



# Series Six Programmable Controllers

GEK-84865B

## Redundant Processor Unit CPU Switch Module

March 1989

### General Description

The CPU Switch Module is used in the Redundant Processor Unit (RPU) to monitor and select one of two external Series Six CPUs as the Master CPU, as well as to provide a communications link to either CPU from the RPU Data Control Module.

The I/O chains from both CPUs interface to the CPU Switch Module through two 37-pin connectors located at the top and middle positions of the Module.

The CPU Switch Module transfers the selected CPU I/O chain bus to the RPU backplane bus for use by the I/O Switch Module.

Two CPU Switch Modules may be utilized in an RPU; one for the Main I/O chain and an optional module for the Auxiliary I/O chain. The features and benefits of the CPU Switch module are summarized in Table 1, while Table 2 provides module specifications.

Table 1. Features and Benefits

FEATURES	BENEFITS
Three parallel bus connectors	Provides RPU link to two CPUs
Solid state bus switch	Provides bumpless transfer of I/O chain control between CPUs

Table 2. AC Specifications

<b>Dimensions:</b>	Circuit Board: 8.15 x 11.0 x 1.1 (inches) 208 x 280 x 28 (mm)
<b>Power Requirements:</b>	Faceplate: 12.46 x 1.175 (inches) 317 x 30 (mm) 5 V dc, 2.0 A (Supplied by RPU power supply)
<b>Storage Temperature:</b>	-40° to +70° c
<b>Operating Temperature:</b>	0° to 60° C (Outside of rack)
<b>Humidity:</b>	5% - 95% (non-condensing)

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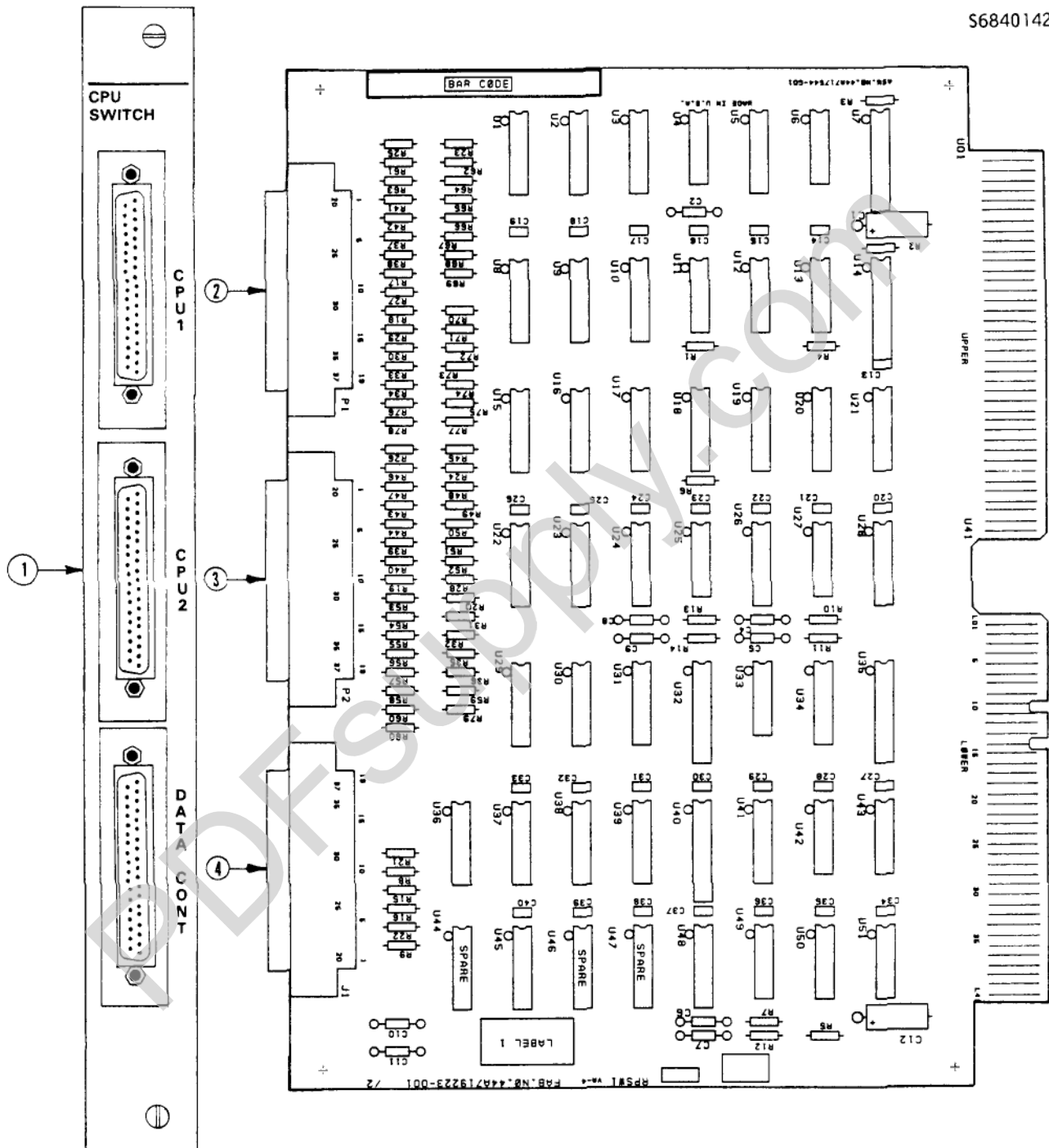


