



SLC[®] Series 5 Carrier System

AUG4() Battery Interface Unit — 5SPQ10P (AUG4) and 5SPQABNAAA (AUG4B)

This data sheet describes the AUG4() battery interface unit (BIU) [COMCODE 104032768 (AUG4) and 106924046 (AUG4B)] and is intended for the end-user of the unit. The AUG4() BIU is used in the J1C182BD power shelf. The AUG4() BIU serves as an interface between a set of five 336A1 rectifiers and two strings of 48 V batteries, and handles all DC power alarm interfaces from the shelf to the associated transmission equipment.

This data sheet is reissued to add information on the AUG4B BIU.

Figure 1 is a functional block diagram of the AUG4() battery interface unit, and Figure 2 shows the faceplate and option switch.

The AUG4() BIU performs the following functions.

- a. Senses the battery voltage during AC power failure, disconnects the load when the voltage has dropped to 42.5 volts, and prevents battery damage that can occur in deep discharge.
- b. Uses a set of four (two with AUG4B) internally mounted 30 A fuses to protect the power shelf from damage if accidentally shorted.
- c. Supplies measurement access to the battery's charging current through two sets of pin jacks. The measurement is taken with a hand-held voltmeter and the scaling factor is 1 mV per ampere of battery current.
- d. Monitors the operation of the battery disconnect relay and the two battery fuses.
- e. Indicates the service condition of the power shelf using three faceplate-mounted LED indicators.

- f. Provides power minor (PMN) and minor (MN) alarm outputs to connecting transmission equipment.
- g. AUG4B provides a switch controlled option to define AC rectifier failures as either MN or PMN alarms.

The following LED indicators and pin jack sets are located on the faceplate of the AUG4() battery interface unit.

NORMAL (Green LED): When lighted, this LED indicates that output bus voltage is normal, batteries are being charged, and all installed rectifiers are working normally and contributing to the load current.

BOD (Yellow LED): When lighted, this battery on discharge (BOD) LED indicates that the battery strings are being discharged. This condition signifies AC line failure, or that one or more rectifiers have internal component failures. The BOD state is defined as an output bus voltage reading of less than 51.5 V.

FAIL (Red LED): When lighted, this LED indicates an internal failure of the battery disconnect relay or its drive circuitry or a failure in either fuse.

BAT CURRENT 1/2 (Pin jack sets): Access for measurement of the battery's charging current through two sets of pin jacks. The measurement is taken using a hand-held voltmeter and the scaling factor is 1 mV per ampere of battery current.

The AUG4() battery interface unit supplies the following alarm outputs to associated transmission equipment.

