- Basic input/output linking for outputs 1 and 2, and auxiliary inputs 1 and 2

Specifications

Dimensions

5.8" W x 4.825" H x 1.275" D
(147.32 mm x 122.55 mm x 32.38 mm)

Weight: 13.6 oz (.38 kg)

Enclosure Material: UL94 Polycarbonate

Power Supply Requirements

60 mA @ 9-18 VDC
Recommended: supervised linear power supply with battery backup, input surge protection, and AC Fail and battery low contact outputs.

Separate supervised, DC supply with battery back-up recommended for relay activated devices.

Relay Rating

2 A @ 30 VDC maximum load

Operating Environment

Indoors, or customer-supplied NEMA-4 rated enclosure

Temperature

32° to 122° F (0° to 50° C)

Humidity

5% to 95% relative, non-condensing

Communication Ports

RS-485: two wire.

Certifications

UL 294 and UL 1076 Recognized Component for the US
CSA 205 for Canada
FCC Class A Verification
EMC for Canada, EU (CE Mark), Australia (C-Tick Mark), New Zealand, Japan
EN 50130-4 Access Control Systems Immunity for the EU (CE Mark)

Cable Distance

RS-485 – 4000 feet (1220 m) to host using Belden 3105A, 22 AWG twisted pair, shielded 100Ω cable

Output Circuits – 500 feet (150 m), 2-conductor, using ALPHA 1172C (22AWG) or Alpha 1897C (18AWG)
Minimum wire gauge depends on cable length and current requirements.