

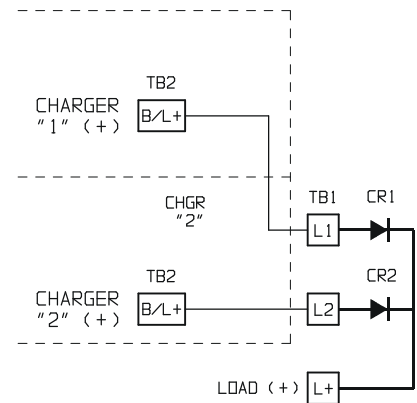
DESCRIPTION

- Applications that require redundant dc power to one critical load often consist of two (2) battery / battery charger sets. When the two systems are tied to a single load, use of the steering diode assembly prevents current from flowing from one dc set (charger/battery) to the other. The diodes "steer" the current from the best dc set to the load. The diode assembly of this system is often called the "Best Battery Selector" or "auctioneering diodes".
- No switching is done, so the complete system is very reliable. The system allows the user to test, remove, or repair equipment and/or batteries without disturbing the dc load.
- The steering diode assembly must be rated to the maximum dc load current expected.
- Without options there are no adjustments or calibration of the steering diode assembly.

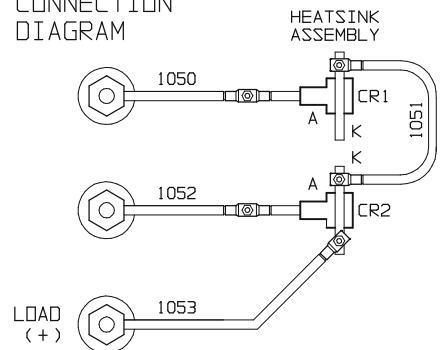
OPTIONS AND ALARMS

- The steering diode assembly can also be equipped with dc meters, alarm relays with indicators lamps, and other options to monitor the dc load voltage and current.
- The voltage rating for the steering diode assembly without options is a maximum voltage. If voltage-based options are added, please specify the number and type of battery cells used.
- Available Options and Alarms:
 - DC LOAD VOLTMETER
 - DC LOAD AMMETER
 - HIGH / LOW DC VOLTAGE ALARM W/IND
 - END OF DISCHARGE ALARM W/IND
 - END OF DISCHARGE DISCONNECT W/ALARM & IND
 - DC LOAD DISCONNECT CIRCUIT BREAKER

SCHEMATIC



CONNECTION DIAGRAM



INSTALLATION

CAUTION: There are dangerous voltages at many points inside the enclosure. When performing tasks inside the enclosure, be sure to disconnect all input power sources and lock out breakers and/or safety switches. After the input has been disconnected, wait a minute for capacitors to discharge to safe levels before performing internal work. Heatsinks, bus bars, and wire terminals carry high voltages. You must use extreme care when working inside the enclosure. You should wear safety gloves while performing this procedure.

Wall Mounting:

- Locate a dry, solid wall surface near the dc load distribution, or near the charger/batteries for easiest cable connection.
- Use 1/4in or 5/16in hardware to wall-mount the enclosure, using the enclosure keyhole slots.
- Standard pre-fab conduit knockouts are provided on the side of the enclosure. However, the top or bottom of the unit can also be used if required.

User Electrical Connections:

- Power wiring to TB1 on the steering diode assembly must be rated for the full dc load current.
- Connect the positive (+) terminals of the first charger/battery set to TB1-1 of the steering diode assembly.
- Connect the positive (+) terminals of the second charger/battery set to TB1-2 of the steering diode assembly.
- Connect the positive (+) dc load to TB1-3 of the steering diode assembly.
- Connect the negative (-) output terminals of the chargers, batteries, and dc load together. If required, and available, use disconnects within this circuit.
- If metering and alarm options are supplied, a 2-position terminal block (TB5) is installed for a negative (-) connection of less than 2 Adc. This signal voltage sense connection typically uses no more than a #14 AWG wire. The positive (+) dc connection for metering and alarm options is internally installed.