Figure 1. User Items

- 1. Faceplate.
- 2. CPU No. 1 Connector.
- 3. CPU No. 2 Connector.
- 4. Data Control Connector (Cable supplied with RPU)

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**Installation**

The CPU Switch Module must be installed in either the first or sixth slot (from the left) of the RPU, depending on whether it is to be used in the Auxiliary or Main I/O chain, respectively. Use the insertion/extraction tool supplied with the RPU to ensure proper module seating. Guide the faceplate over the connectors; then secure the faceplate to the rack by tightening the thumbscrews at the top and bottom.

Connect a multi-pair cable from the CPU1 port (37-pin D connector) on the RPU to the I/O port (37-pin D connector) on the first CPU I/O Control Module or Auxiliary I/O Module for the Main or Auxiliary I/O chain, respectively.

Connect a multi-pair cable from the CPU2 port (37-pin D connector) on the RPU to the I/O port (37-pin D connector) on the second CPU I/O Control Module or Auxiliary I/O Module for the Main or Auxiliary I/O chain.

The other 37-pin connector on the CPU Switch module (Main I/O chain only) should be connected to the Data Control module bottom 37-pin connector using the short cable supplied with the RPU. All connectors should be secured using the furnished screws.

**CAUTION**

**While removing or installing the CPU Switch Module, power should be removed from the RPU. Removing either RPSW board from the RPU will cause an I/O Chain reset. The process controlled by the CPU will stop.**

For best results, cables from the CPU Switch Module to either CPU should be routed separately from power, contactor or motor circuits containing high current or high frequency noise components. These cables should not exceed 10 feet in length.

**Table 3. Ordering Information**

Equipment	Catalog Number
Circuit Board and Faceplate	IC600RB75 1
Faceplate only	IC600FP75 1
CPU No. 1 Cable 2 feet (0.6m)	IC600WD002
CPU No. 1 Cable 5 feet (1.5m)	IC600WD010
CPU No. 2 Cable 2 feet (0.6m)	IC600WH002
CPU No. 2 Cable 5 feet (1.5m)	IC600WH005
CPU No. 2 Cable 10 feet (7.5m)	IC600WH010
Data Control Cable	IC600WJ001

The UL symbol on the nameplate means the product is listed by Underwriters Laboratories Inc. (UL Standard No. 508, Industrial Control Equipment, subsection Electronic Power Conversion Equipment.)

For further information, contact your local GE Fanuc sales representative.