

AUA11C POWER CONVERTER UNIT — 5SCD4J2AXX

DATA SHEET

SLC[®] SERIES 5 CARRIER SYSTEM

The AUA11C PCU (power converter unit) (COMCODE 105728042) converts a battery supply of -42.5V DC to -60V DC to three +5V DC and one -5V DC sources, each at 2 Amps. When used in SLC Series 5 banks, the AUA11C PCU is installed in the digroup shelves and the facility shelves at both the COT (central office terminal) and the RT (remote terminal). The AUA11C may also be used with the SLC Series 5 FTTH (Fiber-To-The-Home) feature — for this application, the unit is located in the J1C182PB optical power shelf. The AUA11C PCU may be mixed with existing AUA11 and AUA11B PCUs.

Figure 1 is a functional block diagram of the unit, and Figure 2 shows the faceplate.

Voltage detection circuitry monitors the 5V buses and will raise an alarm under abnormal conditions — this alarm causes the FAIL LED to light and the alarm condition is transmitted to the BCU (bank control unit). As a fail-safe measure, the voltage detection and alarm circuitry operate from the -48V supply, and thus do not rely on any of the DC-DC converter outputs. Output short circuit protection is included in the DC-DC converters.

All 5V outputs on digroup shelves have their switching converters synchronized via a PLL (phase lock loop) which uses the 64 kHz reference from the TRU (transmit-receive unit). TABLE A lists the distribution of the converter outputs to the various SLC Series 5 and Fiber-To-The-Home plug-in units.

TABLE A DISTRIBUTION OF PCU OUTPUT
FACILITY SHELF PCUs
-5 All Protection (LIUs), CTU, DTU +5S LSUs, CTU, DTU, ADU, AIU +5R Protection LIUs (White) +5L Protection LIUs (Blue)
CHANNEL UNIT SHELF PCUs
-5 CUs, LIUs +5S CUs +5R CUs, TRUs (COT only) +5L OTU, LIUs, TRUs (RT only)
FTTH OPTICS POWER SHELF PCUs
+5 AYB1Bs -5 AYB1Bs

FAIL (Red LED): When lighted, this LED indicates that an overvoltage or undervoltage condition is detected on one of the DC-DC converters.

-48V and **GND** (Test Points): These test points are used to measure the -48V input to the PCU. This allows the craft to determine if the power is reaching the PCU as required for proper function of the detection circuitry and the FAIL LED.

Technical assistance for the SLC Series 5 Carrier System can be obtained by calling the Regional Technical Assistance Center at **1-800-225-RTAC**. This telephone number is staffed 24 hours per day.

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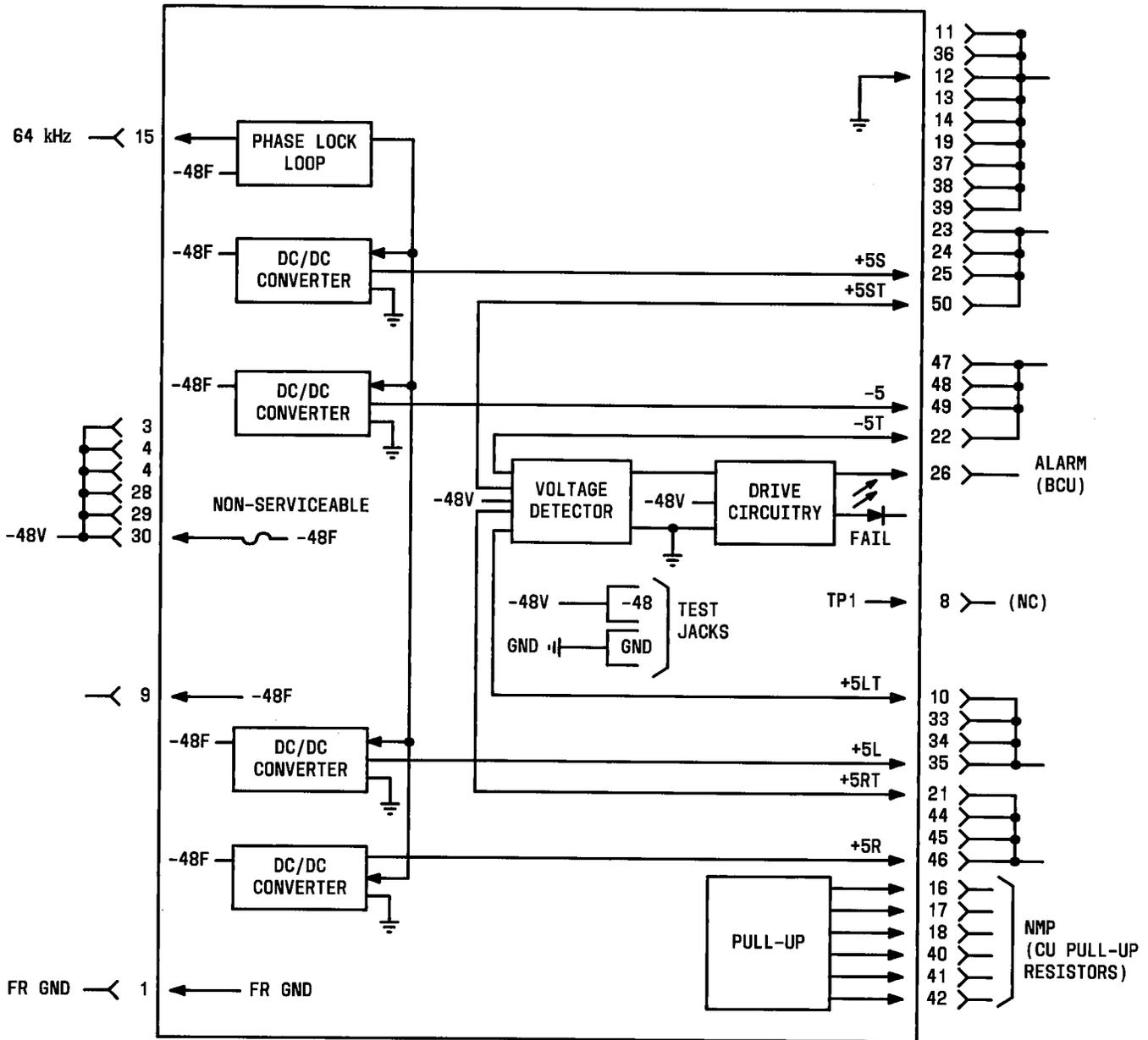


Figure 1—AUA11C block diagram

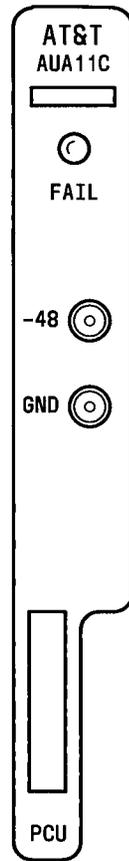


Figure 2—AUA11C faceplate

