## 120/240 Volt AC Output - 2 Amp, 8 Point IC693MDL330

This 2 amp AC output module has a catalog number with a D or later suffix (i.e., IC693MDL330D); previous versions (modules with a C or earlier suffix) were rated at 1 amp. The 120/240 volt, 2 Amp AC Output module for the Series 90-30 Programmable Logic Controller provides 8 output points in two isolated groups with four points in each group. Each group has a separate common associated with it. The two commons are not tied together inside the module. This allows each group to be used on different phases of the AC supply, or they can be powered from the same supply. Each group is protected with a 5 amp fuse for each common, and an RC snubber is provided for each output to protect against transient electrical noise on the power line. This module provides a high-degree of inrush current (10x the rated current) which makes the outputs suitable for controlling a wide range of inductive and incandescent loads. AC Power (DC power cannot be used) to operate loads connected to outputs must be supplied by the user.

LED indicators which provide the ON/OFF status of each point are located at the top of the module. There are two horizontal rows with eight green LEDs in each row and a red LED centered between and to the right of the two rows. This module uses the upper eight LEDs, labeled A1 through 8 for output status. The red "F" LED is a blown fuse indicator that turns ON if any of the fuses should blow. 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 red to indicate a high-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 7-4. Specifications for IC693MDL330

Rated Voltage	120/240 volts AC
Output Voltage Range	85 to 264 volts AC, 50/60 Hz
Outputs per Module	8 (two groups of four outputs each)
Isolation	1500 volts between field side and logic side
	500 volts between each group
Output Current †	2 amp maximum per point
	4 amps maximum per group at 40° C (104°F)
Output Characteristics	
Inrush Current	20 amps maximum for one cycle
Minimum Load Current	100 mA
Output Voltage Drop	1.5 volts maximum
Output Leakage Current	3 mA maximum at 120 volts AC
	6 mA maximum at 240 volts AC
On Response Time	1 ms maximum
Off Response Time	1/2 cycle maximum
Power Consumption	160 mA (all outputs on) from 5 volt bus on backplane

<sup>†</sup> Maximum load current is dependent upon ambient temperature as shown in graph on following page. Refer to Appendix B for product standards and general specifications.

## IC693MDL330 Output Module Field Wiring Information

The following figure provides wiring information for connecting user supplied input devices and power source to the 120/240 volt AC output, 2 Amp module.

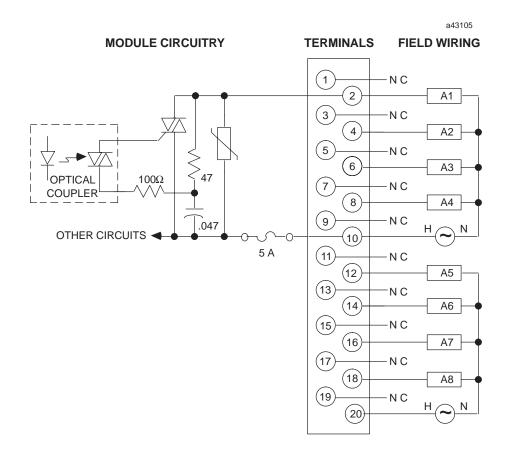


Figure 7-4. Field Wiring - 120/240 Volt AC Output, 2 Amp Module - IC693MDL330

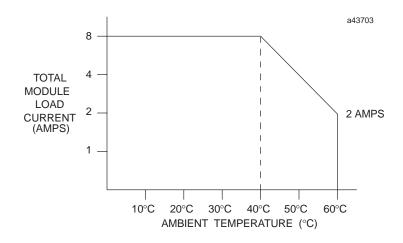


Figure 7-5. Input Points vs. Temperature for IC693MDL330