



**ALARM SAF**

## **BEACON Power Management**

INTEGRATING FIRE AND ACCESS

### **BN4-003-APD8F-UL 12/24 VDC, 4 Amp, 8 Output Fire/Access Power Management System**



**12/24 VDC, 4 Amp** regulated power supply with advanced power distribution module designed to manage power in access control and fire systems for full integration of life-safety building systems.

**Unique and versatile**, this off-line switching power supply features supervised outputs, broad fault detection and reporting, FACP egress control, interface to FACP addressable modules, battery presence supervision and continuous monitoring of internal system and battery charging operations. The system also provides 8 relay controlled, individually programmable, fuse protected outputs.

**Applications include** Fire Alarm Interface (FAI) for emergency egress, elevator recall and alarm monitoring, power for access control systems, FACP, auxiliary devices and door electronics and mag lock control.

**UL Listed** to the latest releases of UL 1481, UL 294. Optional system accessory modules available.

#### **AGENCY LISTINGS**

- UL1481
- UL294

#### **CODE COMPLIANCE**

- NFPA 72
- NFPA 731
- CSFM
- NY MEA
- FCC Part 15, subpart B, class A

#### **GENERAL SYSTEM FEATURES**

- 12/24 VDC, user selectable
- Multiple power supply outputs individually fused and supervised
- 8 individually programmable power distribution outputs, fuse protected
- High surge current capability
- Continuous monitoring of:
  - Internal System Operation
  - Battery Charging System
- Short circuit protection
- Thermal protection
- Dual rate controlled current battery charging
- Solid state battery transfer
- Visual fault & status indication
- Relay fault output
- Reverse polarity protection
- Minimal current draw in standby mode
- Surge current available for initial activation of:
  - Magnetic locks
  - Smoke dampers
  - Door holders
- Battery presence supervision or optional battery presence disconnect
- Zero voltage drop on battery transfer
- Instant switch over to battery standby
- Interface to FACP addressable modules through either:
  - Voltage output
  - Relay output
  - Open collector output
- Limited lifetime warranty

#### **POWER DISTRIBUTION FEATURES**

- 8 Individually fuse protected advanced outputs
  - Independently programmable
  - Relay Controlled
- Latching or non-Latching Fire Alarm Interface (FAI)
- Visual Status Indication

#### **INSTALLATION / SERVICE FEATURES:**

- Removable terminal strips
- Connector for primary AC input allows for safe disconnect
- Automotive Blade Fuses for improved reliability
- Tamper switch included

# BN4-003-APD8F-UL 12/24 VDC, 4 Amp, 8 Output Fire/Access Power Management System

## POWER SUPPLY SPECIFICATIONS

### Input specifications:

- Input voltage: 120 VAC or 230 VAC
- Input current: 1 A maximum
- Input voltage frequency: 60 Hz

### Output specifications:

- Output voltage: 12 or 24 VDC, user selectable
- Output current rating: 8 A @ 12 VDC or 4 A @ 24 VDC
- Ripple: < 1 % RMS
- Current draw in standby mode: < 60 mA
- Electronically regulated and filtered output

### Output Configurations:

- 1 constant DC output
- 1 FACP controlled output; energized on FAI
- 1 FACP controlled output; de-energized on FAI

### Fire Alarm Interface (FAI) Requirements:

- Trip voltage range: 9 to 33 VDC
- Current draw from FACP: 4 to 15 mA

### Temperature Ratings:

- Operating temperature: 0 C° to 49 C°
- Humidity: 93% @ 32 C°, indoor, dry
- BTU/hr: 71

### Battery Back-up Specifications:

- Battery charge chemistry: sealed lead acid rechargeable
- Maximum battery charge capacity: 36 Ah

### Fault Detection; Relay Contact Output:

- Low/No AC
- High/Low DC
- Blown fuse
- Battery presence

### Visual Indicators:

- System trouble: Yellow LED
- AC power: Green LED
- AC trouble: Yellow LED
- Constant DC output OK: Green LED
- FACP controlled output OK: Green LED
- FAI activated: Red LED
- Reversed battery: Yellow LED

## POWER DISTRIBUTION SPECIFICATIONS

- 8 outputs, individually programmable for:
  - Fail Safe
  - Fail Secure
  - Form "C" Relay Contact
  - Constant Voltage for Auxiliary devices
  - Fire Alarm Interface (FAI)
- 8 inputs, individually programmable for:
  - Negative or Open Collector Trip
  - Positive Trip
  - Isolated Trip
- Lock Output Current: 3 A per output, fuse protected
- Lock Input trip current: .03 A per input
- Lock Relay contacts rated @ 28 VDC, 12 A

### Visual status indicators:

- Input Activation: Red LED per input
- Control Voltage Presence: Green LED
- Fire Alarm Interface (FAI) status: Green LED

## MECHANICAL SPECIFICATIONS

### BN4-003-APD8F-UL:

- Vented cabinet: 11"L x 15"W x 4"D, 15 lbs

### BN4-004-APD8F-UL:

- Vented cabinet: 15"L x 18"W x 4"D, 21 lbs
- Battery space: two 7Ah or two 12 Ah batteries

## APPLICATIONS

### Fire System Applications:

- Fire alarm interface for emergency exit
- Smoke detectors (re-settable)
- Door holders
- Auxiliary equipment
- Elevator recall
- Smoke dampers
- Mass Notification Systems

### Access Control Applications:

- Access control system power
- Fire alarm interface for emergency exit
- Door strikes
- Mag locks
- Card readers
- Proximity readers

## ORDER INFO

ORDER NUMBER	MODEL NUMBER	DESCRIPTION
10009	BN4-003-APD8F-UL	12/24 VDC 4 A power supply 8 fused outputs key lockable cabinet
10010	BN4-004-APD8F-UL	12/24 VDC 4 A power supply 8 fused outputs large key lockable cabinet
10001	BN4-000-UL	12/24 VDC 4 A power supply replacement board
02828	APD8F-BD	8 fused outputs advanced power distribution replacement board