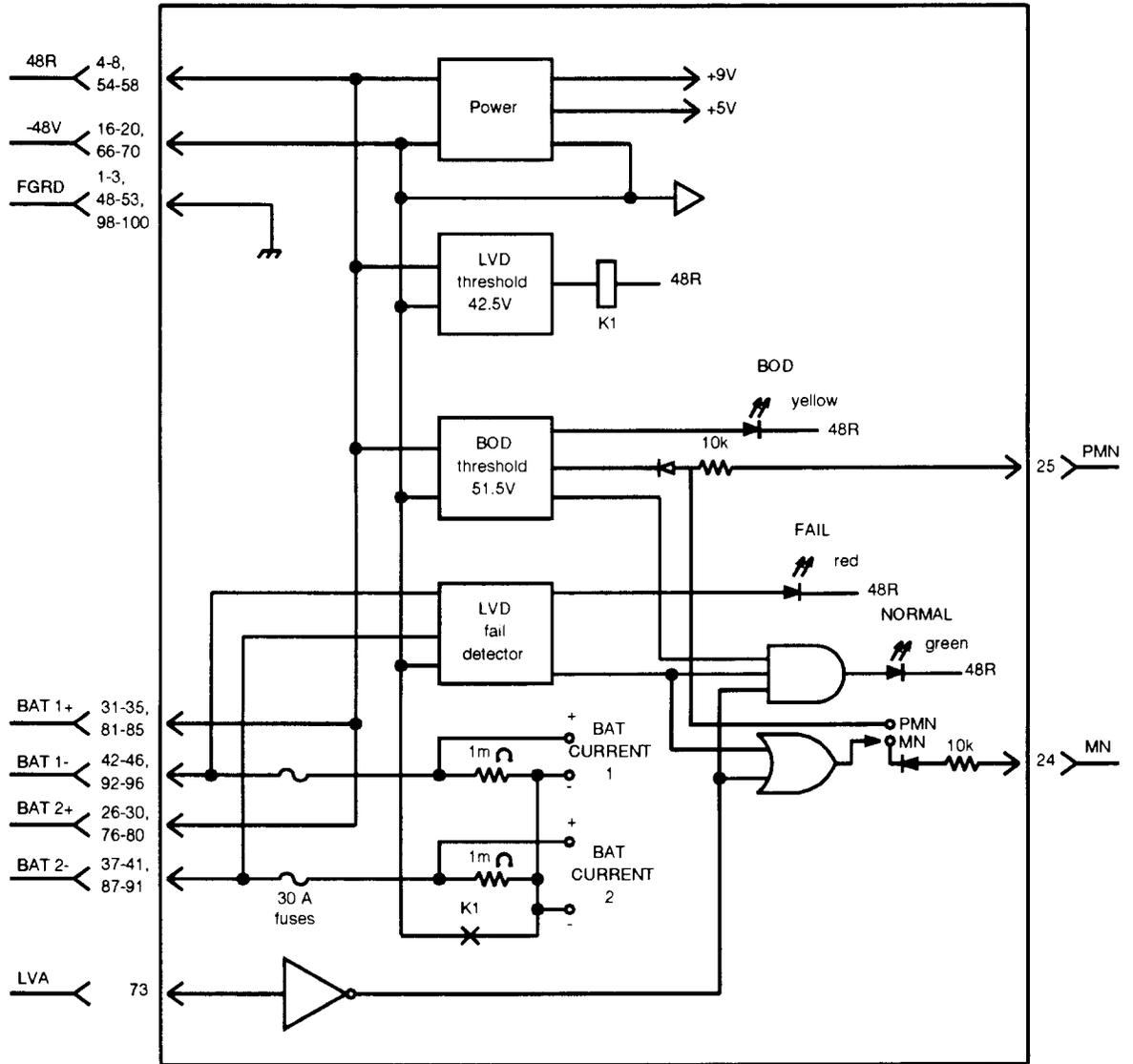
AUG4 — No Option Necessary; AUG4B — Option to MN Position (standard setting): Power minor alarm (PMN). A power minor alarm indicates that the batteries are on discharge, thus tracking the state of the BOD LED indicator.

Minor alarm (MN). A minor alarm indicates an AC power failure, rectifier internal circuit failure, or a failure in the AUG4() BIU battery disconnect relay or fusing.

AUG4B — Option Switch to PMN Position (optional setting): Power minor alarm (PMN). Alarm will be asserted for any of the following conditions:

- batteries on discharge
- AC power failure
- rectifier failure
- AUG4B failure

Minor alarm (MN). Alarm lead is dead for this option and has no responses.



pr 821159/01

Figure 1. AUG4B Battery Interface Unit Block Diagram (AUG4 Has Four 30A Fuses and Does Not Have MN/PMN Option Switch)

