

# **ES System Accessories**

Batteries and Battery Cabinets; 110 Ah Sealed Lead-Acid Batteries and Compatible Battery Cabinet (without charger)

# Features

# 2081-9279, 12 V, 110 Ah rechargeable sealed lead-acid battery features:

- Output terminals are high current posts; connecting hardware is included with battery cabinet
- UL, ULC fire alarm system requirements are satisfied when these batteries are used with a compatible charger and compatible battery cabinet
- Batteries have UL 924 recognized pressure relief valves

## A2081-9280 Battery Cabinet (ordered separately):

- Use when fire alarm control panel internal charger is capable of charging 110 Ah batteries (not applicable for ULC listed 4100ES systems)
- For compatible Autocall 4100ES systems, connection requires two wires to a A100-5128 Battery Distribution Terminal Block located in the cabinet
- Refer to data sheet *AC4081-0002* for 4100ES compatible battery cabinet *with* charger

## Description

2081-9279, 110 Ah rechargeable sealed-lead acid batteries provide reliable and repeatable discharge and recharge characteristics for use in fire alarm and other systems applications. For use with Autocall fire alarm control panels with battery chargers capable of up to 110 Ah, mount these batteries in external battery cabinet A2081-9280, located close-nippled to the control panel.

# **Battery Details**

## Series Connections.

Connect two of these 12 V batteries in series to produce 24 V system voltage. Battery sets must be of identical voltage, model number, appearance, and approximately the same date of manufacture for proper operation.

### Disposal.

Battery chemicals and materials can be recycled. Refer to information shipped with the battery or on its case. Return to the battery manufacturer or to a similarly qualified battery processing facility for proper disposal.



Figure 1: 2081-9279 Batteries, 2 required for 24 VDC system (actual appearance may vary)



Figure 2: A2081-9280 Battery Cabinet

## Testing.

Battery capacity testing is recommended to be performed by using a sealed lead-acid battery tester designed to withdraw a minimum of battery charge. Testing is available through your local Autocall product supplier.

## Additional Information.

Refer to Installation Instructions 574-670AC for Battery Cabinet installation details. See 4100ES basic panel data sheets AC4100-0031 and *AC4100-0100* for additional power supply/battery charger information.

# **Compatible Autocall Battery Chargers**

Description*	SKU Reference
4100ES Standard System Power Supplies (SPS), or Enhanced Power Supply (EPS+)	A100-9xxx Series
4100ES Additional EPS+	A100-5311, A100-5313
4100ES Additional EPS	A100-5325, A100-5327



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# Specifications

## Table 1: A2081-9280 Battery Cabinet

Specification	Rating   26-1/2" W x 12" H x 12" D (673 mm x 305 mm x 305 mm)			
Dimensions				
Hardware Included	Terminals and cables for compatibility with 2081-9279 batteries			
Battery Protection	Internally mounted fuseholder with 80 A fuse, included			
Wiring Terminals	ng Terminals 14 AWG to 2 AWG (2 mm <sup>2</sup> to 32 mm <sup>2</sup> )			
Color	Red			
Weight	Cabinet = 49 lbs (22.2 kg)			
Total weightCabinet with two batteries = 213 lbs (97 kg)				

#### Table 2: 2081-9279 Battery Reference Information

Specification	Rating			
Dimensions (per battery)	11-3/16" W x 9" H x 10-1⁄2" D (284 mm x 230 mm x 267 mm)			
Capacity	110 Ah @ 20 hour discharge rate			
Discharge Voltage	12 V per battery, 2 required for 24 V system			
Connections	High currect terminal posts			
Weight	82 lbs (37 kg), per battery			
Total weight	Cabinet with two batteries = 213 lbs (97 kg)			

## 4100ES Wiring and A2081-9280 Battery Cabinet Detail Reference





Batteries and Battery Cabinets; 110 Ah Sealed Lead-Acid Batteries and Compatible Battery Cabinet (without

charger)

## Wiring Distance Chart

### Table 3: Wiring distances

Minimum Wire Size		Maximum Distance per Battery Discharge Current Range							
AWG	mm <sup>2</sup>	0-15 A	16-20 A	21-30 A	31-40 A	41-55 A	56-70 A	71-79 A	
14	2	26 ft (8 m)							
12	3	41 ft (12.5 m)	31 ft (9.5 m)						
10	5	66 ft (20 m)	50 ft (15 m)	33 ft (10)					
8	8	106 ft (32 m)	80 ft (24 m)	52 ft (15.8 m)	39 ft (11.9 m)				
5	13	168 ft (51 m)	126 ft (38 m)	83 ft (25 m)	63 ft (19 m)	45 ft (13.7 m)			
4	19	268 ft (81.7 m)	201 ft (61 m)	132 ft (40 m)	100 ft (30.5 m)	72 ft (22 m)	56 ft (17 m)		
2	32	426 ft (130 m)	320 ft (97.5 m)	211 ft (64 m)	160 ft (48.7 m)	115 ft (35 m)	89 ft (27 m)	80 ft (24 m)	

A2081-9280 Battery Cabinet, Additional Wiring Information:

1. Internal battery cabinet output fuse is 80 A for battery protection.

2. In-line battery fuse requirement: To protect the output conductors, install a line fuse rated properly to the load current in the battery plus (+) side of each output pair. Wire per applicable local code.

3. Battery output connects to multiple conductor terminal block for connections to other panels requiring external battery power.



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