

## AYK2 CIRCUIT PACK — 5SPQAABAXX DATA SHEET

### SLC<sup>®</sup> SERIES 5 CARRIER SYSTEM — 60 AMP POWER PLANT

The AYK2 circuit pack (COMCODE 105560296) is a part of the 60A power plant. It is used with the SLC Series 5 Carrier System 80E remote terminal cabinet and other enclosures. The AYK2 plugs into a KS-21479,L25 connector assembly (designated J2) located on the backplane assembly of the ED-83114-30 control and distribution panel. Together, the AYK1 (see AT&T 363-005-224) and AYK2 circuit packs function as the control circuitry for the 25-Ampere, 48-Volt off-line switched-mode rectifiers and battery strings in the 60A power plant. The 48-Volt power plant provides for a peak load capacity of 60 Amperes with an additional 20 Amperes required for battery recharge.

Figure 1 is a functional block diagram of the AYK2 circuit pack and Figure 2 shows the AYK2 mounted in an ED-83114-30 control and distribution panel.

When the battery bus voltage exceeds  $56.5 \pm 0.5$  Volts a selective high voltage shutdown signal is sent to each rectifier.

A remote start signal is automatically sent to all rectifiers upon receipt of a RFA (rectifier failed alert) signal. The remote start signal is held for 5 minutes. If the rectifiers again shutdown, no further attempt to restart is made.

When the bus voltage drops below  $51.5 \pm 0.5$  Volts, the battery on discharge circuit illuminates a yellow LED and provides an isolated contact closure as a PMN (power minor) alarm.

During an open battery test, with the rectifiers shut down and batteries on discharge, a test circuit inhibits operation of the battery on discharge alarm and the associated power minor alarm.

**BAT ON DISCHARGE** (Yellow LED): When lighted, this LED indicates that the bus voltage has dropped below  $51.5 \pm 0.5$  Volts.

When the AYK2 circuit pack is removed from the control and distribution panel, external control of the rectifiers is disrupted and an isolated contact closure is provided as a minor alarm. Front mounted circuit breakers provide the required circuit protection.

When mounted in the control and distribution panel, the BAT ON DISCHARGE LED is visible through a hole in the panel front cover (Figure 2). Access to the circuit breakers is attained by removal of the panel front cover.

