

Data Sheet: ACI-88-255

GENERAL DESCRIPTION:

The Model 252 TWO-CHANNEL AC ISOLATOR is designed specifically to meet Caltrans Traffic Signal Control Equipment Specifications dated January 1989. Each channel of the Model 252 shall present a true signal (ground closure) at the output of its optical coupling device when a AC signal of +80 +-5 VAC is applied to its receptive input for a period of 100 milliseconds. Each channel is provided with switches, which will invert the output signals. When the switch for a channel is set to invert, the respective channel will maintain a true output (ground closure) until a voltage of +80 +-5 VAC is applied for a minimum of 100 milliseconds at which time the respective output will go false. A transition from false to true will occur when the respective input voltage drops to 70 volts for 100 milliseconds.

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 and is conformally coated to resist adverse environmental conditions.

Installation:

The Model 252 TWO-CHANNEL AC ISOLATOR intermates with the appropriate traffic signal control or traffic management system cabinet input file. Connector pinouts are shown in Fig. 1. The connector mates with a Cinch #250-22-30-xxx or equivalent.

Pin	Function	Pin	Function
Α	DC ground	N	AC+
В	+24 VDC	P	NA
С	NA	R	NA
D	Input #1	S	NA
Е	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	Equipment ground	Y	NA
M	AC-	Z	NA

FIG 1.

General Characteristics:	Model	ACI-88-252	
Input:	Voltage	135 VAC	
	True State	80 +/-3 VAC, 100 msec.	
	False State	70 +/-3 VAC, 100 msec.	
Output:	Voltage	30 VDC max.(open collector)	
	Current	50 mamp sink(true state)	
Power:	Voltage	+24 VDC	
	Current	100 mamp max.	
Isolation:	Voltage	2500 VAC	
	Resistance	1000 megohm.	
Transient suppression:	Energy	50 Joules	
Mechanical:	Length	7.00 IN.	
	Width	1.12 IN.	
	Height	4.50 IN.	
	Weight	0.35 LBS	

Alignment procedure: There is no alignment procedure required for the operation of the MODEL 252 AC ISOLATOR.