



ALARM SAF

BEACON Power Management

INTEGRATING FIRE AND ACCESS

BN48-013-CMB40-UL

Access Control Power

Supply/Battery Charger System

16-Reader, 16-Lock & 8 Auxiliary Outputs



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

The system includes power supply and power distribution modules that have been tested and listed to the following UL/ANSI standards: UL 1481 and UL 294.

AGENCY LISTINGS

- UL1481
- UL294

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 distribution allows for safe and easy connect/disconnect
- Tamper Switch Included

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Access Control Power Supply/Battery Charger 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
- 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
 - Blown fuse
 - High/Low DC
 - 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
- Mag locks
- Smoke detectors (re-settable)
- Auxiliary equipment
- Smoke dampers

ORDER INFO

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



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