



## Data Sheet: ACI-88-252

### Model 252 AC Isolator:

#### **Description:**

The PDC Model ACI-88 dual channel AC isolator is designed specifically to meet the California Department of Transportation, Model 252 specifications. 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, silk screen identifying all component locations and is conformally coated to resist adverse environmental conditions.

#### **Installation:**

The Model 252 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
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	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 AC Isolator.

Adjustments: Input Voltage level pots are factory set for 80 and 70 volts.