

***Product Manual
ED83134-30***

***026-369-100
Comcode 107300584
Issue 2
June 1996***

***Lucent Technologies
600-2000 Ampere
Switch and Fuse***

Notice:

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

Table of Contents

1 Introduction

| | |
|--|--------------|
| <i>General</i> | <i>1 - 1</i> |
| <i>Documentation References</i> | <i>1 - 1</i> |
| <i>Technical Support</i> | <i>1 - 2</i> |
| <i>USA, Canada, Puerto Rico, and the US Virgin Islands</i> | <i>1 - 2</i> |
| <i>Central and South America</i> | <i>1 - 2</i> |
| <i>Europe, Middle East, and Africa</i> | <i>1 - 2</i> |
| <i>Asia Pacific Region</i> | <i>1 - 2</i> |
| <i>Product Repair and Return</i> | <i>1 - 2</i> |
| <i>USA, Canada, Puerto Rico, and the US Virgin Islands</i> | <i>1 - 2</i> |
| <i>Central and South America</i> | <i>1 - 3</i> |
| <i>Europe, Middle East, and Africa</i> | <i>1 - 3</i> |
| <i>Asia Pacific Region</i> | <i>1 - 3</i> |
| <i>Customer Service</i> | <i>1 - 3</i> |

2 Product Description

| | |
|----------------------------|--------------|
| <i>General Description</i> | <i>2 - 1</i> |
| <i>Features</i> | <i>2 - 1</i> |

3 Installation and Operation

4 Product Warranty

List of Figures

| | |
|---|--------------|
| <i>Figure 1-1: ED83134-30 Switch and Fuse Panel Installed in H569-418 Bay</i> | <i>1 - 4</i> |
| <i>Figure 1-2: Rear View of ED83134-30 Switch and Fuse Panel</i> | <i>1 - 5</i> |

1 Introduction

General

This Product Manual describes the 600-2000 Ampere Switch and Fuse panel (ED83134-30). The ED83134-30, shown installed in the H569-418 equipment frame in Figure 1-1, serves as a multi-purpose switch and fuse. It can be used in three ways:

- as a high capacity distribution with “ON” and “OFF” positions.
- as a battery disconnect switch which allows for the safe removal of blown fuses.
- for off line equalize charging capability, switching from floating operation to equalize charging.

The ED83134-30 panel may be ordered with a switch rated at either 1200 or 2000 amperes. As many as six panels may be installed in a single H569-418 equipment frame.

This manual includes a general product description, basic features, and installation information.

Documentation References

This Lucent Technologies document (Select Code 026-369-100) is part of a set of documentation developed to assist engineering and installation personnel. Additional product information includes the following:

- ED83134-30 Switch and Fuse Assembly Drawings
- H569-418 Bay Drawings
- T-8320730 Wiring Drawings
- SD-8320701 Schematic Drawings

Technical Support

Technical support for Lucent Technologies equipment is available to customers around the world.

USA, Canada, Puerto Rico, and the US Virgin Islands

On a post-sale basis, **during the Product Warranty period**, our Technical Support telephone number 1-800-CAL RTAC (1-800-225-7822) provides coverage during normal business hours. Product Specialists are available to answer your technical questions and assist in troubleshooting problems. For out-of-hours EMERGENCIES, the 800 number will put you in touch with a Regional Technical Assistance Center Engineer via our 24 hour a day, 7 day per week Help Desk.

When Technical Support is required in **the Post-Warranty Period**, the service may be billable unless you hold an extended warranty or contractual agreement.

Central and South America

If you need product technical support, contact your local Field Support/Regional Technical Assistance Center or contact your sales representative who will be happy to discuss your specific needs.

Europe, Middle East, and Africa

If you need product technical support, contact your local Field Support/Regional Technical Assistance Center or contact your sales representative who will be happy to discuss your specific needs.

Asia Pacific Region

If you need product technical support, contact your local Field Support/Regional Technical Assistance Center or contact your sales representative who will be happy to discuss your specific needs.

