



July 7, 2000

DN-1109 • E-200

## PS Series Batteries

Section: Power Supplies

### GENERAL

Power-Sonic PS Series batteries provide secondary power for the whole series of NOTIFIER fire alarm control panels.

### FEATURES

- Provide secondary power for control panels.
- Gelled electrolyte.
- Sealed and maintenance-free.
- Overcharge protected.
- Extended shelf life.
- Easy handling with leakproof construction.
- Ruggedly constructed, high-impact case (ABS, polystyrene, or polypropylene depending on model).
- Long service life.
- Compact design.

### CAPACITY

Battery capacity, expressed in ampere-hours (AH), is the product of a discharge current and the length of time that the current is discharged. Batteries are rated according to their performance during 20 hours of discharge at a constant current.

The rated capacity of a battery is determined by subjecting it to a constant discharge current for 20 hours at 68°F (20°C). After 20 hours the voltage across the terminals is measured. The discharge current which causes a reading of 1.72 volts per cell (5.16 V on a 6 V battery and 10.32 V on a 12 V battery) is called the rated current. This current multiplied by 20 is the rated capacity of the battery.

### APPLICATIONS

Use the PS Series batteries to provide backup power for control panels. Select batteries based on current requirements for your system and the capacity of its charger. These batteries can be used over a temperature range of -76°F to +140°F (-60°C to +60°C).

### CONSTRUCTION

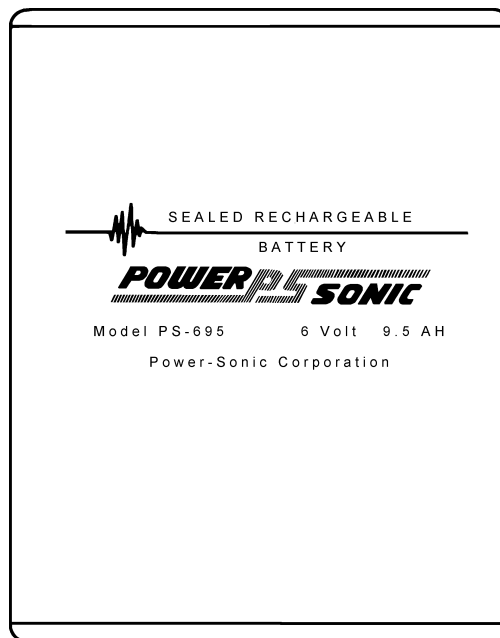
The sealed construction of the Power-Sonic battery allows trouble-free, safe operation in any position. There is no need to add electrolyte, as gases generated during overcharge are recombined in a unique "Oxygen Cycle." The battery is sealed, leakproof, and maintenance-free. The case is of high-impact materials with high resistance to chemicals and flammability.

### INSTALLATION

All panels have space reserved for batteries. See the appropriate panel installation manual for battery size restrictions. Typical inter-connection diagrams are shown in the literature accompanying each control panel.



**LISTED**  
MH14328 (S)



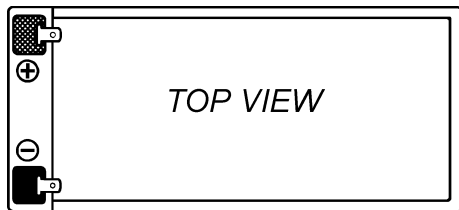
*The PS-695 Battery*

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **NOTIFIER**. Phone: (203) 484-7161 FAX: (203) 484-7118



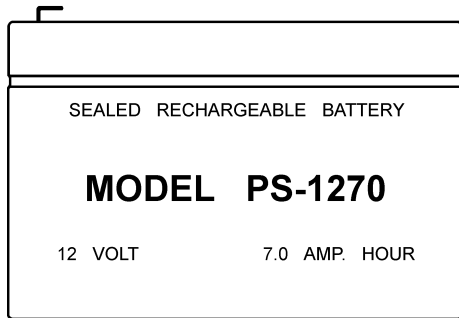
**NOTIFIER**® One Fire-Lite Place, Northford, Connecticut 06472

**ISO 9001**  
**CERTIFIED**  
ENGINEERING & MANUFACTURING



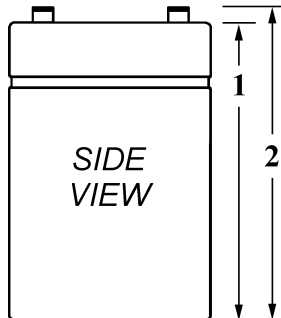
HEIGHT 1 BELOW  
3.70 ± 0.08 inches  
(94 ± 2 mm)

HEIGHT 2 BELOW  
3.86 ± 0.08 inches  
(96 ± 2 mm)

