

FEATURES

- **Extended Temperature Range**
- **AAR Binding Post Wire Connections**

DESCRIPTION

The Trilogy Products SiRM-4VI-1VO is ideal for use as a track circuit rectifier. The purpose is to drive DC track circuit relays in single rail track circuit applications using DC propulsion. A series resistor is used in the system circuit to ensure that the voltage presented to the relay coil is only enough to energize the relay. This is based on the relay pick up voltage and the length of the wire to the coil. The resistor is selected on site for each track circuit to insure system safety.

This assembly is also available in a power-on indication configuration which accepts 120VAC on the primary and produces 12VDC on the output.

ELECTRICAL SPECIFICATIONS

AC Input Voltage (4VI-1VO) _____ 4V_{AC}
 DC Output Voltage Maximum (4VI-1VO) _____ 1.2V_{DC}
 AC Input Voltage (120VI-12VO) _____ 120V_{AC}
 DC Output Voltage Maximum (120VI-12VO) _____ 12V_{DC}
 AC Input Frequency _____ 50-60Hz
 DC Output Current _____ 300mA
 Electrical Isolation _____ 3750V_{RMS}
 Min Operating Temperature _____ -30 °C
 Max Operating Temperature _____ +70 °C



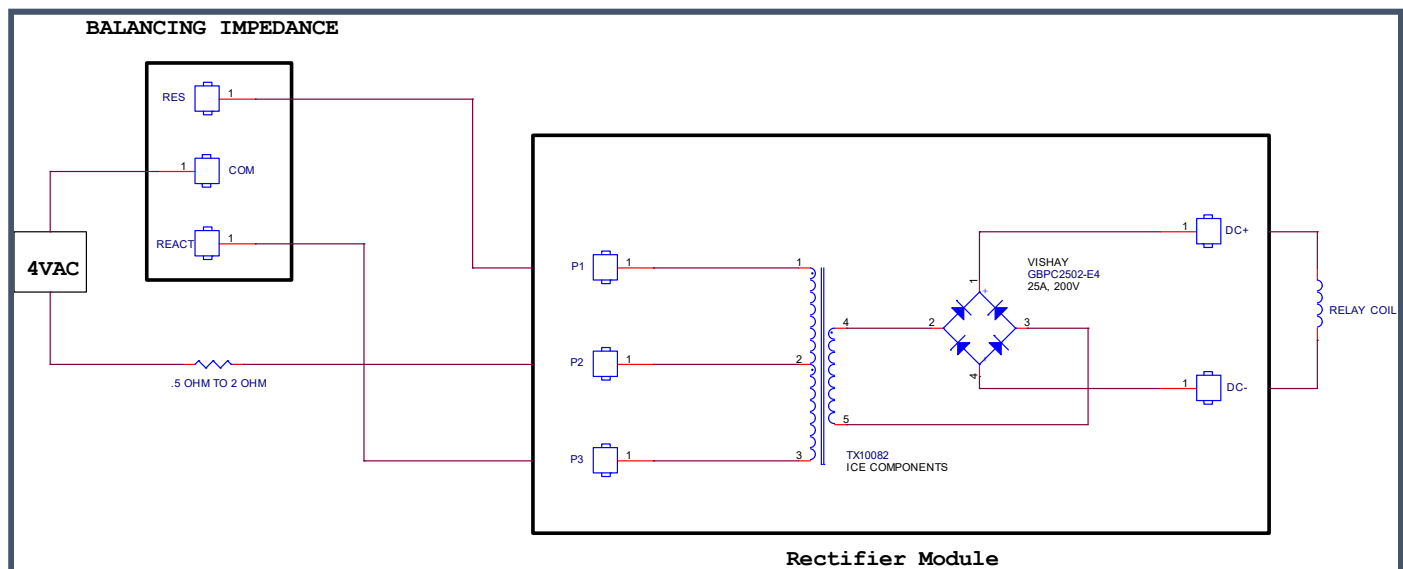
MECHANICAL SPECIFICATIONS

Height _____ 8.5in
 Width _____ 3.5in
 Depth _____ 3in

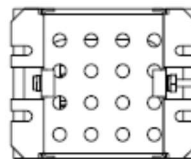
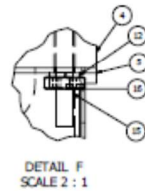
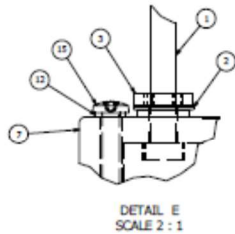
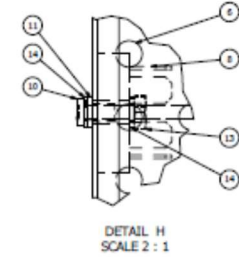
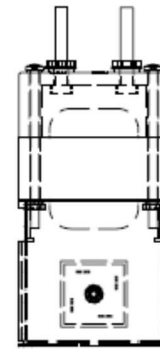
