Power Supply Module, 100W, 120/240 VAC or 125 VDC

GFK-1448B August 1997

## **Dual Rack Operation**

A single power supply can provide power for two racks under the following conditions:

- Only 5 volt power is required in the second rack, and the total power required by both racks is within the capability of the supply.
- The current drawn by the second rack is less than 5.2 amperes.
- The two racks must be mounted in close proximity as limited by the available 3-foot connecting cable.

The connecting cable used for dual rack operation is listed in Table 2, Ordering Information. This cable carries the +5 volts power bus as well as the power sequencing signals. It uses a 9-pin D-type connector which connects directly to the backplane through an opening in the rack frame. Note that the cable carries power and power sequencing signals only. Inter-rack communication and bus interface modules must be provided separately. See the applicable *Programmable Controller Installation Manual*. for application information.

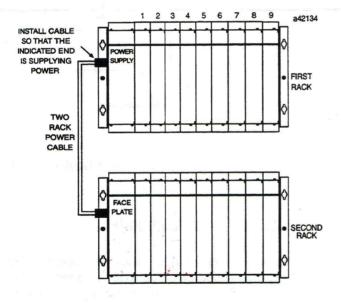


Figure 2. Dual Rack Configuration

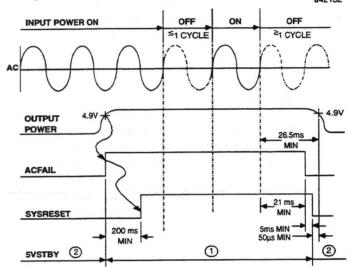
## **Timing Diagram**

The timing diagram below shows the relationship of the ac input power to the dc outputs and to the two system signals generated by the power supply: ACFAIL and SYSRE-

SET. The 5VSTBY output may be used for user battery backup schemes as shown.

On application of power, the ACFAIL signal goes false soon after the 5 volt bus is within specification. The system is held in the Reset state by SYSRESET for at least 200 milliseconds after 5 volt power is available (during this time, outputs are forced off).

If AC input power is interrupted, the 5 volt bus will remain within specifications for at least one cycle. The system is then given an additional 5 milliseconds to complete an orderly shutdown before SYSRESET stops all processing.



- 1) 5VSTBY CONNECTED TO POWER SUPPLY 5VDC
- ② 5VSTBY DISCONNECTED FROM POWER SUPPLY 5VDC BY A TRANSISTOR TO ALLOW CONNECTION OF USER BATTERY SOURCE.

Figure 3. Timing Diagram

## Note

Input power interruptions which exceed the power supply holdup time (21 milliseconds minimum) will result in a complete power down/power up cycle of ACFAIL and SYS-RESET.

## Mounting

This Power Supply is a plug-in module that is installed in the leftmost slot of any standard IC697 rack or VME Integrator's rack. For additional installation information, refer to GFK-1179, Installation Guidelines for Conformance to Standards, shipped with the PLC programming software.