DESCRIPTION

- Applications that require redundant dc power to one (1) critical load often consist of two (2) battery / charger sets. When the two (2) systems are tied to a single load, use of the **Best Battery Selector** (or 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. This assembly is sometimes also referred to as "auctioneering diodes".
- No switching is done. Therefore the complete system is very reliable. The Best Battery Selector allows the user to test, remove, or repair equipment and/or batteries without disturbing the dc load.
- The Best Battery Selector must be rated to the maximum dc load current expected.
- Without options, there are no adjustments or calibration of the Best Battery Selector.

OPTIONS AND ALARMS

- The Best Battery Selector 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 Best Battery Selector (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 VOLTOMETER
  - 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

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 user terminals on the Best Battery Selector must be rated for the **full** dc load current.
- Connect the positive (+) terminals of the first charger/battery set to TB1 of the Best Battery Selector.
- Connect the positive (+) terminals of the second charger/battery set to TB2 of the Best Battery Selector.
- Connect the positive (+) "common" dc load to TB3 of the Best Battery Selector.
- Connect the negative (-) of the chargers, batteries, and dc load together. Negative(+) connections **may** pass "through" the Best Battery selector if required, and possible. If required, and available, use dc 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 then a #14 AWG wire. The positive (+) dc connection for metering and alarm options is internally installed.