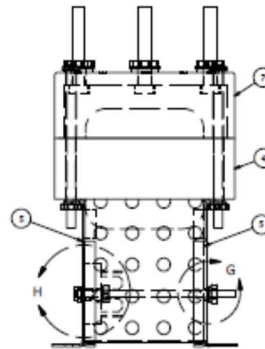
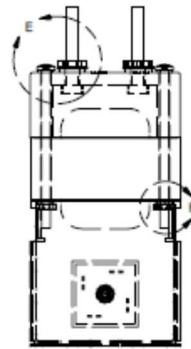
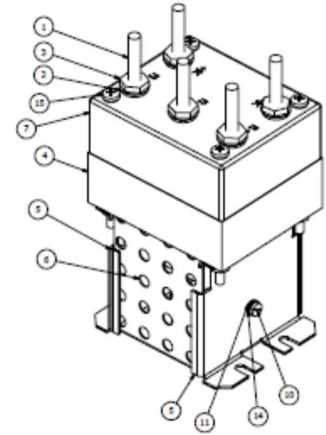
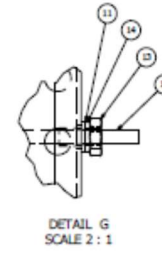
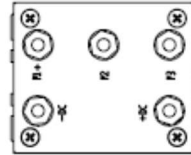
ORDERING INFORMATION

Desired AC Input/DC Output Voltage	Catalog Number
4/1	SiRM-4VI-1VO
120/12	SiRM-120VI-12VO

TYPICAL APPLICATION CIRCUIT



ITEM	QTY	PART NUMBER	DESCRIPTION	STOCK NUMBER
1	1	SC1000382	Thyristor Mfg Co Bolt	711-0113
2	5	SC1000385	Thyristor Mfg Co ANR Washer	600-0543-5-0
3	2	SC1000384	Thyristor Mfg Co Clamp Nut	711-0182
4	1	SC1000276	Transformer - Use Componente T110002	T110002
5	2	SAU000326	Cable End Plate	N/A
6	1	SAU000327	Steel Perforated Sheet .02" Hole Dia, 50% Open Area, 20 GA. (3996)	McMHC 82577941
7	1	SAU000328	Transformer Phasor Block	N/A
8	1	SAU000329	DIODE BRIDGE RECTIFR 15A 200V ZENK	Digi-Key 28P1203-ZW512Z-ND
9	1	SAU000330	HEATPAD RECTIFIER 30P 8.12	Digi-Key 85314E-ND
10	1	SC1000277	#6 x 32 x 3" Zinc Plated	McMHC 91440A161
11	2	SC1000281	Female Unthreaded Round Spacer	McMHC 86952A007
12	3	SC1000315	#6 Lock Washer Zinc Plated	McMHC 91133A795
13	3	SC1000380	Hex Machine Screw Nut #6-32 Zinc Plated	McMHC 96792A007
14	3	SC1000279	#6 Regular Helical Spring Lock Washers #6	McMHC 91133A790
15	4	SC1000286	#6-32 machine screw x 3"	McMHC 96275A209
16	4	SC1000288	#6-32 Nut Zinc Plated	McMHC 96480A009



DATE:	7/23/2010	REV:	
BY:		APP'D:	
CHK:		TRANSFORMER ASSEMBLY	
APPROVED:		REV:	
	D	REV NO:	1
		PART NO:	SIA1000325
		REV:	1