

Chapter 6

Discrete Input Modules

120 Volt AC Isolated Input, 8 Point IC693MDL230

The *120 volt AC Isolated Input* module for the Series 90-30 Programmable Logic Controller provides 8 isolated input points, each with a common power input terminal. The input circuits are reactive (resistor/capacitor) inputs. Current into an input point results in a logic 1 in the input status table (%I). Input characteristics are compatible with a wide range of user-supplied input devices, such as pushbuttons, limit switches, and electronic proximity switches. Power to operate the field devices must be supplied by the user. This module requires an AC power source, *it cannot be used with a DC power source.*

LED indicators which provide the ON/OFF status of each point are located at the top of the module. This LED block has a horizontal row with eight green LEDs labeled A1 through 8 (points 1 through 8). 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 6-1. Specifications for IC693MDL230

Rated Voltage	120 volts AC, 50/60 Hz
Input Voltage Range	0 to 132 volts AC, 50/60 Hz
Inputs per Module	8 (each input point has a separate common)
Isolation	1500 volts RMS between field side and logic side 500 volts RMS between inputs
Input Current	14.5 mA (typical) at rated voltage
Input Characteristics:	
On-state Voltage	74 to 132 volts AC
Off-state Voltage	0 to 20 volts AC
On-state Current	6 mA minimum
Off-state Current	2.2 mA maximum
On response Time	30 ms maximum
Off response Time	45 ms maximum
Power Consumption	60 mA (all inputs on) from 5 volt bus on backplane

Refer to Appendix B for product standards and general specifications.

IC693MDL230 Input Module Field Wiring Information

The following figure provides wiring information for connecting user supplied input devices and power source to the 120 volt AC Isolated input module. Note that since each input is isolated (separate) from each of the other inputs, each input can be powered by a separate AC power source.

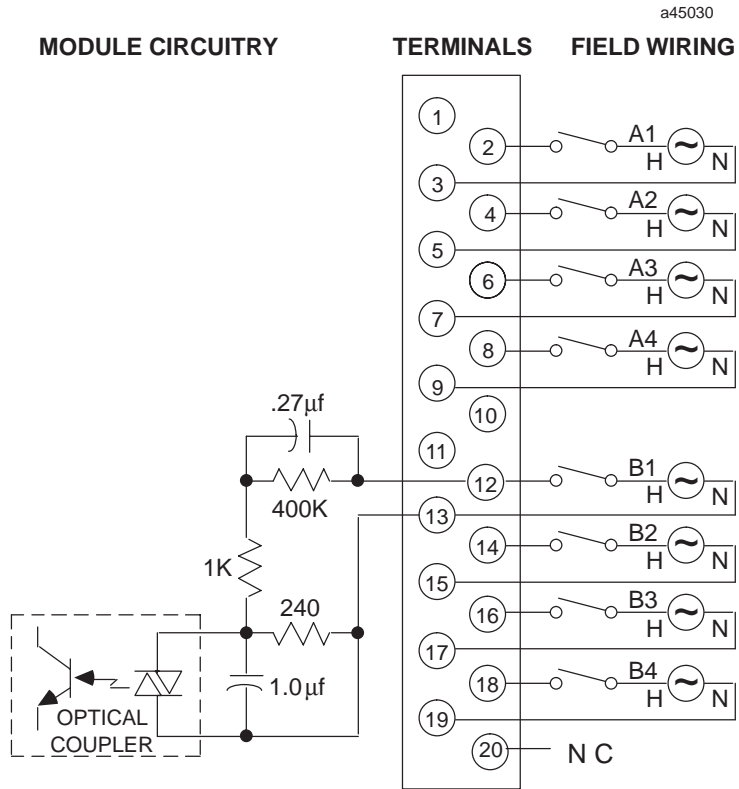


Figure 6-1. Field Wiring - 120 Volt AC Isolated Input Module - IC693MDL230