

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

GE 90-30 SERIES PLC

IC693MDL730

EIGHT-POINT DC OUTPUT MODULE

Used with the applicable Series 90-30 discrete I/O configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: IC693MDL730.pdf

12/24 Volt DC Positive Logic Output - 2 Amp, 8 Point IC693MDL730

The **12/24 volt DC Positive Logic 2 Amp Output** module for the Series 90-30 Programmable Logic Controller provides 8 output points in one group with a common power input terminal. This output module is designed to have positive logic characteristics in that it sources current to the loads from the user common or positive power bus. The output device is connected between the negative power bus and the module output. The output characteristics are compatible with a wide range of user-supplied load devices, such as: motor starters, solenoids, and indicators. Power to operate the field devices must come from an external power supply supplied by the user.

LED indicators which provide the ON/OFF status of each point are located at the top of the module. This LED block has two horizontal rows with eight green LEDs in each row. This module uses the top row labeled A1 through 8 (points 1 through 8). A red LED (labeled "F") on the right and centered between the two rows of green LEDs functions as a blown fuse indicator; it turns ON when any fuse is blown. The module has two 5 Amp fuses with each fuse protecting four outputs; the first fuse protects A1 - A4, the second fuse protects A5 - A8. The fuses are electrically connected to the same common. An insert goes between the inside and outside surface of the hinged door. The surface towards the inside of the module (when the hinged door is closed) has circuit wiring information, and circuit identification information can be recorded on the outside surface. The outside left edge of the insert is color-coded blue to indicate a low-voltage module.

This module can be installed in any I/O slot of a 5 or 10-slot baseplate in a Series 90-30 PLC system.

Table 7-7. Specifications for IC693MDL730

Rated Voltage	12/24 volts DC
Output Voltage Range	12 to 24 volts DC (+20%, -15%)
Outputs per Module	8 (one group of eight outputs)
Isolation	1500 volts between field side and logic side
Output Current †	2 amps maximum per point 2 amps maximum per fuse at 60°C (140°F) 4 amps maximum per fuse at 50°C (122°F)
Output Characteristics	
Inrush Current	9.4 amps for 10 ms
Output Voltage Drop	1.2 volts maximum
Off-state Leakage	1 mA maximum
On Response Time	2 ms maximum
Off Response Time	2 ms maximum
Power Consumption	55 mA (all outputs on) from 5 volt bus on backplane

† Maximum load current is dependent upon ambient temperature as shown in graph on next page.

Refer to Appendix B for product standards and general specifications.

IC693MDL730 Output Module Field Wiring Information

The following figure provides wiring information for connecting user supplied load devices and power source to the 12/24 volt DC positive logic 2 amp output module.

