



Part Nos.

BS100 - 12/24V 100A

BS140 - 12/24V 140A

Key Features

Auto Voltage Selection (12/24V)

Microprocessor controlled

Good alternative to a Battery Isolator

Loss Free Connection

Easy Installation

Power Surge Protection

Small size

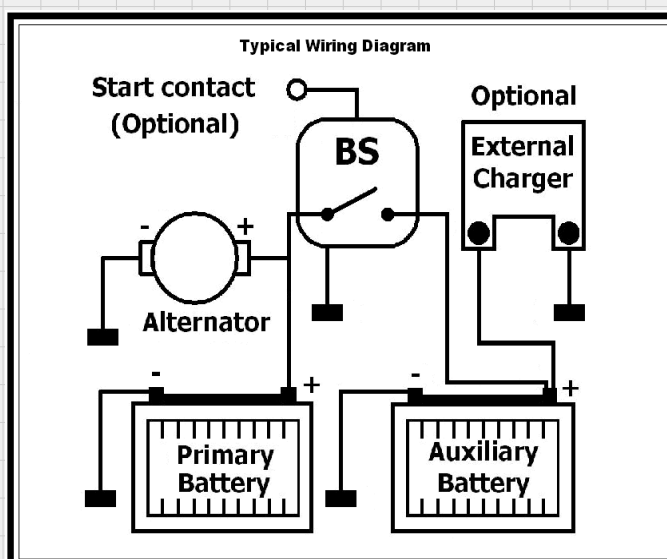
Low power use

About.

Intellitec's Battery Separator is designed for use in situations where 2 batteries are used, for example in emergency services vehicles, leisure vehicles and marine applications.

The battery separator will automatically connect 2 batteries in parallel when one of the batteries reaches the Switch-On voltage, so the other battery will also be charged. When the voltage drops below the Switch-OFF voltage the connection will be broken. This prevents a discharged aux battery taking charge out of the primary (cranking) battery.

The battery separator has the unique feature of sensing voltage from both banks of batteries, this means that if an external charging source is connected to the aux battery when Switch-ON voltage is reached the BS will pass charge to the primary battery also.



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Battery Separator - Waterproof

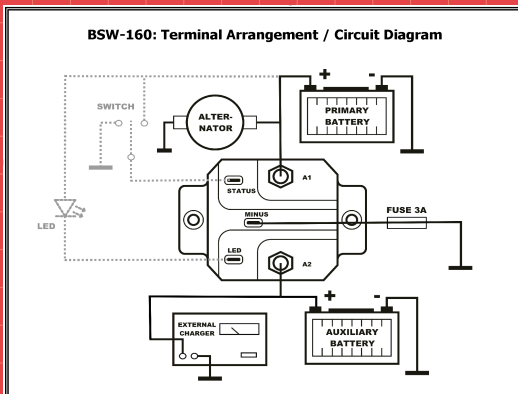


Part Nos.

BSW-160: - 12/24V 160A

Key Features

- Auto Voltage Selection (12/24V)**
- Microprocessor controlled**
- Good alternative to a Battery Isolator**
- Loss Free Connection**
- Easy Installation**
- Power Surge Protection**
- Small size**
- Low power use**
- LED Output**



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About.

Connection:

The BS can be used in situations where two batteries are present, for example in boats, caravans and campers. The BS can also be used as a voltage-dependent switch.

The BS is a microprocessor-controlled high-power mechanical switch. If two batteries are used the BS will 'look' at the voltage of the primary battery. A battery that is not being charged will (in a 100% charged condition) have a voltage of approximately 12.6 V (25.2 V). When the vehicle or a boat is started the voltage will slowly increase to the maximum charging voltage of approximately 14.4V (28.8V). Once the voltage has reached 13.2 V (26.4 V) for a minimum of five seconds the BS switch will close and the auxiliary battery will also be charged. As is usual in boats, caravans etc. all accessories are connected to the auxiliary battery. When the vehicle/boat has stopped, after a while the battery voltage drops and thus the switch opens again. This happens when the voltage reaches 12.8 V (25.6 V) or lower for a minimum of 60 seconds. Therefore the primary battery always remains 100% charged.

Bi-directional operation:

The Battery Separator has a second unique function. If in your application you have a battery charger connected to your auxiliary battery (often the case in boats and campers), once the voltage of the auxiliary battery exceeds 13.2 V (26.4 V) for a minimum of 5 seconds the auxiliary battery is also charged. This is a particular advantage if you remain stationary for a long period. In this case your primary battery also remains in optimum condition and once the charger is removed the switch will open if the voltage drops below 12.8 V (25.6 V) for a minimum of 60 seconds.

Start help contact:

If you wish to make use of the start help option the battery separator has yet another connection. If you connect the start help terminal (Status) via the start switch to the plus terminal, the separator will also switch in the auxiliary battery during starting. Instead of the start switch an optional remote control panel can be supplied.

Voltage-dependent switch:

In some vehicles it is desirable that power is only available via an extra terminal when the vehicle is operating. The BS is also very easy to use in this situation by connecting one terminal (A1 or A2) to the primary battery and the other terminal (A1 or A2) to your accessories. If the battery is now charged the battery voltage will quickly rise above 13.2 V (26.4 V) and the switch will close and the accessories will be powered.

Battery/accessory protection:

All our battery separators have a unique safety system for the auxiliary battery and the accessories. If the generator voltage regulator becomes defective, the charging voltage can rise well above the allowable battery voltage. This can/will damage the battery and the attached accessories. However the BS will immediately open the switch and prevent this unnecessary damage from occurring!

TECHNICAL DATA

10-bits accuracy µProcessor

Supply voltage	Autodetect 12/24 V
Connecting bolts for batteries	M8
Other terminals	6.3 mm spade terminals
Cable recommendations	Minimum 50 mm ² copper wire
Continuous current	160 A
Peak current	480 A/250 msec
Switch-in voltage for 12 V	13.2 V
Switch-in voltage for 24 V	26.4 V
Switch-in delay	5 sec
Switch-out delay	60 sec
Fast switch-off at	11.8 V
Fast switch-off delay	4 sec
Switch-off for overvoltage	16 V for 12 V 32 V for 24 V
Complete relay	Water and gas-tight
Current use, relay passive	1.8 mA for 12 V 2.0 mA for 24 V
Current use, relay active	340 mA for 12 V 170 mA for 24 V
Switch in current use	700 mA max 100 msec
Weight	470 g
Dimensions	(L) 108 mm x (B) 72 mm x (H) 58 mm

Accessories

Remote control with switch and LED indicator