



FireSwitch108

Overview

The Altronix *FireSwitch108* is a managed NAC Power Extender. It interfaces with 12 or 24VDC Fire Alarm Control Panels (FACP) to provide Notification Appliance Circuit expansion support, for additional horns/strobes to allow ADA compliancy. It also provides auxiliary power to support system accessories. FireSwitch108 delivers electronically regulated and filtered 24VDC power to Class B or Class A NAC loop circuits. Additionally, a separate 1 amp auxiliary output for 4-wire smoke detectors is available. Alarm current can be divided between the eight (8) outputs for powering NAC devices. Outputs are rated at 2.5 amp max. and can be independently programmed for Steady, Temporal Code 3 or Strobe Synchronization. All outputs may be programmed for Input to Output Follower Mode (output will follow input. i.e. March Time Input, March Time Output). In non-alarm condition independent loop supervision

for Class A and/or Class B FACP NAC circuits is provided. In the event of a loop trouble, the FACP will be notified via the steered input (input 1 or input 2). In addition, there are common trouble output terminals [NC, C, NO] which are used to indicate general loop/system trouble. Two (2) FACP signaling outputs can be employed and directed to control supervision and power delivery to any combination of the eight (8) outputs. It provides a programmable LCD display interface, plus an ethernet port interface for remote programmability and monitoring.



Specifications

Input:

- Power input: 120VAC 60Hz, 4.8 amp.
- Two (2) Class A or two (2) Class B FACP inputs.
- Two (2) configurable inputs trigger via Class A or Class B FACP signal circuits (polarity reversal) or dry contacts.

Output:

- 24VDC voltage regulated power-limited NAC outputs.
- Output power:
10 amp max. total alarm current.
7 amp max. stand-by without battery back-up.
1 amp with battery back-up including dedicated Aux. output.

For Canadian applications Stand-by with battery backup is limited to 0.45 amp.

- 2.5 amp max current per output.
- One (1) auxiliary output rated at 1 amp (regulated, battery backed up).
0.45 amp for Canadian applications.
- Any NAC can be configured as an Aux. output with or without battery back-up (special application only).
When set as Aux. output, the output is not supervised.
- Programmable supervised indicating circuit outputs: Eight (8) Class B or Four (4) Class A, or any combination of Class A and Class B circuits.
- Thermal and short circuit protection with auto reset.

Battery Backup:

- Built-in charger for sealed lead acid or gel type batteries.
- Automatic switchover to stand-by battery when AC fails.
- Zero voltage drop when switching over to battery backup.

Supervision:

- AC fail supervision (form "C" contacts).
- Battery fail & presence supervision (form "C" contacts).
- Low power shutdown. Shuts down DC output terminals if battery voltage drops below 70-75% for 24V units. Prevents deep battery discharge.

Special Features:

- Programmable LCD display interface.
- EOL resistor value is programmable by output.
- Ethernet port interface for remote programmability and monitoring.
- 2-wire horn/strobe Sync mode allows audible notification appliances (horns) to be silenced while visual notification appliances (strobes) continue to operate.
- Sync protocols include Potter, Gentex®, System Sensor®, and CooperWheelock®.
- Temporal Code 3, Steady Mode, Input to Output Follower Mode (maintains synchronization of notification appliances circuit).
- Compatible with 12VDC or 24VDC fire panels.
- Output loop supervision directed to input 1 or input 2.
- Common trouble Dry N.C. output for reporting trouble to remote FACP.
- Ground fault detection - Ground fault maximum test impedance 1,000 ohm.
- Ground fault Dry N.O. output to report ground fault to remote FACP.
- CO Temporal Code 4 (NFPA720) include Gentex®, Potter and System Sensor® devices.

Electrical:

- Operating temperature: 0° C to 49° C ambient.
- BTU/Hr.: 122.84 BTU/Hr.
- System AC input VA requirement: 576VA.

Visual Indicators:

- LCD display - Indicates troubles and conditions of operation. Trouble Condition Memory facilitates quick identification of an intermittent/fault (short circuit, open or ground) which has previously occurred on one or more signaling circuit outputs. LCD displays which output the fault has occurred on.

Mechanical:

- Enclosure Dimensions (H x W x D approx.):
15.5" x 12" x 4.5" (393.7mm x 304.8mm x 114.3mm)
- Accommodates up to two (2)12VDC/12AH batteries.
- Product weight (approx.): 12.4 lbs. (5.62 kg).
- Shipping weight (approx.): 13.7 lbs. (6.21 kg).

Agency Approvals



UL Listed Control Units and Accessories for Fire Systems (UL 864).

NFPA 72 Compliant.



CAN/ULC-S527-99 Control units for Fire Alarm Systems.



CSFM - California State Fire Marshal Approved.

Enclosure Dimensions (H x W x D approximate):

15.5" x 12" x 4.5" (393.7mm x 304.8mm x 114.3mm)

