

# F3-16ND3F DC Fast Response Input

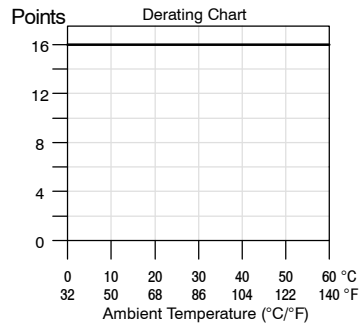
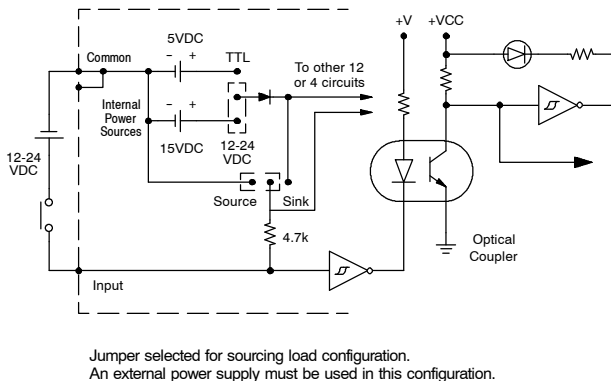
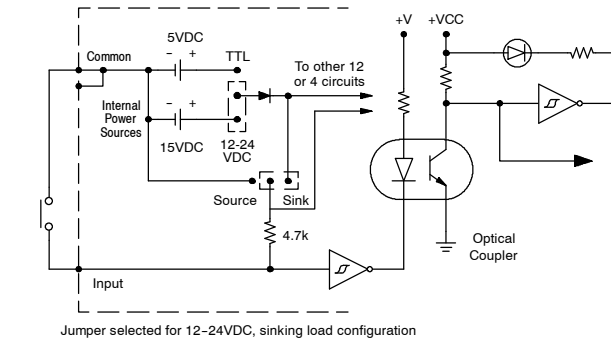
Inputs per module	16 sink/source (jumper selectable sink/source)*
Commons per module	2 (internally connected)
Input voltage range	5 VDC TTL & CMOS, 12-24 VDC (jumper selectable)*
Input voltage supplied	Internal (used with sinking loads) External (used with sourcing loads)
Peak voltage	100 VDC (35 VDC Continuous)
AC frequency	N/A
ON voltage level	3.5-5VDC @ 5VDC 10-24VDC @ 12-24VDC
OFF voltage level	0-1.5VDC @ 5VDC 0-4VDC @ 12-24VDC
Base power required	9V 148 mA Max 24V 68 mA Max
Input current	1 mA @ 5VDC 3 mA @ 12-24 DC
Input impedance	4.7K
OFF to ON response	1 ms
ON to OFF response	1 ms
Maximum input rate	500 Hz
Minimum ON current	0.4mA @ 5VDC 0.9mA @ 12-24VDC
Maximum OFF current	0.8mA @ 5VDC 2.2mA @ 12-24VDC
Terminal type	Removable
Status indicators	Logic side
Weight	5.4 oz. (153 g)

The DC power to sense the state of the inputs when jumpers are installed for sinking type signals is provided by the rack power supply. Sinking type inputs are turned ON by switching the input circuit to common. Source type input signals assume the ON state until the input device provides the voltage to turn the input OFF.

### Selection of Operating Mode:

The mode of operation, either 5VDC or 12-24VDC sink or source, for each group of circuits is determined by the position of jumper plugs on pins that are located on the edge of the circuit board. There are four sets of pins (3 pins in each set), with two sets for each group of inputs. The first two sets of pins are used to configure the first 12 inputs (eg. 0 to 7 and 100 to 103) and are labeled 12/24V and 5V. Above the first set of pins are the labels SINK and SRC (source). To select an operating mode for the first 12 circuits, place a jumper on the two pins nearest the appropriate labels. For example, to select 24VDC Sink input operation for the first 12 inputs, place a jumper on the two pins labeled 12/24V and on the two pins labeled SINK. The last two sets of pins are used to configure the last 4 inputs (eg. 104 to 107) and are labeled 4 CIRCUITS. The operating mode selected for the last group of 4 inputs can be different than the mode chosen for the first group of 12 inputs. Correct module operation requires that each set of three pins have a jumper installed (four jumpers total).

NOTE: When a group of inputs are used with TTL logic, select the SINK operating mode for that group. Standard TTL can sink several milliamps but can source less than 1 mA.



\* 12 Inputs are jumper selectable for 5VDC/12-24VDC and Sink Load/Source Load  
4 Inputs are jumper selectable for 5VDC/12-24VDC and Sink Load/Source Load