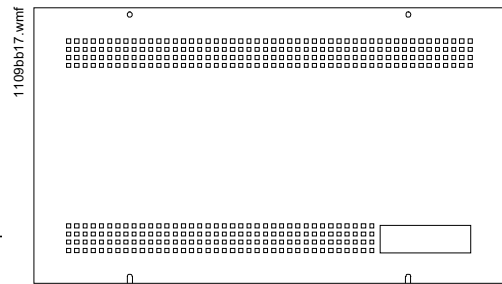


5.94 ± 0.04 inches  
(151 ± 1 mm)

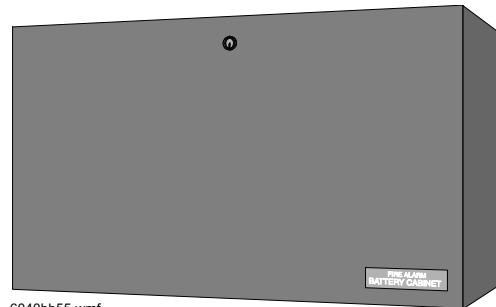
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2.56 ± 0.04 inches  
(65 ± 1 mm)



**BB-17: Optional Battery Backbox** ▲  
14-1/2" W x 8-1/4" H x 4-3/4" D  
(mm: 368.3 W x 209.55 H x 120.65 D)  
For remote mounting of two 12-volt  
PS-12180 batteries.



6040bb55.wmf

**BB-55: Optional Battery Backbox** ▶  
See CHG-120 data sheet for details.

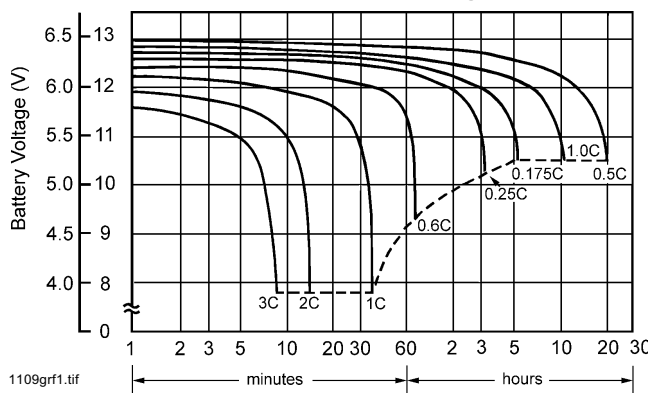
## ENGINEERING SPECIFICATIONS

The fire control panel shall be equipped with secondary power provided by gelled-electrolyte batteries. The batteries shall be maintenance-free and shall be capable of powering the system in a manner and for a length of time determined by the governing regulations and the authority having jurisdiction.

MODEL	Nominal Voltage V	Nominal Capacity @ 20 hr. rate A.H.	Discharge Current @ 20 hr. rate mA	DIMENSIONS									
				Width		Depth		Height		Height over terminal		Weight	
				in.	mm.	in.	mm.	in.	mm.	in.	mm.	lbs.	kg.
PS-695	6	9.5	475	4.26	108	2.75	70	5.54	141	5.54	141	4.9	2.2
PS-1250	12	5.0	250	3.54	90	2.76	70	4.02	102	4.21	107	4.1	1.9
PS-1270	12	7.0	325	5.94	151	2.56	65	3.70	94	3.86	98	5.7	2.6
PS-12120	12	12	600	5.94	151	3.86	98	3.70	94	3.86	98	8.8	4.0
PS-12180	12	18	875	7.13	181	2.99	76	6.57	167	6.57	167	12.8	5.8
PS-12250	12	25	1300	6.89	175	6.54	166	4.92	125	4.92	125	18.7	8.5
PS-12550	12	55	3000	10.25	260	6.60	168	8.20	208	9.45	240	39.7	18.0
PS-121000	12	100	5000	12.00	305	6.60	168	8.20	208	9.45	240	65.7	29.8

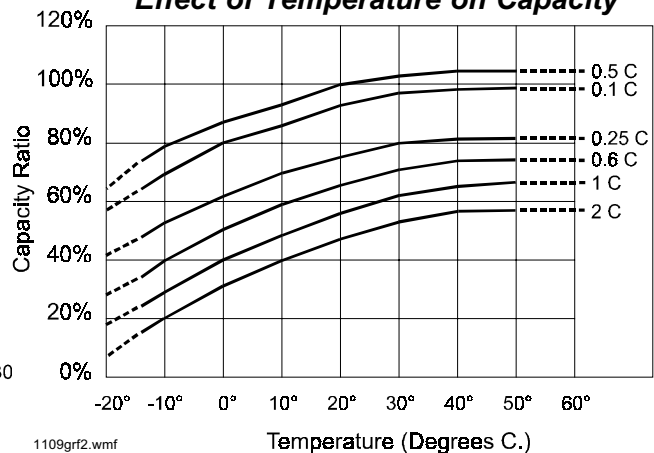
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**Characteristic Discharge Curves**



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**Effect of Temperature on Capacity**



