

BATTERY ACCESSORIES

Battery Protection

Battery Separators (Isolators)

Designed for vehicles / boats / RV's using 2 sets of batteries i.e. Starter Battery & Auxiliary Battery

Allows connection of the batteries in parallel for charging

Provides priority for charging only the starter battery first

Prevents excessive discharging of the starter battery

BS-160 and BS-400 allow forced engaging of the auxiliary battery through external switch to enable paralleling with the starter battery if the starter battery is discharged or damaged

BS-400 has auxiliary dry contact for signalling engaging of the auxiliary battery

Provides better performance than a diode based battery isolator

Easy to install as it does not require changing the existing circuit of the alternator.



● **BS80**
80 Amps
12 VDC & 24 VDC Models



● **BS160**
160 Amps
12 VDC & 24 VDC Models



● **BS400**
400 Amps
12 VDC & 24 VDC Models

Battery Guards

Prevents excessive discharge of batteries

Batteries last longer

Also prevents excessive voltage caused by faulty alternators or chargers

Prevents damage to connected components



● **BG30**
25 Amps
Adjustable for 12 & 24 VDC Systems



● **BG60**
60 Amps
Adjustable for 12 & 24 VDC Systems

FEATURES

- Microprocessor Controlled
- Easy Installation
- Extends Battery Life
- High Efficiency
- Fully Automatic
- 2 Year Warranty
- 12 VDC & 24 VDC Models

see back for complete specifications



BATTERY PROTECTION

BATTERY SEPARATORS (Isolators)

	<u>BS80-12</u>	<u>BS80-24</u>	<u>BS160-12</u>	<u>BS160-24</u>	<u>BS400-12</u>	<u>BS400-24</u>
CONTINUOUS CURRENT	80 Amps	80 Amps	160 Amps	160 Amps	400 Amps	400 Amps
SWITCH ON	13.2 VDC	26.4 VDC	13.2 VDC	26.4 VDC	13.2 VDC	26.4 VDC
SWITCH OFF	12.8 VDC	25.6 VDC	12.8 VDC	25.6 VDC	12.8 VDC	25.6 VDC
STANDBY CURRENT	< 5 mA	< 5 mA	< 5 mA	< 5 mA	< 5 mA	< 5 mA
START CONTACT			Yes	Yes	Yes	Yes
MICRO SWITCH					Yes	Yes
(Remote status indication)						
VOLTAGE STABILITY	← $\pm 2\%$ →					
DIMENSIONS - inches	1.8 x 1.8 x 3.2	1.8 x 1.8 x 3.2	1.8 x 3.6 x 3.8	1.8 x 3.6 x 3.8	3.5 x 4 x 4.3	3.5 x 4 x 4.3
DIMENSIONS - millimeters	46 X 46 X 80	46 X 46 X 80	46 X 93 X 96	46 X 93 X 96	88 X 102 X 110	88 X 102 X 110
WEIGHT - pounds	0.24	0.24	0.66	0.66	2.2	2.2
WEIGHT - kilograms	0.11	0.11	0.3	0.3	1.0	1.0

*** Note - some alternators do not allow a battery isolator between the alternator and the battery**

It is recommended that battery isolators be used in conjunction with inverters when an auxiliary battery is being used

The auxiliary battery is normally isolated (disconnected) from the starter battery. When the alternator is running (or when the external charger is switched on) and putting out float voltage more than the preset "Connect Voltage", a microprocessor controlled relay engages the auxiliary battery and both the batteries are connected in parallel for charging. If the batteries are discharging and their voltage is less than the preset "Disconnect Voltage", the relay disengages to prevent excessive discharging of the starter battery

Provides priority for charging only the starter battery first till it reaches the preset "Connect Voltage"

BS-160 and BS-400 allow forced engaging of the auxiliary battery through external switch to enable paralleling with the starter battery if the starter battery is discharged or damaged

BS-400 has auxiliary dry contact for signalling engaging of the auxiliary battery

Provides better performance than a diode based battery isolator (When a diode based battery isolator is used, the charging voltage of the alternator / battery charger is required to be increased because the isolating diode introduces a voltage drop)

BATTERY GUARDS

	<u>BG30</u>	<u>BG60</u>
MAX. CONTINUOUS LOAD	25 Amps	60 Amps
MAX. TRANSIENT LOAD	40 Amps	80 Amps
OPERATING VOLTAGE RANGE	6-35 VDC	6-35 VDC
CURRENT CONSUMPTION	<7 mA	<7 mA
ALARM OUTPUT DELAY	15 seconds	15 seconds
LOAD DISCONNECT DELAY	1 minute	1 minute
DIMENSIONS - inches	2.0 x 3.5 x 2.7	3.2 x 2.4 x 1.6
DIMENSIONS - millimeters	49 x 88 x 68	80 x 60 x 40
WEIGHT - pounds	0.5	0.5
WEIGHT - kilograms	0.2	0.2

The Battery Guard can be set to connect / disconnect at several different voltages with jumpers

Jumper Selectable Voltages

Disconnect	Connect
10 VDC	11.5 VDC
10.5 VDC	12 VDC
11 VDC	13 VDC
11.5 VDC	13.8 VDC
21.5 VDC	24.5 VDC
22 VDC	25 VDC
22.5 VDC	25.5 VDC
23 VDC	26.5 VDC

APPLICATIONS:

Marine . Automotive . Recreational