Product Repair and Return

Repair and return service for Lucent Technologies equipment is available to customers around the world.

USA, Canada, Puerto Rico, and the US Virgin Islands

For information on returning of products for repair, customers may call 1-800-255-1402 for assistance.

***Central and
South America***

If you need to return a product for repair, your sales representative will be happy to discuss your individual situation.

***Europe, Middle
East, and Africa***

If you need to return a product for repair, your sales representative will be happy to discuss your individual situation.

***Asia Pacific
Region***

If you need to return a product for repair, your sales representative will be happy to discuss your individual situation.

***Customer
Service***

For customer service, any other product or service information, or for additional copies of this manual or other Lucent Technologies documents, call 1-800-THE-1PWR (1-800-843-1797). Specify the select code number for manuals, or drawing number for drawings. Contact your regional customer service organization or sales representative for information regarding spare parts.

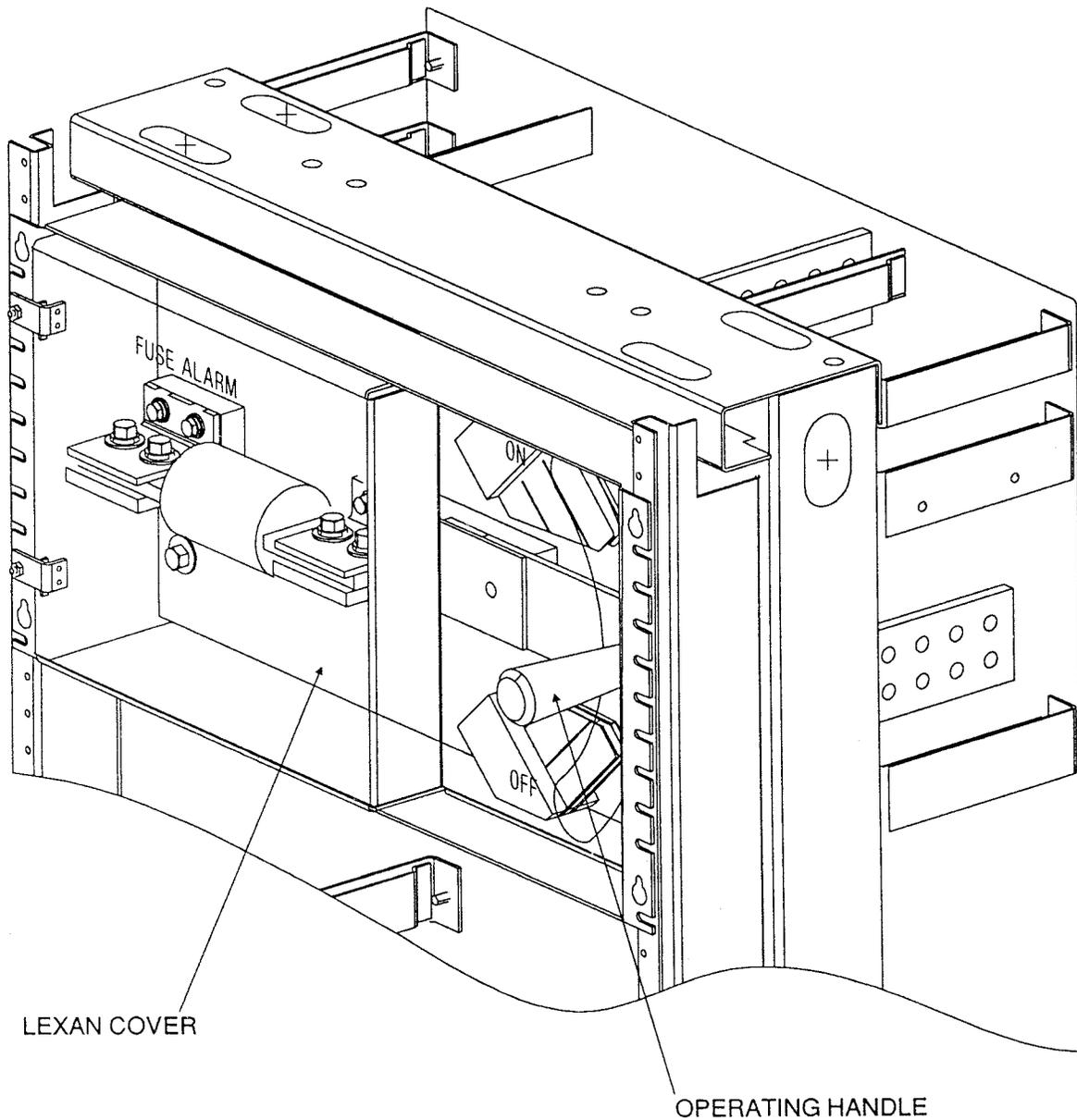


Figure 1-1: ED83134-30 Switch and Fuse Panel Installed in H569-418 Bay

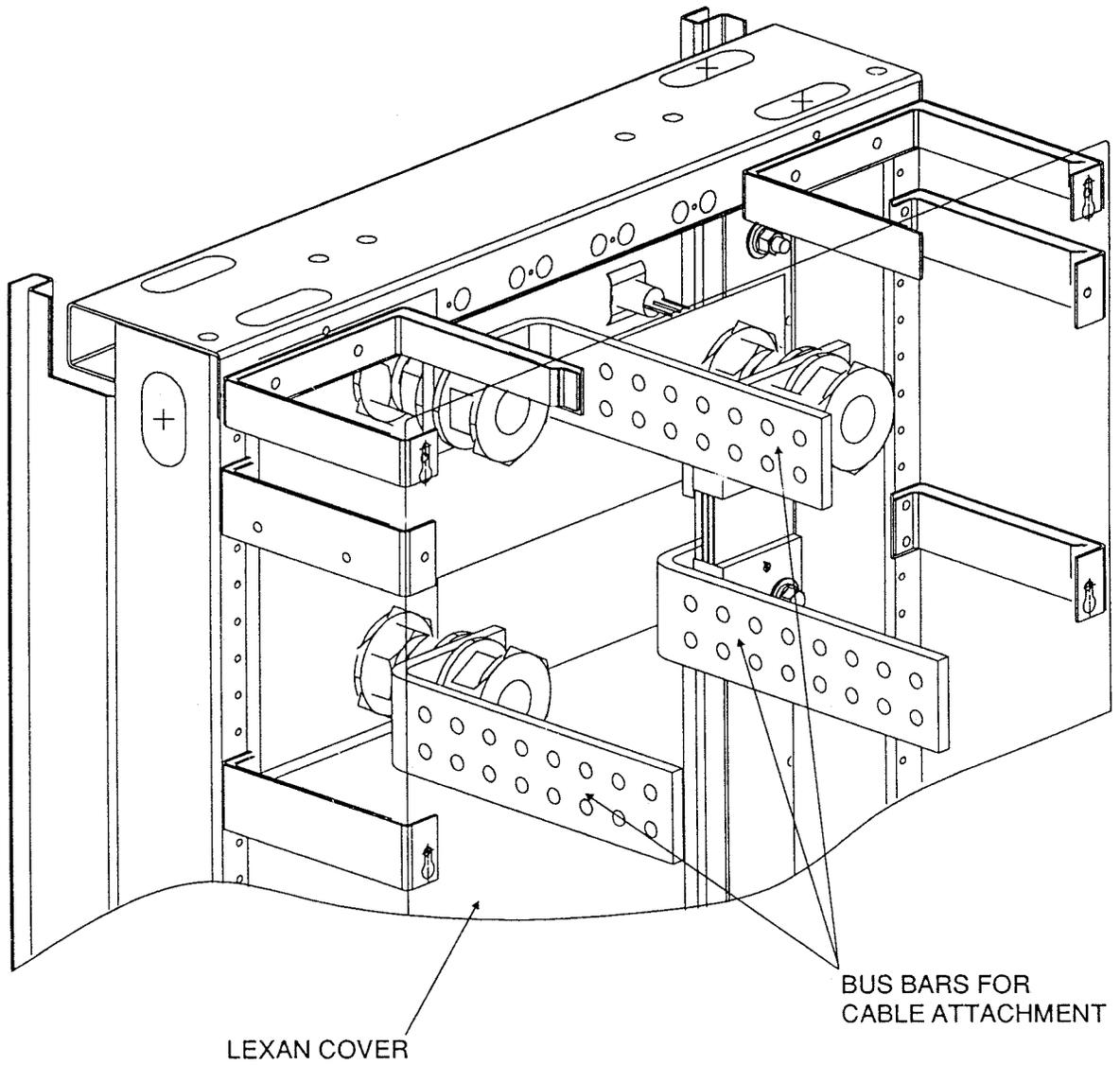


Figure 1-2: Rear View of ED83134-30 Switch and Fuse Panel

2 *Product Description*

General Description