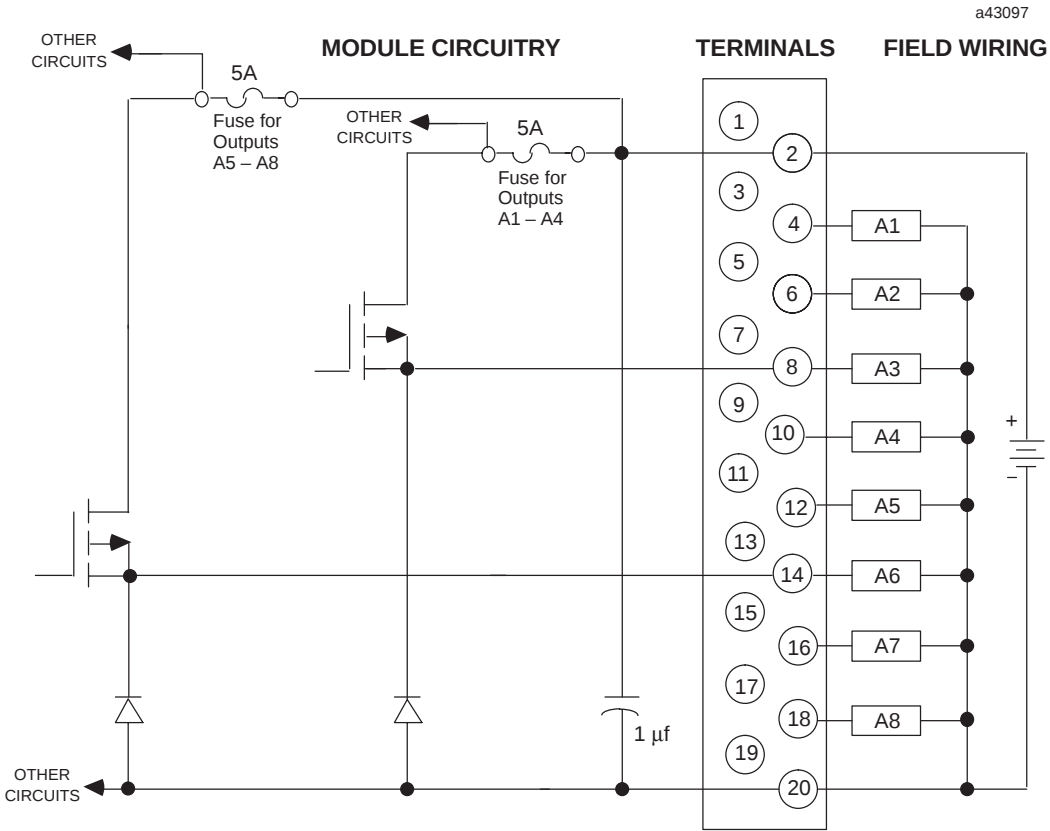


Figure 7-10. IC693MDL730 Output Module Field Wiring

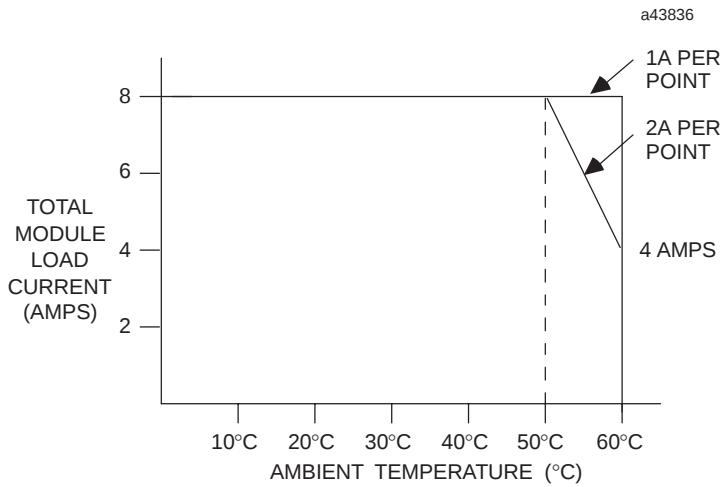


Figure 7-11. Load Current vs. Temperature for IC693MDL730

Installing and Removing IC693MDL730 Terminal Boards with Holding Screws

Discrete output modules IC693MDL730F (and later versions) and IC693MDL731F (and later versions) have a special terminal board that is equipped with holding screws, as shown in the figure below. These screws prevent the terminal board-to-module connections from deteriorating in applications where the PLC is subjected to severe vibration.

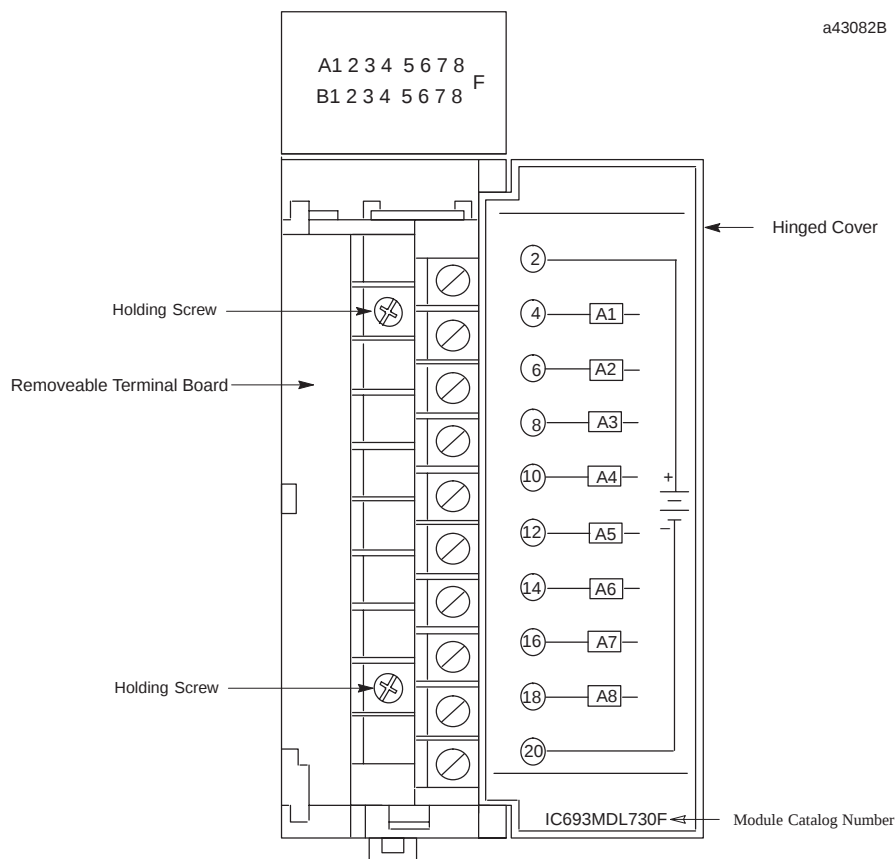


Figure 7-12. Terminal Board with Holding Screws

- Removing:** To Remove these terminal boards, first loosen the two holding screws on the front of the terminal board, then follow the standard removal instructions in the section “Removing an I/O Module’s Terminal Board.” The holding screws are held captive in the terminal board and do not have to be completely removed.
- Installing:** To install these terminal boards, follow the standard installation instructions in the section “Installing an I/O Module’s Terminal Board,” then tighten the two holding screws to 8 to 10 inch pounds (1 Newton-meter) of torque.