

AUA24 FAN CONTROL UNIT — 5SCD500AXX

DATA SHEET

SLC[®] SERIES 5 CARRIER SYSTEM

The AUA24 FCU (fan control unit) (COMCODE 103840401) is used only in RT (remote terminal) applications. Two FCU plug-ins are required in each RT dual channel bank. The FCU controls the application of power to fans in a 2A Fan Unit mounted immediately above or below the dual channel bank. The FCU plug-ins are positioned to sense temperatures adjacent to PCUs (power converter units) in the dual channel bank.

This practice has been reissued to update to the new tolerances for the *turnon* and *turnoff* temperatures.

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

The FCU contains two thermal switches. A relay on the FCU selects one of these switches to control the fans. When the system is in normal operation (ac power), the thermal switch selected by the FCU relay has temperature setpoints (fans turn on at $120 \pm 12^{\circ}\text{F}$ and turn off at $75 \pm 10^{\circ}\text{F}$) chosen to provide maximum system reliability. When the system is in battery backup operation, the system PMN (power minor) alarm from the power shelf causes the FCU relay to operate. The FCU relay then selects a second thermal switch with setpoints (fans turn on at $155 \pm 11^{\circ}\text{F}$ and turn off at $135 \pm 9^{\circ}\text{F}$) chosen to maximize battery reserve time, while keeping the system within acceptable temperature limits.

When the air temperature adjacent to the PCU rises to the *turnon* setpoint of the selected thermal switch, the switch closes and grounds the coil of a relay in the 2A fan unit. The fan unit relay operates and applies power to the fans. When the air temperature falls to the *turnoff* setpoint of the thermal switch, the switch opens and the fan unit relay removes power from the fans.

FAN TEST: This faceplate-mounted pushbutton switch on the FCU provides for testing the corresponding 2A fan unit. Operation of the FAN TEST switch with the system normally powered bypasses the thermal switch on the FCU and causes the three fans in the fan unit to turn on. If any of the fans is malfunctioning, a red FAIL LED indicator on the front panel of the fan unit lights within 10 seconds. When the system is operating on batteries (no ac power), the fans should not turn on when the FAN TEST switch is operated.

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.

Published by
The AT&T Documentation Management Organization.

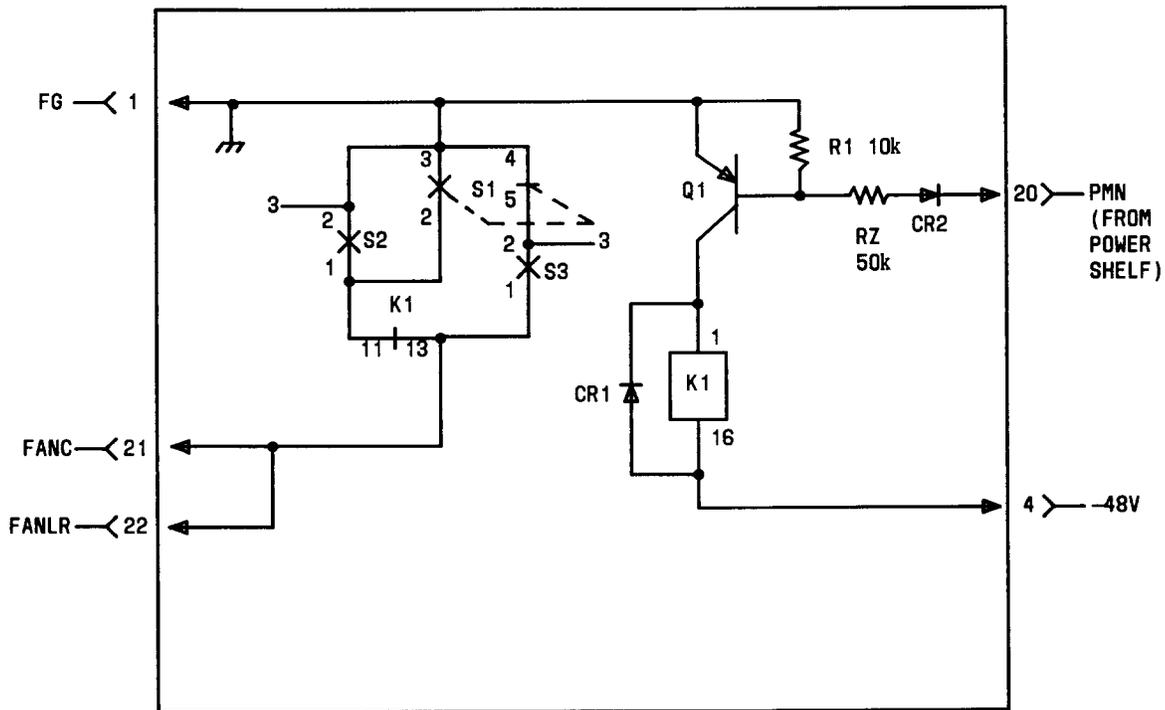


Figure 1—AUA24 Block Diagram



Figure 2—AUA24 Faceplate