The H569-418 Battery Switch Bay can come equipped with up to six ED83134-30 panels (600-2000 Ampere Switch and Fuse). These switch and fuse panels have the capacity to carry and switch up to 2000 amperes at up to 65 volts dc.

Each switch and fuse unit comes mounted in a 12-inch panel. A protective clear cover protects users from electrical contact. Rear access busbars allow cable connections.

You may order the ED83134-30 switch and fuse panel as either Group 1 or Group 2. Group 1 panels use fuses ranging from 600 to 1200 amperes, while Group 2 panels uses fuses ranging from 1000 to 2000 amperes. Group 1 comes equipped with a 1200 ampere shunt and Group 2 comes equipped with a 2000 ampere shunt for current monitoring.

Features

The following features are provided with this product:

- Distributes or switches $\pm 24\text{VDC}$ and $\pm 48\text{VDC}$
- Single pole, double throw switch
- Compact size allows six units to be mounted in one H569-418 bay
- Accommodates fuses ranging from 600 to 2000 amps
- Fuse operation generates visual alarm within the unit
- Remote access for monitoring alarm conditions through controller
- 1200 or 2000 ampere monitoring shunts
- Rear access for cabling
- Cable entry from top or bottom of cabinet
- Allows connection of cable sizes from 4/0 to 750MCM
- Protective front and rear clear covers
- Front access for fuse replacement

3 ***Installation and Operation***

Installation of the ED83134-30 panel is very simple. A set of #12-24x0.625 self tapping screws is provided for installation in an H569-418 Switch Bay. Figure 1-1 shows the ED83134-30 unit along with the H569-418 bay. Mount the panel onto the H569-418 bay as shown in the figure. Recommended torque setting for the self tapping screws is 35 in-lb. Use a power drill with an 8mm socket to thread the screw through the frame.

The switch may be used either for power distribution, disconnect, or off-line equalize. Raise the switch handle fully to select the “ON” position. Lower the switch handle fully to select the “OFF” or “Equalize” position, depending on the application selected.

Always move the switch handle firmly and seat the switch fully in the chosen position. Never leave the switch partially seated. Partial contact can cause excess heating between conducting parts.

The switch may operate stiffly; this is normal.

When the switch is used for the equalize function, there is no “OFF” position. Do not leave the switch handle in the center to simulate an “OFF” position.

Leave the lexan cover in place during normal operation because some sparking may occur when the switch is thrown. Remove the lexan cover to change the fuse. The handle may be left in the center position to interrupt the current path when changing fuses, but take care not to move the handle accidentally to either contact position while you are working. If possible, block the path of the switch with non-conductive material to prevent accidental contact.

