GFK-0153G
January 1997

Cable - Power Supply Extension

Features

- Allows two racks to operate from a single power supply (this feature available with 55 and 100 watt AC / DC power supplies and the 90 watt 24 and 48 VDC power supplies).
- Cable includes both +5 volt power and control signals.
- Uses a 9 pin D-type connector.
- The cable kit includes cover plate for unused power supply slot in second rack.

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

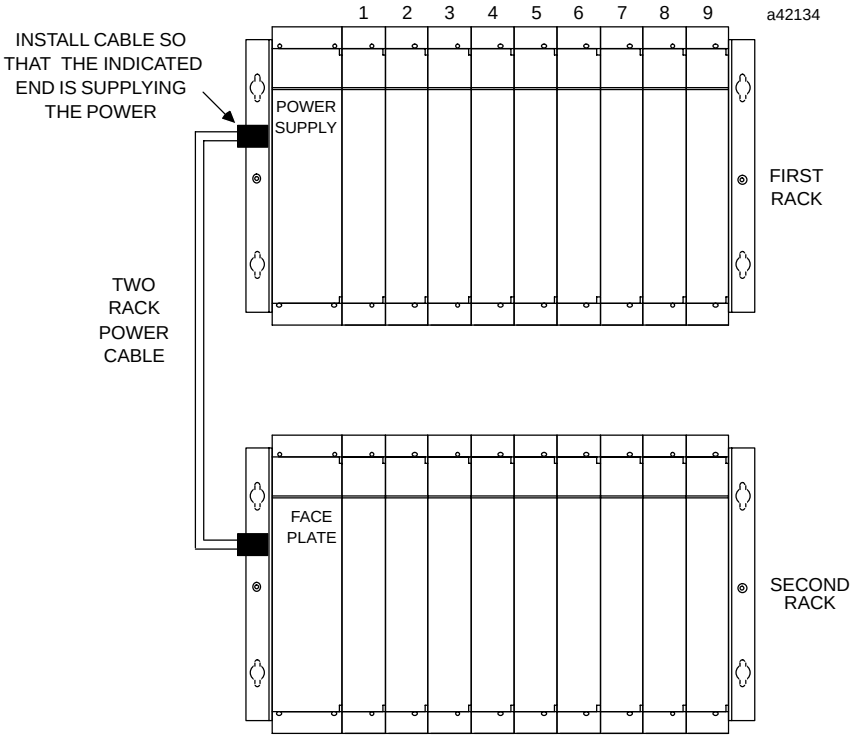
1. Only +5 volt power is required in the second rack, and the total power required by both racks is within the capability of the supply.
2. The current drawn by the second rack is less than 5.2 amperes.
3. Any IC697 module can be used in second rack slots 2 through 9 except those that require +12 volts.
4. The two racks must be mounted in close proximity, as limited by the 3-foot (1 meter) length of the cable.

Functions

The Power Supply Extension Cable allows operation of two IC697CHS racks from a single power supply. The cable carries the ACFAIL and SYSRESET signals, as well as the +5 volt power bus to the second rack.

Note

This cable carries power and power sequencing signals only. Inter-rack communication and bus interface modules must be provided separately.



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Operation of the Power Supply

The 55 and 100 Watt AC / DCPower Supply Modules can operate from either 120 VAC or 240 VAC nominal inputs or from a nominal 125 VDC source. The AC input voltage range can be from 90 to 264 volts AC, 50 to 60 Hz; the 125 VDC input can be from +100 to +150 VDC. The 90 Watt 24 VDC Power Supply Module can operate from a DC input of +21 to +32 VDC. The 90 Watt 48 VDC Power Supply Module can operate from a DC input of +35 to +60 VDC. Both overvoltage and overcurrent protection (as described below) apply to both the base rack and the auxiliary rack.

Overvoltage Protection

An electronic shutdown circuit protects against voltages exceeding 6.2 volts. A back-up voltage clamp is provided to protect against sustained overvoltage conditions due to either external influences or internal faults. Overvoltage due to internal faults may cause the fuse to open. For short term overvoltage conditions, normal operation will resume when the cause is removed.

Overcurrent Protection

An electronic current limit is provided on each of the DC outputs. An overload on any output will cause the voltage to collapse and may cause the other output voltages to collapse.

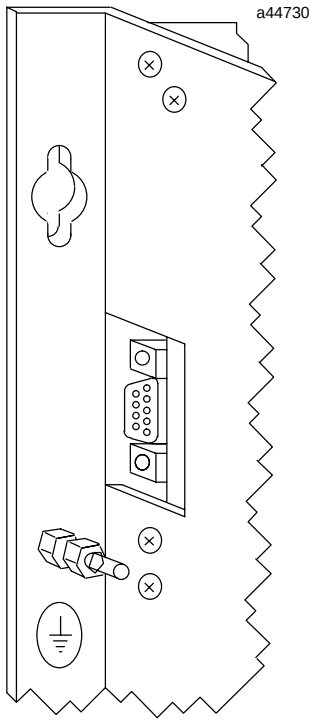
Normal operation will resume after removal of the overload. Some component cooling time may be required before normal operation resumes.

Power Supply Cover Plate

A cover plate is included with the cable kit for the power supply slot in the second rack. It mounts to the rack using four M2.5 screws (included).

Cable Connection

The power supply cable terminates in two 9-pin D-type connectors. The mating connector on each rack backplane is accessed through an opening in the left side panel of the rack. Approximately 6 inches (152.4mm) of clearance on the left side of the rack must be allowed for access to the connector.



Warning

Always turn power off before connecting or disconnecting the cable. Connecting or disconnecting the cable with power applied may cause unsafe operation.

Table 1. Ordering Information

Description	Catalog Number
Power Supply Extension Cable	IC697CBL700 / 713