

UL, CSFM Listed\*  
(2081-9280 Battery Cabinet)

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

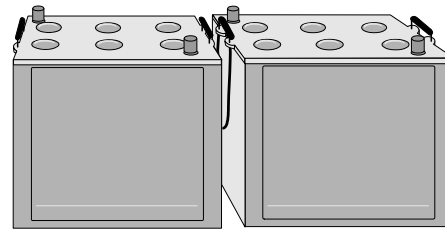
### Features

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

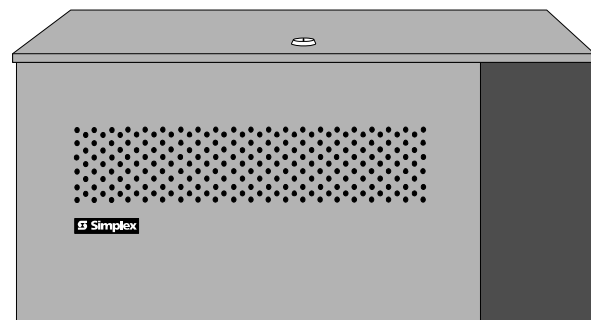
- Output terminals are high current posts; connecting hardware is included with battery cabinet
- UL, ULC, and FM fire alarm system requirements are satisfied when these batteries are used with a compatible charger and compatible battery cabinet
- Batteries have UL 924 recognized pressure relief valves

#### 2081-9280 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/4100U systems)
- For compatible Simplex® 4100ES/4100U systems, connection requires two wires to a 4100-5128 Battery Distribution Terminal Block located in the cabinet
- For compatible 4100 Legacy systems, wiring requires two wires for charging and two wires for battery connections
- Refer to data sheet S4081-0002 for 4100ES/4100U compatible battery cabinet *with* charger



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



2081-9280 Battery Cabinet

### 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 Simplex fire alarm control panels with battery chargers capable of up to 110 Ah, mount these batteries in external battery cabinet 2081-9280, located close-nipped 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.

\* Battery cabinet 2081-9280 has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7315-0026:144 for allowable values and/or conditions concerning material presented in this document. 2081-9280 was not ULC listed or approved by FM or MEA (NYC) as of document revision date. Additional listings may be applicable; contact your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Safety Products Westminster.

### Battery Details (Continued)

**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 Simplex product supplier.

**Additional Information.** Refer to Installation Instructions 574-670 for Battery Cabinet installation details. See 4100ES basic panel data sheets S4100-0031 and S4100-0100 for additional power supply/battery charger information.

