



SERIES SIX

PROGRAMMABLE CONTROLLERS

GEK-83506B

DPU, PDT and
User I/O interfaces

I/O CONTROL MODULE

GENERAL DESCRIPTION

The I/O (Input/Output) Control module is utilized in the Series Six Central Processing Unit (CPU) to provide an interface between the CPU and the primary I/O chain; it also controls data transfers between the CPU and peripheral devices such as the Program Development Terminal (PDT) and the Data Processor Unit (DPU). The features and benefits of this module are summarized in Table 1.

The module provides four Light-Emitting Diodes (LED's), visible through a lens on the faceplate, which indicate I/O-chain parity and continuity conditions, whether user I/O are enabled, and problems with the DPU interface. The LEDs operate only when the module is installed in a properly powered CPU rack.

Two, 37-pin "D" type connectors are available for cable connections. One, marked "I/O", can be used for linking

an I/O Receiver module up to 50 feet away; the other connector, marked "PP/DPU", can be used to connect a cable from the DPU or the PDT.

The user has the option of selecting (by jumper) whether the CPU enters the STOP mode (and Alarm No. 1 and No. 2 are activated) if there is a Data Processor Window failure and/or a Communications Window failure (between the I/O Control and the Communications Control Module (CCM)), in the course of an execution sequence by the CPU. If these options are not selected, the CPU closes the window to the DPU and/or CCM at the occurrence of a window failure, and an Alarm Condition No. 2 prevails.

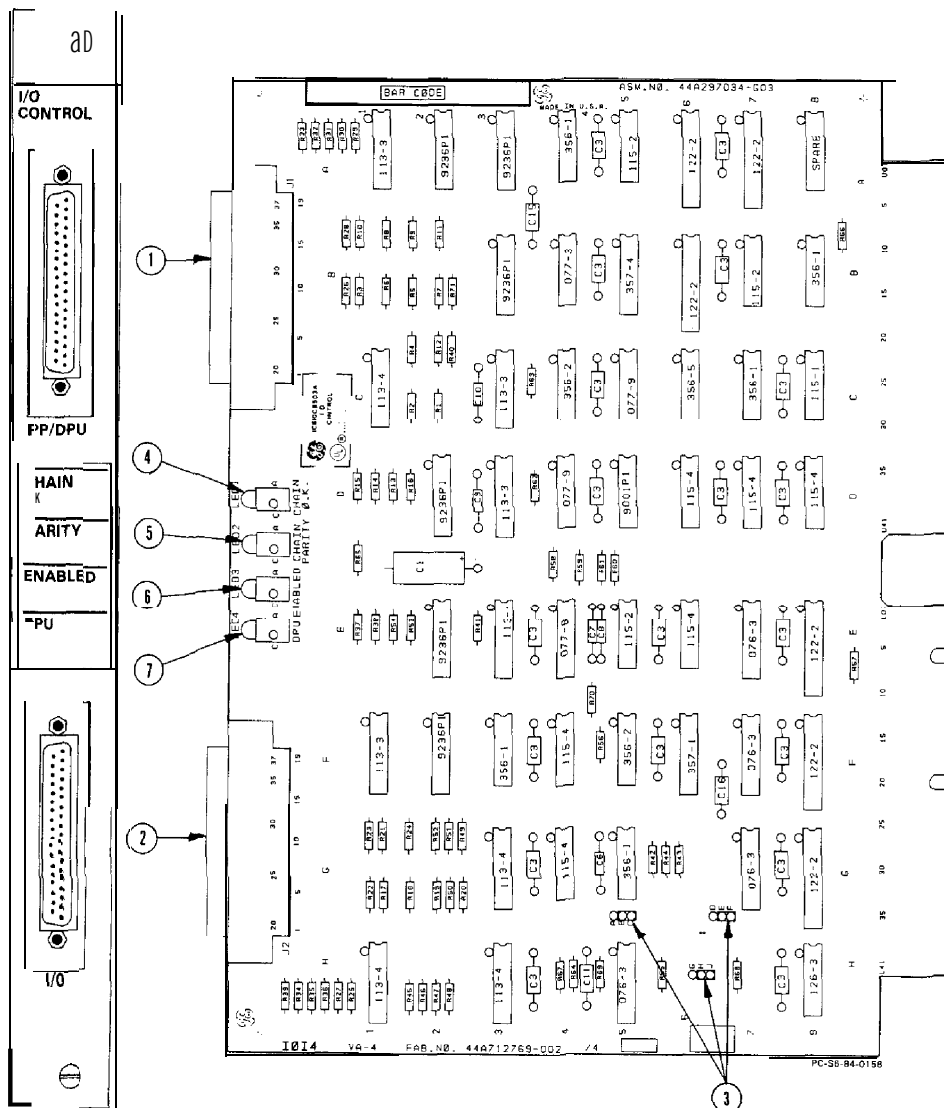
Refer to Figure 1 (next page) for I/O Control module specifications.

