

24 VDC INPUT/OUTPUT (16 INPUTS/16 OUTPUTS)
IC630MDL304A

This module provides a dual function in that it provides 16 input circuits and 16 output circuits on one module. The 16 input circuits are each designed to receive a single discrete (ON/OFF) signal from user supplied devices and the 16 output circuits are each capable of controlling user supplied discrete (ON/OFF) loads. Typical input devices include limit switches, pushbuttons, and relay contacts. Typical loads include motor starters, relay coils, and indicator lights. A 24 Vdc power supply must be provided by the user. This supply provides the power to sense the state of the inputs and also provides the DC power source for the output circuits.

The 16 input circuits and 16 output circuits are connected to the appropriate input devices or user loads through field wiring to a 36 screw-terminal connector mounted on the faceplate. Input and output terminals are each arranged in two groups with eight terminals in each group, numbered 0 to 7. The top 16 terminals are for inputs, the lower 16 terminals are for outputs. Each terminal will accept one No. 12 AWG or two No. 14 AWG wires.

When installed in an I/O slot, a 32 point I/O module uses 32 consecutive I/O references, i.e. the 16 references assigned to that slot and the next 16 references. A 32 point I/O module in slot 1 would use references 00-37. In this case, an I/O module installed in slot 2 would have a starting reference number of 40. If an 8-slot base was filled with 32 point I/O modules, that base would contain 256 I/O points (references 000-377, if first base unit).

Specifications for each of the 16 input and 16 output circuits are as follows.

INPUT CIRCUITS		OUTPUT CIRCUITS	
Input Current	7mA	Maximum Current	0.5 amp
ON Level	< 6.0 Vdc	ON Voltage Drop, Typical	0.8 Vdc @ 0.5 amp
OFF Level	> 18.0 Vdc	Leakage Current, Maximum	100 μ A
ON Current, Minimum	5.0 mA	Peak Voltage	45 Vdc
OFF Leakage, Maximum	2.0 mA	OFF to ON Response	100 μ s
OFF to ON Response	3-12 ms	ON to OFF Response	100 μ s
ON to OFF Response	3-12 ms	Maximum Switching Capacity	24 Vdc @ 0.5 amp
		Fuse (Internal)	5 amp (In output common line, 1 for each 8 circuits)
External Power			
Voltage	24 Vdc, 10%		
Ripple	<3% rms, Maximum		
Current	160 mA Maximum (32 Circuits ON) 80 mA Typical (16 Circuits ON)	Excluding loads	
Internal Power Consumption 5 Vdc @ 50 mA + .22 mA per Input ON (Supplied by Series Three power supply) + 2.25 mA per Output ON			

Figure 6.12 provides wiring information for the 24 Vdc Input/Output module.

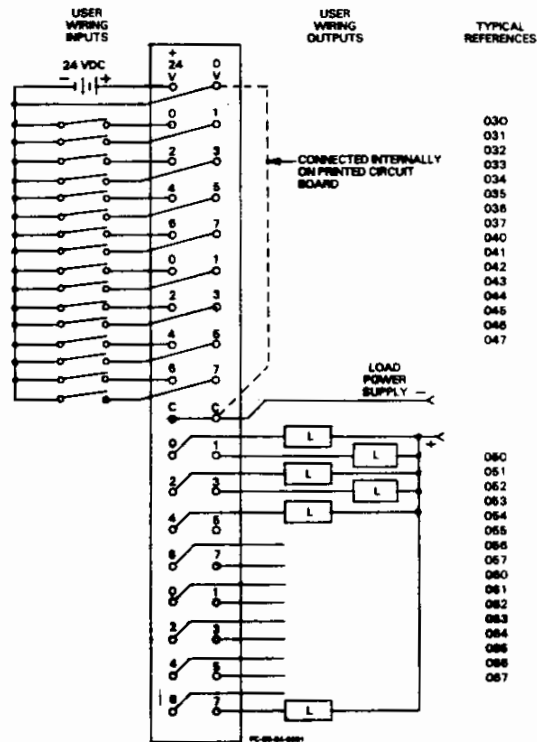
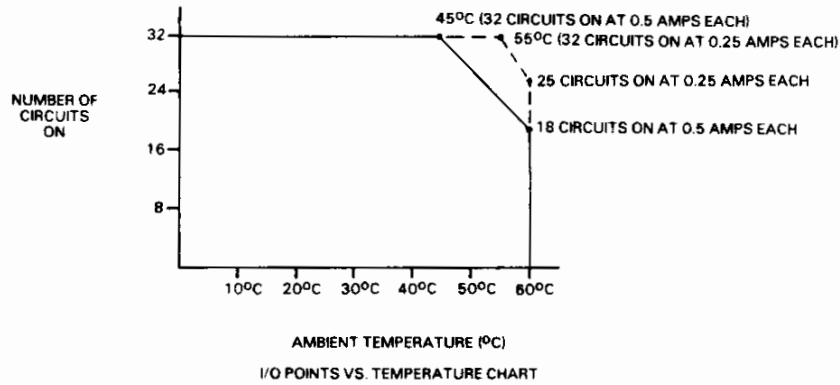


Figure 6.12
24 VDC INPUT/OUTPUT USER CONNECTIONS