

## Extra Notes for No-Break DC PSUs

### SR250C, SR500C and SR750C..

#### A. Battery Condition Test Function

1. The BCT function ( if enabled) tests the condition of the battery by lowering the voltage of the power supply and allowing the battery supply the load. If the battery terminal voltage drops to 1.92V/cell (= 46V for a 48V nominal system) then the **BATT SYS OK** alarm will be activated and the LEDs on the front panel flash to indicate a fault condition.
2. The frequency and the duration of the BCT may be specified by the customer depending on the application. For example, this may be 1 hour every 28 days.

In addition, the BCT may be initiated manually by pushing the **BATT SYS OK** pushbutton on the front panel.

3. During battery condition testing the battery condition test relay changes state to indicate that the BCT is in progress
4. Once a battery failure condition is detected the SR.. unit will immediately abort the test and revert to mains input power
5. If the system fails the BCT the LEDs continue flashing and **BATT SYS OK** alarm latches (de-energized state) until **either** both the mains power input and the battery are disconnected briefly **or** the system passes the next BCT.

#### B. Battery Overcurrent Protection Circuit

This allows the battery to supply up to 1.5 times the rated current of the power supply unit. If the battery current exceeds this value the electronic circuit breaker (ELCB) will open and disconnect the battery from the load. The trip time depends on the severity of the overload, eg. Short circuit = 2ms, 6 x PSU rated current = 300ms, 1.5x PSU rated current = indefinite (until low voltage disconnect operates)

Reset is automatic upon removal of the overload.