Relay Output, 2 Amp - 32 Circuits
IC655MDL581

This module provides 32 normally-open relay circuits for controlling user output loads. The output switching capacity of this module is two amps, resistive load. The top 16 LEDs on the front of the module provide a dual function. They provide a visual indication of the status of each output circuit, with each LED reflecting the ON or OFF state of the corresponding circuit. And when commanded through programming, they indicate the starting I/O address for the module. Connections to each circuit are made to the removable terminal block on the front of the module. The output circuits are divided into four groups of eight. On the terminal block, they are labeled A, B, C, and D, with each terminal in the group labeled 1 to 8. Each group of eight has a single common connection, labeled H. This terminal serves as the hot terminal for AC loads or the common terminal for DC loads. The user must supply the AC or DC source of power for the loads connected to the module's output circuits, and 24 VDC to power the module's output circuitry.

Table 26. Specifications for Relay Output, 2 Amp - 32 Circuits

Output Circuit Type	Relay Contact, Normally Open
Number of Circuits	32
Internal Circuit Grouping	Four groups, eight circuits per group
Operating Voltage	5 to 24 VDC or 5 to 250 VAC
Peak Voltage	265 VAC
Maximum Operating Current	5 amps, resistive load
(see following table)	5 amps/common; 20 amps/module
Maximum Leakage Current	0.1 mA at 265 VAC, 60 Hz
Smallest Recommended Load	5.0 mA at 5 VDC
Maximum Inrush current	5 amps
OFF to ON Response	10 ms
ON to OFF Response	10 ms
Status Indicator Location	Logic side
Internal Power Consumption, (5 VDC)	Total; 260 mA (typ), 300 mA (max)
	Each On Point; 8.0 mA
External Power Supply Requirements	Voltage: 24 VDC, ±10%
	Current: 350 mA at 26.4 VDC

Table 27. Load Current Limitations

Operating Voltage	Maximum Current for Load Type		Typical Contact Life (number of Operations)
	Resistive	Lamp or Solenoid †	
24 to 120 VAC	5 amps	1 amp	200,000
24 to 120 VAC	1 amp	.2 amps	400,000
24 to 120 VAC	.1 amps	.02 amps	1,000,000
240 VAC	5 amps	1 amp	100,000
240 VAC	1 amp	.2 amps	300,000
240 VAC	.1 amps	.02 amps	900,000
24 VDC	-	3 amps	100,000
24 VDC	5 amps	1 amp	200,000
24 VDC	1 amp	.2 amps	1,000,000
24 VDC	.1 amps	.02 amps	1,000,000
110 VDC	.4 amps	.1 amps	200,000

†Assumes a 15 ms time constant

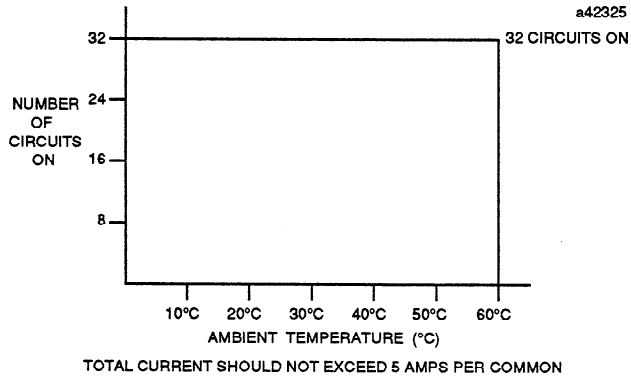

Figure 43. Output Points vs. Temperature for IC655MDL581

Wiring Information - IC655MDL581

The following figure provides the information required for connecting field devices to this module.

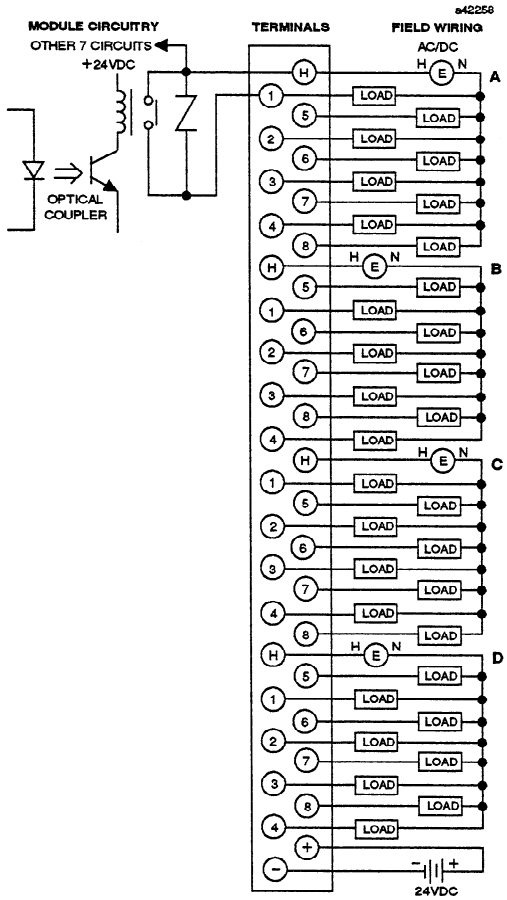

Figure 44. Field Wiring and Typical Circuit for IC655MDL581