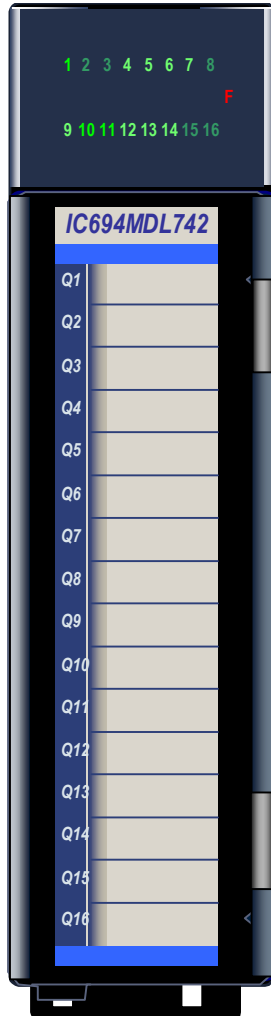


Output Module, 12/24VDC Positive Logic ESCP, 1A, 16 Pt: IC694MDL742



The **12/24 volt DC Positive Logic 1 Amp Electronic Short Circuit Protection (ESCP) Output** module, IC694MDL742, provides 16 output points in two groups of eight. Each group has a common power output terminal. This output module has positive logic characteristics: it sources current to the loads from the user common or positive power bus. Output devices are connected between the negative power bus and the output terminals. The module's output characteristics are compatible with a wide range of load devices, such as: motor starters, solenoids, and indicators. Power to operate the field devices must be supplied by the user.

Individual numbered LEDs show the ON/OFF status of each output point. There are no fuses on this module. The module's red LED (F) indicates electronic short circuit protection trips. The blue bands on the label show that MDL742 is a low-voltage module.

This module can be installed in any I/O slot in an RX3i system.

Electronic Short Circuit Protection

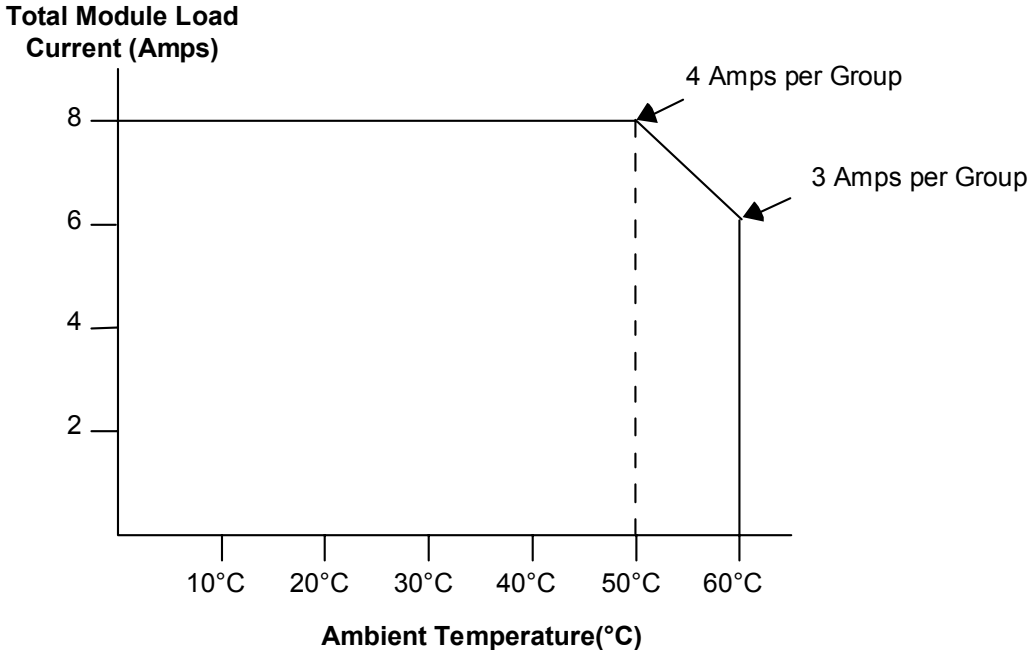
Module MDL742 has two Electronic Short Circuit Protection circuits. The first circuit protects points 1 to 8 and the second protect points 9 to 16. The module electronically monitors the common signal for each group. If a short circuit occurs, the module turns off the output points in that group, and turns on the red LED (F). The point LEDs do not turn off. Electronic Short Circuit Protection does not prevent individual outputs from exceeding their ratings, but it protects the module in case of a short-circuited load. Electronic Short Circuit Protection is reset by cycling the 12/24 VDC user power to the module.

Specifications: MDL742

Rated Voltage	12/24 volts DC
Output Voltage Range	12 to 24 volts DC (+20%, -15%)
Outputs per Module	16 (two groups of eight outputs each)
Isolation:	
Field to Backplane (optical) and to Frame Ground	250 VAC continuous; 1500 VAC for 1 minute
Group to Group	250 VAC continuous; 1500 VAC for 1 minute
Output Current	1 Amp maximum per point 4 Amps maximum per group at @ 50°C 3 Amps maximum per group @ 60°C Maximum total load current depends on the ambient temperature as shown below
Power Consumption	130mA (all outputs on) from 5 volt bus on backplane
Output Characteristics	
Inrush Current	5.2 Amps for 10 ms
Output Voltage Drop	1.2 volts maximum
Off-state Leakage	1mA maximum
On Response Time	2ms maximum
Off Response Time	2ms maximum

Refer to Appendix A for product standards and general specifications.

Load Current vs. Temperature



Field Wiring: MDL742

Terminal	Connection
1	DC +
2	Output 1
3	Output 2
4	Output 3
5	Output 4
6	Output 5
7	Output 6
8	Output 7
9	Output 8
10	Outputs 1 – 8 common (return)
11	DC +
12	Output 9
13	Output 10
14	Output 11
15	Output 12
16	Output 13
17	Output 14
18	Output 15
19	Output 16
20	Outputs 9 - 16 common (return)