4 ***Product Warranty***

A. Seller warrants to Customer only, that:

1. As of the date title to Products passes, Seller will have the right to sell, transfer, and assign such Products and the title conveyed by Seller shall be good;
2. Upon shipment, Seller's Manufactured Products will be free from defects in material and workmanship, and will conform to Seller's specifications or any other agreed-upon specification referenced in the order for such Product;
3. With respect to Vendor items, Seller, to the extent permitted, does hereby assign to Customer the warranties given to Seller by its vendor of such Vendor Items, such assignment to be effective upon Customer's acceptance of such Vendor Items. With respect to Vendor items recommended by Seller in its specifications for which the vendor's warranty cannot be assigned to Customer, or if assigned, less than Sixty (60) days remain of the vendor's warranty or warranty period when the Vendor's items are shipped to Customer or when Seller submits its notice of completion of installation if installed by Seller, Seller warrants that such Vendor's Items will be free from defects in material and workmanship on the date of shipment to Customer. In such an event, the applicable Warranty Period will be sixty (60) days.

B. The Warranty Period listed below is applicable to Seller's Manufactured Products furnished pursuant to this Agreement, unless otherwise stated:

WARRANTY PERIOD

| Product Type | New Product | Repaired Product or Part |
|--------------------------------------|-------------|--------------------------|
| Central Office Power Equipment | 24 Months | 6 Months |

*The Warranty Period for a repaired Product or part thereof is as listed or, in the case of Products under Warranty, is the period listed or the unexpired term of the new Product Warranty Period, whichever is longer.

**The Warranty Period for Products ordered for Use in Systems or equipment Manufactured by and furnished by Seller is that of the initial Systems or equipment.

C. If, under normal and proper use during the applicable Warranty Period, a defect or nonconformity is identified in a Product and Customer notifies Seller in writing of such defect or nonconformity promptly after Customer discovers such defect or nonconformity, and follows Seller's instructions regarding return of defective or nonconforming Products, Seller shall, at its option attempt first to repair or replace such Product without charge at its facility or, if not feasible, provide a refund or credit based on the original purchase price and installation charges if installed by Seller. Where Seller has elected to repair a Seller's Manufactured Product (other than Cable and Wire Products) which has been installed by Seller and Seller ascertains that the Product is not readily returnable for repair, Seller will repair the Product at Customer's site.

With respect to Cable and Wire Products manufactured by Seller which Seller elects to repair but which are not readily returnable for repair, whether or not installed by Seller, Seller at its option, may repair the cable and Wire Products at Customer's site.

D. If Seller has elected to repair or replace a defective Product, Customer shall have the option of removing and reinstalling or having Seller remove and reinstall the defective or nonconforming Product. The cost of the removal and the reinstallation shall be borne by Customer. With respect to Cable and Wire Products, Customer has the further

responsibility, at its expense, to make the Cable and Wire Products accessible for repair or replacement and to restore the site. Products returned for repair or replacement will be accepted by Seller only in accordance with its instructions and procedures for such returns. The transportation expense associated with returning such Product to Seller shall be borne by Customer. Seller shall pay the cost of transportation of the repair or replacing Product to the destination designated by Customer within the Territory.

- E. The defective or nonconforming Products or parts which are replaced shall become Seller's property.
- F. If Seller determines that a Product for which warranty service is claimed is not defective or nonconforming, Customer shall pay Seller all costs of handling, inspecting, testing, and transportation and, if applicable, traveling and related expenses.
- G. Seller makes no warranty with respect to defective conditions or nonconformities resulting from actions of anyone other than Seller or its subcontractors, caused by any of the following: modifications, misuse, neglect, accident, or abuse; improper wiring, repairing, splicing, alteration, installation, storage, or maintenance; use in a manner not in accordance with Seller's or vendor's specifications or operating instructions, or failure of Customer to apply previously applicable Seller modifications and corrections. In addition, Seller makes no warranty with respect to Products which have had their serial numbers or month and year of manufacture removed, altered, or with respect to expendable items, including, without limitation, fuses, light bulbs, motor brushes, and the like.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. CUSTOMER'S SOLE AND EXCLUSIVE REMEDY SHALL BE SELLER'S OBLIGATION TO REPAIR, REPLACE, CREDIT, OR REFUND AS SET FORTH ABOVE IN THIS WARRANTY.

© 1996 Lucent Technologies
All Rights Reserved
Printed in U.S.A.