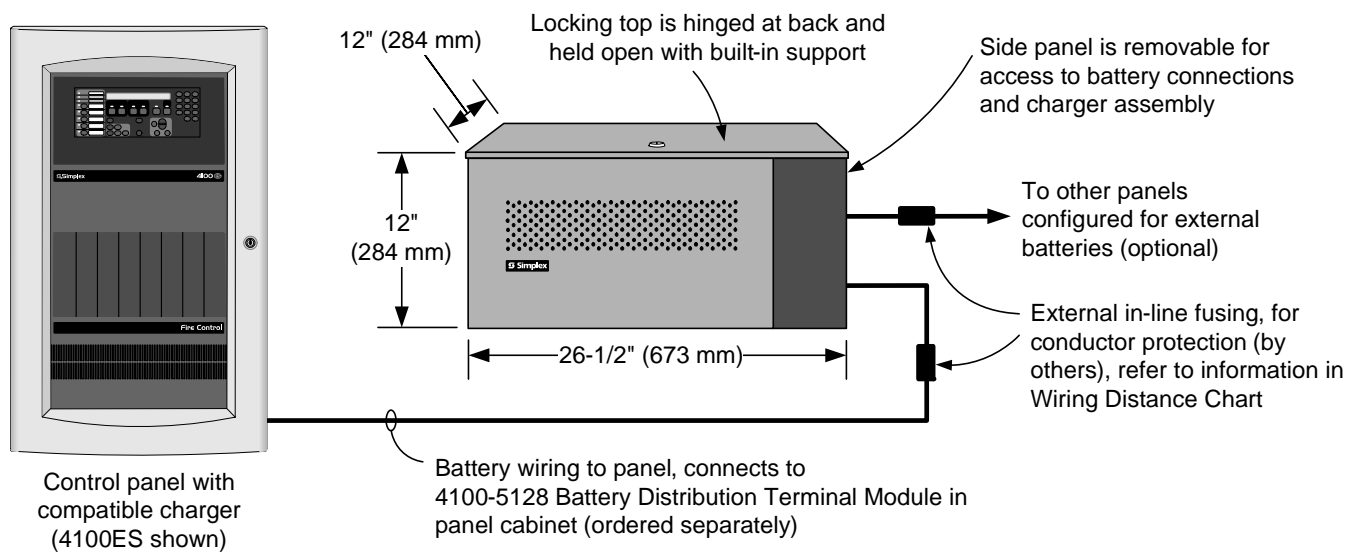
### Compatible Simplex Battery Chargers

| Description*   | Model Reference                 |
|--|---------------------------------|
| 4100ES Standard System Power Supplies (SPS), or Enhanced Power Supply (EPS+) | 4100-9xxx Series                |
| 4100ES Additional SPS  | 4100-5111, 4100-5112, 4100-5113 |
| 4100ES Additional EPS+   | 4100-5311, 4100-5313            |
| 4100ES Additional EPS  | 4100-5325, 4100-5327            |
| 4100ES Remote Power Supply (RPS)   | 4100-5125, 4100-5126, 4100-5127 |
| 4100ES TrueAlert Addressable Power Supply (TPS)                              | 4100-5120, 4100-5121, 4100-5122 |
| 4100 Legacy power supplies   | 4100-0104, 4100-0114, 4100-0124 |

## Specifications

| 2081-9280 Battery Cabinet |   | 2081-9279 Battery Reference Information |   |
|---------------------------|---|---|---|
| Dimensions                | 26-1/2" W x 12" H x 12" D<br>(673 mm x 305 mm x 305 mm)         | Dimensions<br>(per battery)             | 11-3/16" W x 9" H x 10-1/2" D<br>(284 mm x 230 mm x 267 mm) |
| Hardware Included         | Terminals and cables for compatibility with 2081-9279 batteries | Capacity                                | 110 Ah @ 20 hour discharge rate                             |
| Battery Protection        | Internally mounted fuseholder with 80 A fuse, included          | Discharge Voltage                       | 12 V per battery, 2 required for 24 V system                |
| Wiring Terminals          | 14 AWG to 2 AWG (2 mm <sup>2</sup> to 32 mm <sup>2</sup> )      | Connections                             | High current terminal posts                                 |
| Color                     | Red   | Weight                                  | 82 lbs (37 kg), per battery                                 |
| Weight                    | Cabinet = 49 lbs (22.2 kg)                                      |   |   |
| Total weight              | Cabinet with two batteries = 213 lbs (97 kg)                    |   |   |

## 4100ES/4100U Wiring and 2081-9280 Battery Cabinet Detail Reference



## Wiring Distance Chart

| 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)  |                |              |              |
| 6                 | 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) |

### 2081-9280 Battery Cabinet, Additional Wiring Information:

- Internal battery cabinet output fuse is 80 A for battery protection.
- 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.
- Battery output connects to multiple conductor terminal block for connections to other panels requiring external battery power.

TYCO, SIMPLEX, and the product names listed in this material are marks and/or registered marks. Unauthorized use is strictly prohibited.



Tyco Safety Products Westminister • Westminister, MA • 01441-0001 • USA

S2081-0012-5 6/2013

www.tycosafetyproducts-usa-wm.com

© 2013 Tyco Safety Products Westminister. All rights reserved. All specifications and other information shown were current as of document revision date and are subject to change without notice.