DUAL DIGITAL INPUT MODULES
115V AC/DC M/N 45C40
230V AC/DC M/N 45C43
24V AC/DC M/N 45C44

DESCRIPTION

The Dual AC/DC Input Module contains the necessary interface circuitry between on/off devices such as push buttons, selector switches, limit switches and the logic levels required by the programmable controller. Each Input Module contains the circuitry for two individually isolated input channels. Each channel will accept an AC signal (48/63 HZ) or DC input signal of the specified voltage. The logic will be turned on when the input signal reaches the predetermined threshold. Electrical isolation of the input signal from the logic signal is accomplished by use of photo-couplers.

Two LED indicators are provided for each input channel. The green POWER indicator will be illuminated when the input is switched on. The yellow LOGIC indicator will be illuminated when the logic signal to the control system is turned on. Simply by observing the LED's, it can be determined that a field input signal is present and that the input module is operating properly.

A minimum current resistor on each input insures that sufficient current is drawn through the input device to prevent contact film build up. Filtering is also provided to prevent noise from affecting the module operation. In addition, the filtering acts as a bounce filter assuring that the signal of at least 9.5ms is present. The filtering is located on the logic side of the channel.

Users wiring connects to the terminal strip on the I/O Rail. (Refer to figure 2 for Example of Field Wiring)

A slide-on label is provided with each module to identify the type of module. This label is affixed to the right-hand side of the terminal strip by the User. When the label is installed and the module is removed, the label will be visible and will identify the type module that needs to be replaced.

SPECIFICATIONS

Inputs per module	:	2 channels
Input Module Location	:	Mounted to I/O Rail
Ambient Temp Range	:	0 to 60° (Operational) -20 to 85° (Storage)
Humidity Rating	:	0 to 95% Non Condensing
Response Time	:	9.5ms at 60 HZ
Turn On Time	:	1.5ms after threshold is exceeded
Turn Off Time	:	12.3ms after threshold is removed (AC). 19.3ms after threshold is removed (DC).

Isolation

Optical : 2500 VRMS Isolation between input circuit and logic circuit

Electrical : Each input is isolated from one another.

Frequency : DC or 48-63 HZ

	M/N 45C40	M/N 45C43	M/N 45C44
Voltages			
Nominal AC/DC	115V	230V	24V
On Threshold AC	80V	190V	16.5V
DC	106V	203V	20V
Off Threshold AC	50V	120V	10.5V
DC	80V	165V	14.5V
Max. Input Voltage	132V	265V	28V
Impedance (KILO OHMS)	16K	64K	3K
Dissipation (Watts) (per input)	.83W	1.5W	2W

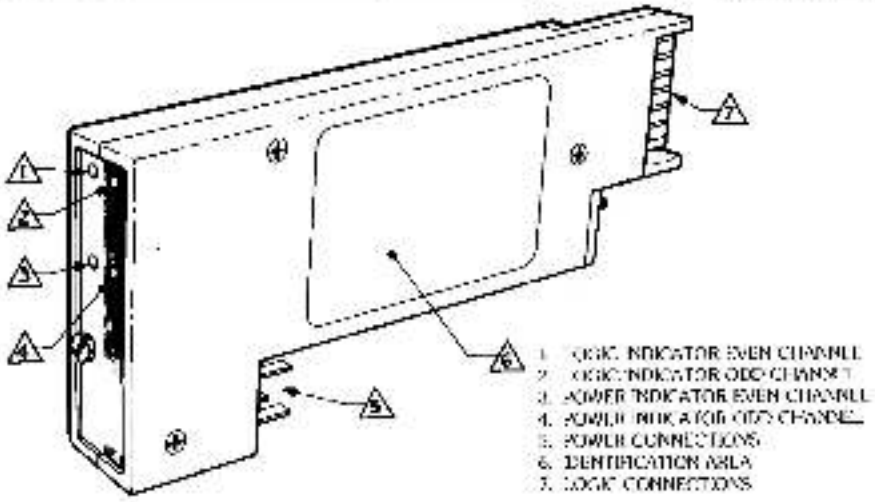


Figure 1

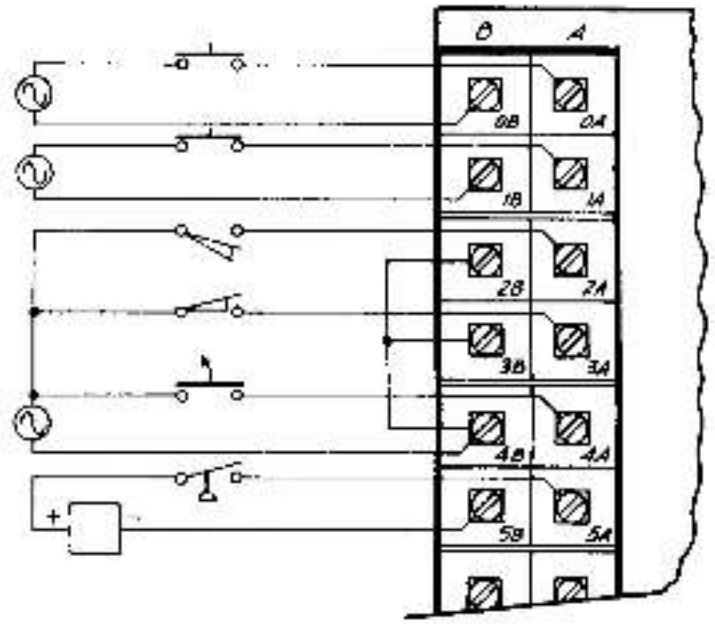
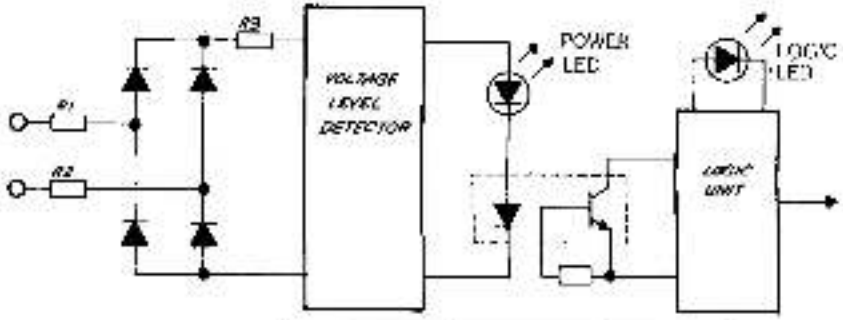


Figure 2



	MIN 48040	MIN 48048	MIN 48048
R1 (ohms)	4.7k	39.2k	100
R2 (ohms)	4.7k	39.2k	100
R3 (ohms)	8.25k	182k	2.49k

Figure 3

For additional information
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