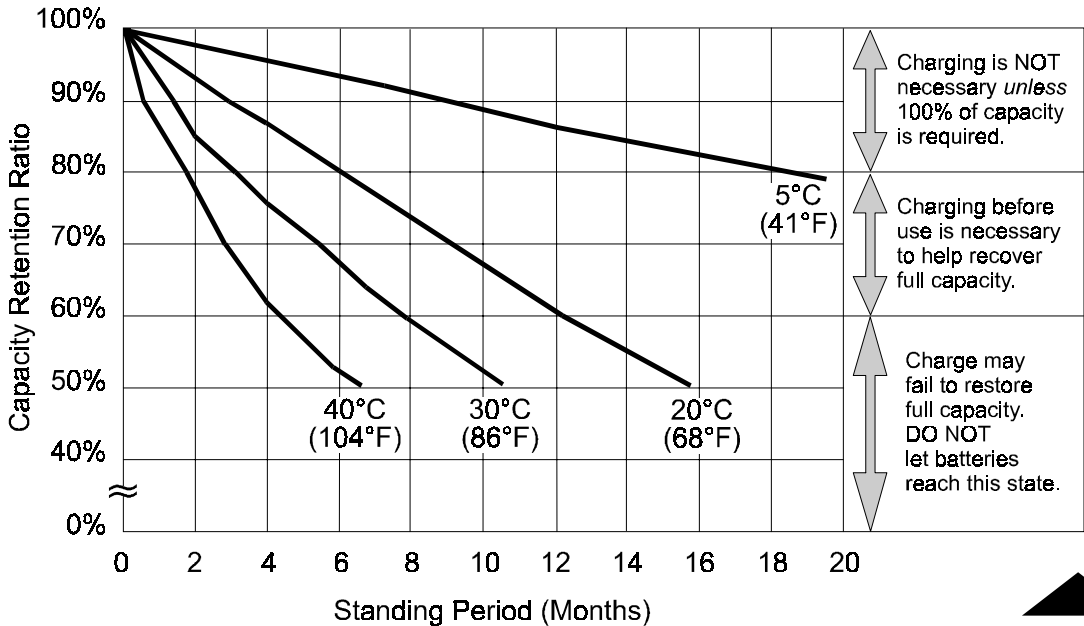
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## PS-121000 RECHARGEABLE BATTERY: APPLICATIONS AND CHARGING

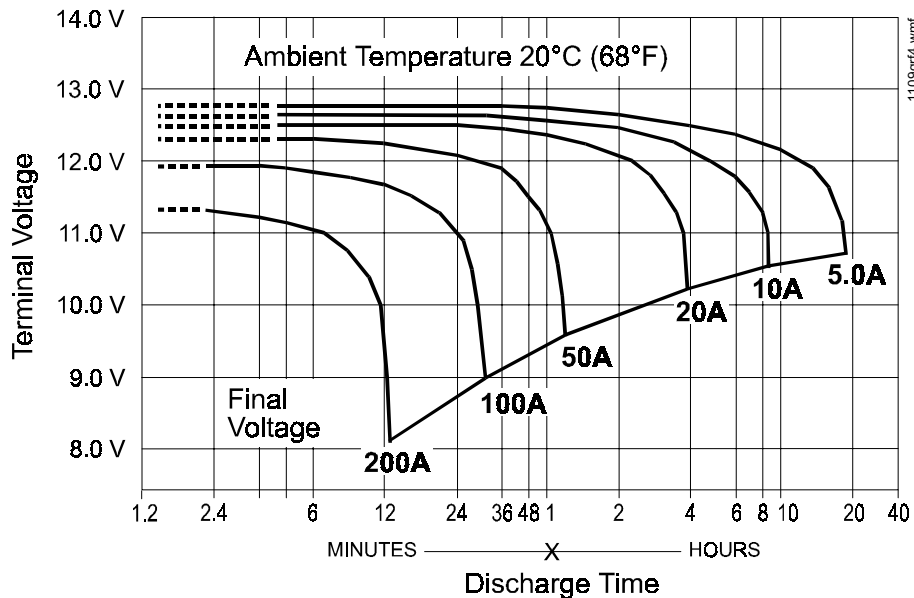
**CYCLE APPLICATIONS:** Limit initial current to 20A. Charge until battery voltage (under charge) reaches 14.40 to 14.70 volts at 68°F (20°C). Hold at 14.40 to 14.70 volts until current drops to approximately 1000 mA. Battery is fully charged under these conditions, and charger should either be disconnected or switched to “float” voltage.

**“FLOAT” OR “STAND-BY” SERVICE:** Hold battery across constant voltage source or 13.50 to 13.80 volts continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged position.

**NOTE:** Due to the self-discharge characteristics of this type of battery, it is imperative that the battery be charged after six to nine months of storage, otherwise permanent loss of capacity might result from sulfation.



**PS-121000  
Shelf-Life  
and Storage**



**PS-121000  
Discharge  
Characteristics**