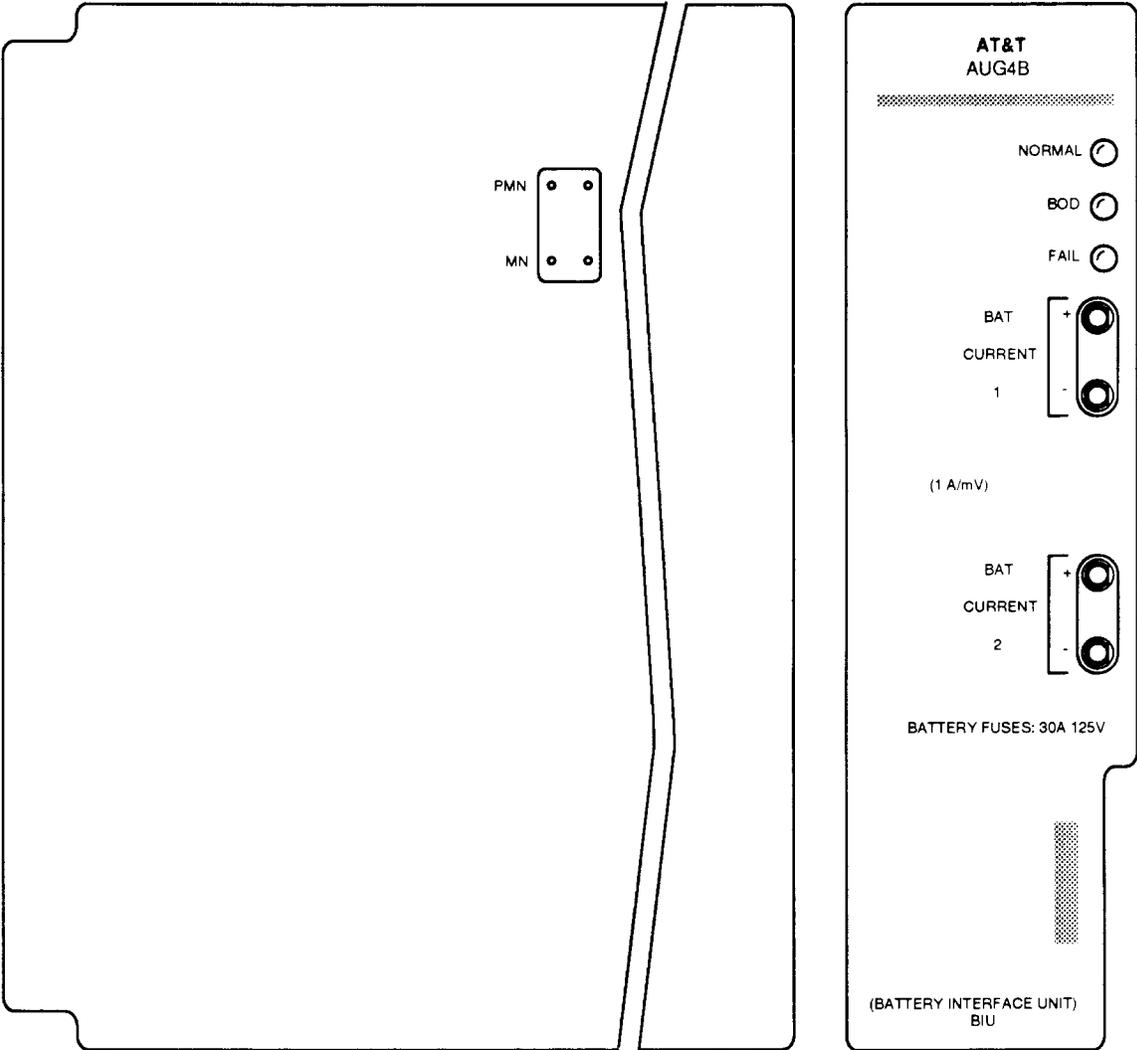


Fig 82-11R0201

Figure 2. AUG4B Battery Interface Unit Faceplate and (AUG4B) Option Switch Location

Follow local procedures for obtaining technical assistance. AT&T also provides in-hours or emergency out-of-hours help for the *SLC* Series 5 Carrier System. Call the AT&T Regional Technical Assistance Center at **1-800-225-RTAC**.

Additional copies of this document (AT&T 363-005-243) are available from the Customer Information Center — call 1-800-432-6600.

Comments about this document can be directed to:

AT&T
Document Development Organization
Attention: Publishing Services Department
2400 Reynolda Road
Winston-Salem, NC 27106

Copyright © 1993 AT&T
All Rights Reserved
Printed in U.S.A.