

## Battery Bank Integrators

The Battery Bank Integrator (BBI) acts as a "smart" switch, connecting independent battery banks only when a charging voltage is present. Otherwise, the battery banks remain isolated, preventing discharge from one bank to another.

The BBI uses a low resistance contact relay causing no voltage drop in the charging system, as the multiple batteries are automatically integrated as a single bank whenever a charging source of approximately 13.3 VDC is present.

When the alternator or charger is off, or a large load causes the voltage to drop below the disconnect point (approximately 12.7 VDC)

The BBI breaks the common tie between the banks. This allows selective battery discharge and prevents "dumping" of a higher-charged bank into a lower charged bank.

A solid state voltage comparator circuit with time delay prevents the BBI from cycling when the battery has voltage transients due to intermittent load demand. A 65 amp continuous duty contactor carries the current between the batteries when connected. An optional override switch may be installed to provide a "boost" for vehicle start when the auxiliary battery has a higher voltage than the main engine battery.



### Product Features

- Enables charging of two separate banks without voltage drop, yet maintains 100% isolation at all other times
- Heavy duty contactor; UL listed, ignition protected, continuous duty rated
- Optional external contactor available for integrating third battery bank
- Voltage sense circuit, epoxy encapsulated
- Aluminum chassis, designed for bulkhead or horizontal mount
- 1/4" nickel;/brass battery connection terminals, with insulating protective cover
- Easy three- wire hook up for two bank systems (BATT +, BATT +, Ground)
- Terminal for optional wiring of remote light indicating when battery banks are integrated
- Optional internal connection can be wired to manual override switch, tying battery banks together for emergency engine start.

### Product Specifications

Model	BBI 12-65
Battery Integration Point	13.3 VDC $\pm$ .2 VDC
Battery Disconnect Point	12.7 VDC $\pm$ .2 VDC
Maximum Continuous Current	65 amps
Intermittent Rating	Connect: 750 amps Disconnect: 100 amps
Power Consumption	8 watts $\pm$ 1 watt connected; .1 watt standby @ 12 VDC
Dimensions	5.25" x 5.25" x 3.5"
Weight	1 lb
Options	Contactor for integrating third battery bank; specify model BBC 12-65

