



Data Sheet: DCI-82-242

Description:

The PDC Model DCI-82 dual channel DC isolator is designed specifically to meet the California Department of Transportation, Model 242 specifications. Each channel of the DC isolator shall present a true signal (ground closure) at the output of its optical coupling device when a contact closure causes an input voltage of less than 8 VDC, for longer than 5 milliseconds. A transition from a true to a false signal at the output shall occur when the respective contact closure causes an input voltage of greater than 12 VDC.

All electronics are provided on a single sided P.C. board with an aluminum front panel. The P.C. board is provided with a solder mask, silk screen identifying all component locations and is conformally coated to resist adverse environmental conditions.

Installation:

The DC Isolator integrates with the model 332 cabinet input file. Connector pin outs are as shown in Fig. 1. The connector mates with a Cinch #250-22-30-xxx or equivalent.

Pin	Function	Pin	Function
A	DC ground	N	AC+
B	+24 VDC	P	NA
C	NA	R	NA
D	Input #1	S	NA
E	Input #1 common	T	NA
F	Output #1 (C)	U	NA
H	Output #1 (E)	V	NA
J	Input #2	W	Output #2 (C)
K	Input #2 common	X	Output #2 (E)
L	Chassis ground	Y	NA
M	AC-	Z	NA

FIG 1

General Characteristics:

Model DCI-82-242
 Input:
 True State.....<8 VDC,>5 msec.
 False State.....>12 VDC
 Output:
 Voltage.....30 VDC max (open collector)
 Current.....50 mamp. sink (true state)
 Power:
 Voltage.....230 VACS
 Current.....20 mamp. AC max
 Isolation:
 Voltage.....2500 VAC
 Resistance.....1000 megohm.
 Transient suppression:
 Energy.....50 Joules

Mechanical Characteristics

Length 7.00 IN
 Width..... 1.12 IN.
 Height..... 4.50 IN
 Weight..... 0.70