

## **BEACON Power Management**

INTEGRATING FIRE AND ACCESS

# BN48-013-CMB40-UL 24 VDC, 8 Amp/12 VDC, 8 Amp 16-Reader, 16-Lock & 8 Auxiliary Outputs Dual Fire/Access Power Management System



Dual Access Control Power Management System designed to supply regulated and filtered main, standby or auxiliary power to access system panels, door controllers, readers, ingress/egress security components, locking devices and auxiliary components. It will fully support up to 16 access controlled door locations.

The system provides two independent off-line switching power supplies; one 12 VDC, 8 Amp and one 24 VDC, 8 Amp. Both power supplies feature supervised outputs, broad fault detection and reporting and life safety egress control through connection to FACP. The system also provides 40 class two, power limited outputs:

- 16 lock outputs, configurable for fail-safe/fail-secure operation and individually selectable for 12 or 24 VDC and Fire Alarm Interface for emergency egress conditions
- 24 reader or auxiliary component outputs individually selectable for 12 or 24 VDC and Fire Alarm Interface for emergency egress conditions.

The versatile, modular design and internal plug-in connectors help to reduce installation and service time

#### **CODE COMPLIANCE**

- NFPA 72
- NFPA 731
- CSFM
- NY MEA
- NEC Article 725, Class 2 Power Limiting
- FCC Part 15, subpart B, class A

#### GENERAL SYSTEM FEATURES

- Two Independent Power Supply Voltages
- Multiple power supply outputs individually fused and supervised
- 40 Individually selectable, Class 2, power limited outputs
- 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
- Continuous monitoring of:
  - Internal System Operation
  - Battery Charging System
- 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
- Battery presence supervision or Optional battery presence disconnect
- Limited lifetime warranty

#### **POWER DISTRIBUTION FEATURES**

- 40 Individually voltage selectable, Class 2, power limited outputs
  - 16 configurable locks
  - 24 reader or auxiliary component outputs
- Easily programmed with removable jumpers
- Visual Status Indicators

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

- Removable terminal strips
- Plug-in Connectors for primary AC input and power distrubution allows for safe and easy connect/disconnect
- Tamper Switch Included

#### BN48-013-CMB40-UL

### **Dual Fire/Access Power Management System** 16-Reader, 16-Lock and 8 Auxiliary Outputs

#### POWER SUPPLY SPECIFICATIONS

NOTE: Dual system provides two independent power supplies, with the following specifications:

#### **Power Supply #1 Specifications**

- Input current 1 A maximum
- Output current rating 12 VDC, 8 A
- BTU/hr 71

#### Power Supply #2 Specifications

- Input current 2.1 A maximum
- Output current rating 24 VDC, 8 A
- BTU/hr 128

#### Common Specifications Input specifications:

- Input voltage: 120 VAC or 230 VAC
- Input voltage frequency: 60 Hz

#### **Output specifications:**

- Ripple: < 1 % RMS
- Current draw in standby mode: < 60 mA</li>
- 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

#### **Battery Charger Specifications:**

- Maximum battery charge capacity: 36 Ah
- Battery short circuit protection
- Instant switch over to battery
- Optional Battery Presence Detection

#### **Fault Detection:**

- Relay Contact Output:
  - Low/No AC - High/Low DC - Blown fuse
    - Battery presence

#### **Visual Indicators:**

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

#### POWER DISTRIBUTION SPECIFICATIONS

#### CMB8 Modules (4 per system) = 32 total outputs

- 8 Class 2, power limited outputs per module:
  - 4 lock outputs, Individually selectable for: 12 or 24 VDC, Enabled or disabled on FA, Continuous output, Output control via dry contact, open collector or voltage application
  - 4 reader outputs, Individually selectable for: 12 or 24 VDC, Enabled or disabled on FAI, Continuous output
- Output current: 1.6 A per output, PTC protected

#### Visual Status Indicators:

- Buss 1 Voltage Present: Green LED
- Buss 2 Voltage Present: Green LED
- FAI activated: Red LED
- Relay 1, 2, 3, 4 Activated: Green LED

#### MB8 Modules (1 per system) = 8 total outputs

- 8 Class 2, power limited outputs, Individually selectable for: 12 or 24 VDC, Enabled or disabled on FAI, Continuous output
- Output current: 1.6 A per output, PTC protected

#### **Visual Status Indicators:**

- Buss 1 Voltage Present: Green LED
- Buss 2 Voltage Present: Green LED
- FAI activated: Red LED

#### **MECHANICAL SPECIFICATIONS**

- Cabinet Size: 18"W" x 28"W x 5"D
- Cabinet Material: 16 Gauge painted steel
- Cabinet Weight: 40 lbs (approx.)
- Cabinet Features:
  - Key locking door with integral tamper switch
  - Removable hinged door
  - Concentric knockouts
  - Removable back plate
  - Battery space: 18"W x 6.5"H x 5" D

#### APPLICATIONS

- Access control system power for all major access control systems
- Fire alarm interface for emergency exit
- Door strikes
- All card/proximity readers
- Door holders
- Elevator recall
- Mass Notification Systems

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- Mag locks
- Smoke detectors (re-settable)
- Auxiliary equipment
- Smoke dampers

| ORDER INFO      |                   |   |
|-----------------|-------------------|---|
| ORDER<br>NUMBER | MODEL<br>NUMBER   | DESCRIPTION   |
| 10075           | BN48-013-CMB40-UL | 12 & 24 VDC<br>8/8 A power supply<br>40 power limited outputs<br>key lockable cabinet |
| 10025           | BN8-000-UL        | 12/24 VDC<br>8 A power supply<br>replacement board                                    |
| 10001           | BN4-000-UL        | 12/24 VDC<br>4 A power supply<br>replacement board                                    |
| 10069           | CMB8              | 4 relay controlled and 4 selectable outputs, Multi-Buss power distribution board      |
| 10067           | MB8               | 8 outputs, Multi-Buss<br>power distribution board                                     |