TABLE 1. FEATURES AND BENEFITS

FEATURES	BENEFITS
Contains I/O and Communication Interfaces.	Centralized control of CPU Interface operations.
Four LED indicators: CHAINOK PARITY ENABLED DPU	Simplifies troubleshooting.
Can be used in Models 60,600 and 6000 CPUs.	Reduced spare-parts inventory.

- Dimensions:	- Power Requirements: 5 Vdc, 1.0 A (Supplied by CPU power supply)
Circuit Board: 8.15 x 11.0 (inches) 208 x 280 (mm)	- Storage Temperature: 0° to 70°C
Faceplate: 12.46 x 1.175 (inches) 317 x 30 (mm)	- Operating Temperature: 0° to 60°C
	- Humidity: 5% - 95% (non-condensing)

FIGURE I. SPECIFICATIONS



- ① D-Type 37-Pin Connector to PDT or DPU
- ② D-Type 37-Pin Connector to Primary I/O Chain
Connects to I/O Receiver module in nearest I/O rack in primary chain.
- ③ User Selection Jumpers
See the "Installation" section of this Data Sheet.
- ④ CHAIN OK Light
On: Continuity, power, and output-data parity are OK at all I/O stations in the primary chain.
off: A continuity or power problem or output data parity error exists at one or more primary-chain I/O stations.
- ⑤ PARITY Light
On: Input-data parity is OK at the I/O Control module.
Off: Input-data parity error exists.
- ⑥ ENABLED Light
On: The outputs are enabled. CPU is operating in the RUN ENABLED mode.
Off: The outputs are disabled. CPU is in the RUN DISABLED or the STOP mode.
- ⑦ DPU Light
On: Data Processor is OK.
Off: A continuity error or other type of problem exists with the DPU.

FIGURE 2. USER ITEMS

INSTALLATION

Before installing the I/O Control module in either the Model 60, 600 or 6000 CPU, refer to Table 2 and determine if the User Selection jumpers are in the appropriate positions.

A further discussion of these jumper selections is provided in the General Description section of this data sheet.

Install this module to the immediate left of the CPU power supply. Use the extraction/insertion tool supplied with the CPU to insert (or remove) this module in the appropriate card slot. Secure the faceplate to the rack using the thumbscrews at the top and bottom.

Connect an I/O cable (Part No. IC600WDXXXXA, where "XXX" is a three-digit number corresponding to the cable length) between the I/O Receiver module in the nearest I/O rack in the primary chain and the faceplate connector on this module; secure the connector using the furnished screws.

NOTE

The total length of I/O cable interconnecting the I/O racks in the I/O station, including the cable connecting this module to the nearest I/O receiver, can not exceed 50 feet (15 meters),

*TABLE 2. USER SELECTION JUMPERS

JUMPER	POSITION	FUNCTION
B	A-B	DPU present
B	B-C	DPU not present
E	D-E	DPU fault causes Alarms No. 1 and 2
E	E-F	DPU fault causes Alarm No. 2
H	G-H	CCM fault causes Alarms No. 1 and 2
H	H-I	CCM fault causes Alarm No. 1

NOTE: Alarm No. 1 results in the CPU entering the STOP mode; Alarm No. 2 is an advisory condition.

ORDERING INFORMATIONCircuit Board and Faceplate

IC600CB503A

Faceplate

IC600FP509A

CATALOG NUMBER REVISION SUFFIX

The equipment listed above having the catalog numbers shown and the same equipment having a higher alpha suffix is designed for listing by UL for use as auxiliary control devices. The equipment is a direct replacement for equipment having the same catalog number but a lower alpha suffix.

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 office.

GE Fanuc Automation North America, Inc., Charlottesville, Virginia

JANUARY,