SIEMENS

System 3[™] Battery Modules

Models BC-35 and BE-35

ARCHITECT AND ENGINEER SPECIFICATIONS

- Automatic operation
- Light-emitting diode (LED) Trouble-event indicator
- For lead-acid or sealed-nickel cadmium batteries
- Battery-circuit supervised
- System transfer from main-power supply to battery-mode operation
- ®UL 864 9th Edition Listed and ®ULC Listed; FM, CSFM, NYCFD and City of Chicago Approved



Product Overview

BE-35

(Battery Extender)

The System 3 Battery Charger / Transfer Module (Model BC-35) and the Battery Extender Module (Model BE-35) are each designed to supply automatic, 24 VDC emergency back-up power to the System 3 panel during main-power outages.

Both models are of solid-state circuitry. Model BC-35 contains a yellow *Trouble*-event LED indicator. Under *Normal* conditions, the System 3 panel is powered directly from the main power supply. When the system is equipped with emergency power, the (calcium grid) lead-acid or nickel-cadmium batteries are maintained at full charge through operation of either Model BC-35 or the combination Models BC-35 / BE-35 charging circuit.

In the event of an AC power failure, the System 3 panel is transferred to battery power. Model BC-35 provides the following circuit-function features:

- 1. Controls charging current and float-voltage values to maintain the batteries in optimal condition
- 2. Provides accurate AC-to-battery and battery-to-AC transfer
- Shuts off battery power-supply source when discharging battery reaches an unacceptable, deep discharge-value point
- 4. Supervises battery placement, along with high-and-low-battery voltage points
- 5. Withstands shorted battery-terminal connections, along with preventing the possibility of reversedbattery polarity
- 6. Charging path of Models BC-35, BE-35 are supervised for placement

The following chart details the battery-range capacities for the Models BC-35 and BE-35 combination:

Battery-Range Capacity	Used for Model{s}		
4.5 to 25 AH	BC-35		
26 to 55 AH	BC-35 and one [1] BE-35		
56 to 75 AH	BC-35 & two [2] BE-35 modules		
76 to 100 AH	BC-35 & three [3] BE-35 modules		

Specifications

Battery-charging capability is provided by a Siemens Industry, Inc. – Fire Safety Battery Charger / Transfer Module, Model BC-35, and - when necessary - with a Battery Extender Module, Model BE-35.

Models BC-35 and BE-35 must be system interconnected by harness assembly, and are designed for use with 24VDC notification appliances. Capability is provided to re-charge sealed-lead acid or sealed-nickel cadmium batteries to their full capacity.

Loss of main operating power to the system will automatically cause the system to transfer to battery power. After main power has been restored and the emergency batteries have been fully recharged, the system will subsequently continue to float charge the back-up batteries.

Models BC-35 and BE-35 are fitted with a fuse to protect against the battery from going past normal current and accidental reversal of polarity.

The battery shall be protected against overcharge and deep discharge. Failure of the charging system shall be identified by an indicator on the primary-charging module, Model BC-35 (and also by a system Trouble event, if the panel is functioning on AC power.)

Electrical Ratings

	46 mA	
Normal Operating Current	(for Model BC-35)	
(excluding charging current)	2 mA	
	(for Model BE-35)	

Temperature and Humidity Range

Models BC-35 and BE-35 are ®UL 864 9th Edition Listed for indoor dry locations within a temperature range of 120+/-3°F (49+/-2°C) to 32+/-3°F (0+/-2°C) and a relative humidity of 93+/-2% at a temperature of 90+/-3°F (32+/-2°C).

Details for Ordering

Model	Part Number	Description		
BC-35	500-884857	Battery Charger Transfer Module, two (2) spaces		
BE-35	500-884859	Battery Extender Module, one (1) space		

Wiring Diagram



	Part Number Model		odel	Maximum	Floor	
Battery Size	Alarm Current	Supervisory Current	Alarm Current	Supervisory Current	Current Avg. @ 24V	Current Average
6AH	2 A	0.15 A	N / A	N / A	0.8 A	0.1 A
10AH	4 A	0.31 A	4 A	0 124 A	0 8 A	014
TUAIT	10 A	0.28 A		477 0.1	0.1217	0.077
31AH	10 A	0.75 A	10 A	0.3 A	0.8 A	0.01 A
55AH	10 A	1.85 A	10 A	0.74 A	1.8 A	0.11 A

Notice: This marketing data sheet is not intended to be used for system design or installation purposes. For the most up-to-date information, refer to each product's installation instructions.

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