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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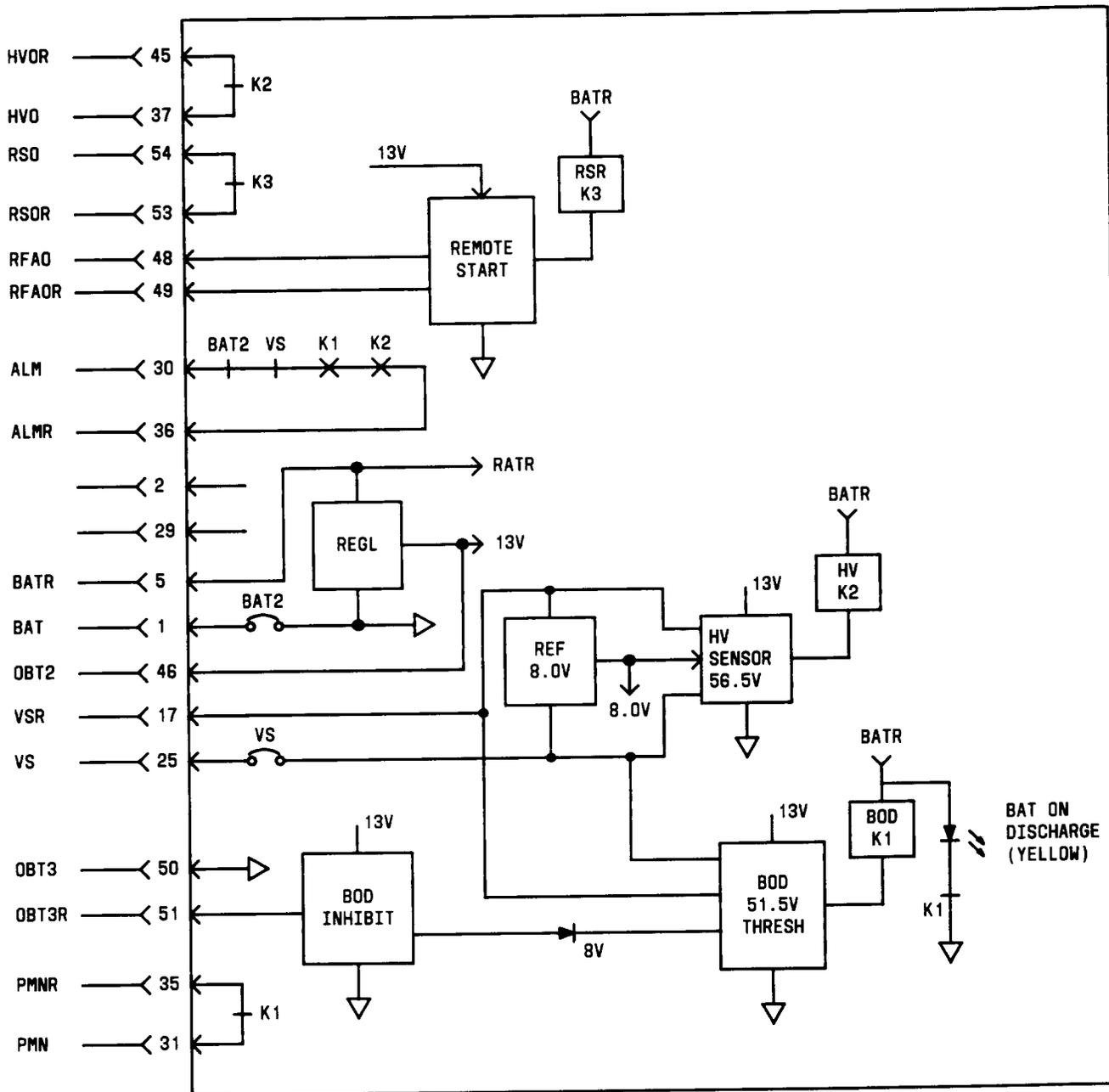


Figure 1—AYK2 block diagram

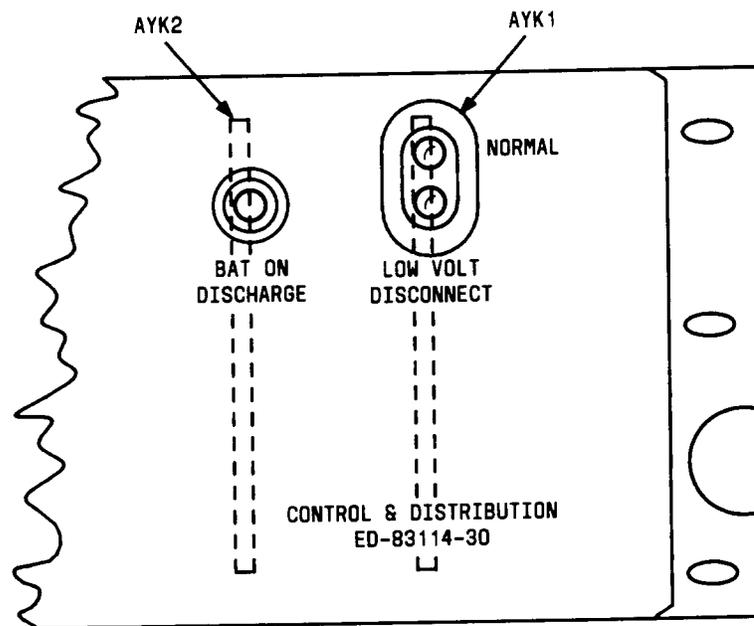


Figure 2—AYK2 as mounted in ED-83114-30 control and distribution panel