


PAD 3

Auxiliary Power Supply - Notification Appliance Extender

ENGINEER AND ARCHITECT SPECIFICATIONS

- 6 amps of Notification Appliance Power
- Advanced Microprocessor Control
- 24 VDC Output Voltage
- Four Power-Limited Notification Outputs
- Strobe Synchronization Option Built In
- Synchronized ANSI Temporal Pattern
- Class 'A' Selectable
- Ground Fault Detection
- Battery Supervision
- 3 Amp Auxiliary Power Output
- Trouble Contact for Monitoring
- Multiple Module Mounting in System 3 Enclosures
- Multiple Modules Share Battery Set
-  UL, ULC Listed, CSFM, NYMEA and FM Approved



Introduction

The Model PAD-3 (PAD-3C for Canada) is a notification appliance circuit expander with a built-in auxiliary power output. It is designed for use with Siemens Building Technologies, Fire Safety Division fire alarm control panels. This power source is designed to provide the extra power required in buildings conforming to the Americans with Disabilities Act.

Features

The PAD-3 provides 6 amps of 24 VDC power for multiple uses. All 6 amps can be directed to 4 Notification Appliance Circuits (NAC s). Each is rated at 3 amps and is power limited. Either 1 or 2 inputs can control the four outputs. These outputs are compatible with all Fire Safety 24VDC notification appliances.

The PAD-3 can be configured so that the inputs can be programmed as steady outputs, ANSI temporal outputs, or synchronized strobe outputs. It can also be programmed so that one input will silence U-MHU-Series horn/strobe horns while the strobes remain on using one set of wires.

The PAD-3 also offers a 3 amp auxiliary output for driving other portions of your fire alarm system such as door holders. This 24VDC filtered output is power limited. When using this output, the total power available from the PAD-3 will not exceed 6 amps.

A trouble contact is provided for monitoring the PAD-3 with a fire alarm panel through the input. It also has a Form C dry contact for trouble monitoring. Therefore, the user has the option of connecting it to a conventional fire alarm panel's existing notification circuit, or controlling it with a TRI Series device on intelligent fire systems.

The PAD-3 offers battery supervision and management as is required of fire alarm system components. Ground faults are transmitted as are any other trouble conditions. Trouble conditions not only change the state of the trouble contact in the unit, but they also break the notification circuit input to create a trouble signal in the fire alarm control unit.

This product is packaged in its own sheet metal enclosure with enough space to house the 7 amp-hour battery set required for back-up. The enclosure comes in black or red. System 3 enclosures may also be used to house multiple PAD-3 modules in a single enclosure. Two modules are capable of sharing the same battery set when mounted in the same enclosure.

Options

One or both PAD-3 signal inputs control the notification outputs, depending on the specific configuration setup. Possible configurations for the PAD-3 are:

| For Option: | These Inputs: | Control These Outputs: | As: |
|-------------|---------------------|---|--|
| 1 | Input 1 | All Outputs | Class B Circuits |
| 2 | Input 1 Input 2* | All Outputs Silences horns on 1 | Class B Circuits |
| 3 | Input 1 Input 2 | Outputs 1 and 2 Outputs 3 and 4 | Class B Circuits Class B Circuits |
| 4 | Input 1 Input 2 | Output 1 Outputs 2, 3 and 4 | Class B Circuits Class B Circuits |
| 5 | Input 1 | Outputs 1-2, 3 and 4 | Class A Circuit Pairs |
| 6 | Input 1 Input 2* | Outputs 1-2, 3 and 4 Silences horns on 1 | Class A Circuit Pairs |
| 7 | Input 1 Input 2 | Outputs 1 and 2 Outputs 3 and 4 | Class A Circuit Pairs Class A Circuit Pairs |
| 8 | Input 1 Input 2 | Outputs 1-2 Outputs 3 and 4 | Class A Circuit Pairs Class B Circuits |

*When used with U-MHU-Series horn/strobe units

Supervision

The Model PAD-3 supervises a variety of functions including:

- Low AC power
- Low battery condition
- Earth ground fault
- Auxiliary output power limit condition
- EOL supervision trouble or power limited condition at an output

When a trouble condition occurs, the PAD-3 creates a trouble condition on the fire control signal circuits to which it is connected. It still maintains the ability to be activated by the fire control. In addition, the PAD-3 provides a Form 'C' trouble relay output as an alternative to using the notification circuit trouble.

Electrical Specifications

AC Input: 120VAC @ 2.5 amps
 Output: 24VDC @ 6 amps
 Auxiliary Power Circuit: 1
 Notification Circuits: 4
 Output Configuration: 2 Class A or 4 Class B or
 1 Class A & 2 Class B

Amps per Output

Circuit: 3.0

Notification Circuit

Outputs: 24 VDC at 3.0 amps each,
 24K ohm EOL resistor
 required on each Class
 B circuit

No. of Inputs: 2

Input Configuration: 2 Class B or 2 Class A

Input Voltage Range: 9-32VDC

Maximum Input Current: 0.006 Amps

Battery Charging

Capacity: 15.0 A.H

Trouble contact rating: 2.5A @250 VAC, 30 VDC

Ambient Temperature: 32°F to 120°F

Mechanical Specifications

Single Module Enclosure Model EN-PAD

Dimensions: 12"W x 16"H x 3"D

Color: Black

Indicator Lights

AC Power On: Green

Battery Trouble: Yellow

Ground Fault: Yellow

Auxiliary Trouble: Yellow

Output 1 Trouble: Yellow

Output 2 Trouble: Yellow

Ordering Information

| Model | Description | Part Number |
|----------|-------------------------------------|-------------|
| PAD-3 | Aux. power supply w/black enclosure | 599-699189 |
| PAD-3R | Aux. power supply w/red enclosure | 599-699190 |
| PAD-3-MB | Aux. power supply - main board only | 500-699080 |
| EN-PAD | Black enclosure for PAD-3 | 310-099073 |
| EN-PADR | Red enclosure for PAD-3 | 310-099150 |