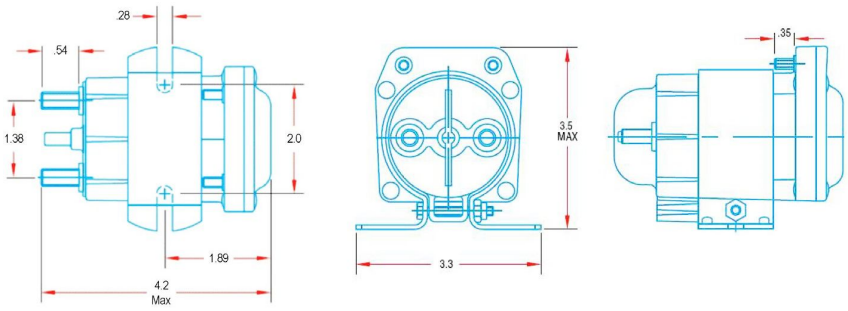
Battery Separator - BAS200-24S

HDM's BAS200-24S Battery Separator is your intelligent charge priority system at sea and on the road.

This product uses a solenoid priority system to control multi-bank charging, assist in on-demand engine starting, and protect respective batteries from excessive drain. Compact and economical, the BAS Series battery separator is the ultimate solution to your multi-bank battery systems.

BAS200-24S Battery Separator will ensure the Main bank is fully charged before charging the Auxiliary bank. BAS200-24S Battery Separator will automatically deactivate during low voltage conditions to prevent the main battery from becoming over drained. Auxiliary Start feature combines the two banks (Main + Auxiliary) for the additional engine starting boost.

Technical Specifications



Mounting dimensions for BAS200-24S. All dimensions in inches unless otherwise

Industry-Leading Features

- High Density
- High Surge Capability
- Intelligent Charge Priority Technology
- Multi-Bank Charging
- Auxiliary Start for On-Demand Engine Startup Boost
- Voltage Transient Protection
- Ignition-Proof Construction
- Easy Installation
- Maintenance Free

Standard Features

- Overvoltage Protection
- Auxiliary Start Function
- Lamp Indicator Signal
- Flange Mounting

ELECTRICAL	
Maximum Operating Current	200A$_{DC}$
Maximum Surge Current	400A$_{DC}$
Battery Voltage	24V$_{DC}$
Solenoid Activate[1] - V_{main} or V_{aux} (Bi-directional)	> 26(±0.3)V$_{DC}$
Solenoid Deactivate[2] - V_{main} or V_{aux} (Bi-directional)	< 22.5(±0.5)V$_{DC}$ for 5 minutes
Overvoltage Protection[3]	≥ 34V$_{DC}$
Minimum Auxiliary Bank Voltage ($V_{aux,min}$)[4]	20V$_{DC}$
Auxiliary Start Signal Voltage[5]	3 ~ 30V$_{DC}$
Maximum Lamp Signal Current[6]	125mA$_{DC}$

GENERAL	
Operating Temperature	-40 ~ +60°C
Storage Temperature	-40 ~ +85°C
Connections	
• DC Positive Main & Auxiliary	5/16" Stud
• Auxiliary Start Signal	1/4" Spade
• Lamp Indicator Signal	1/4" Spade
• Ground	1/4" Spade
Weight	2.4 lbs
Dimensions (LxWxH")	3.3 x 4.1 x 4.1"
Warranty	1 Year

Specifications typical at 25°C unless otherwise stated.

1. Activation of the solenoid will connect the auxiliary bank to the main bank.
2. Deactivation of the solenoid will disconnect the auxiliary bank from the main bank.
3. BAS200-24S battery separators are equipped with an overvoltage protection circuit that will separate the battery banks when high voltage is detected. Unit will auto-recover when voltage is within operating limits.
4. For Auxiliary Start function, solenoid will activate when Vmain < Vaux and Vaux ≥ Vaux,min.
5. Auxiliary Start feature provides on-demand engine startup boost by combining the main and the auxiliary banks.
6. Maximum lamp signal current using 24V$_{DC}$/3W lamp for -24.

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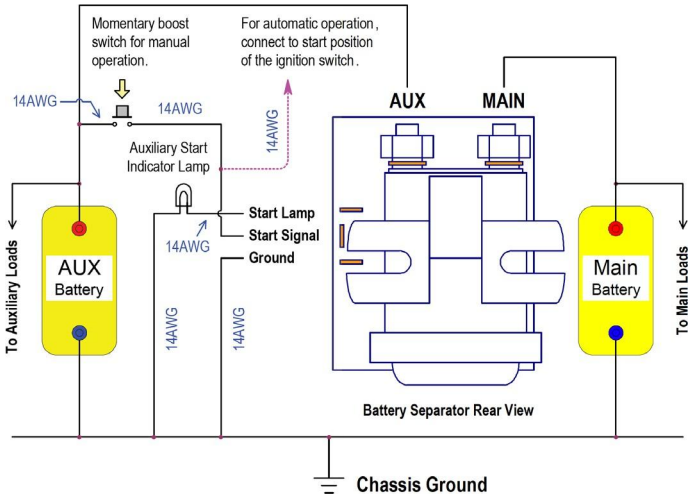
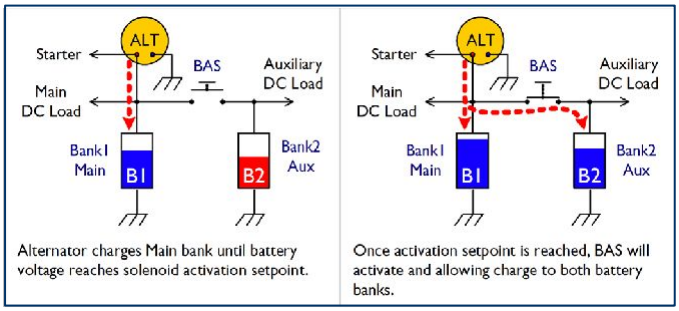
Battery Separator Connection Diagram



MODEL	DESCRIPTION
BAS200-24S	200ADC / 24VDC
Add suffix after model name for product feature.	
S	Uni-directional
D	Bi-directional



Battery Separator Installation Instructions

1. Install battery separator in a location close to the MAIN battery bank. Avoid installing in a location which may be exposed to high temperature such as near the engine.
2. Connect per connection diagram using the appropriate wire size.
3. For the optional automatic auxiliary start feature, connect a 14AWG wire from the start position of the ignition switch to the Start Signal terminal of the Battery Separator. Ignition switch start signal must be above 3VDC in order to provide automatic boost. For manual operation, follow the connection diagram using a momentary boost switch.
4. For the optional Start Indicator Lamp, follow the connection diagram using a 14AWG wire. Start Indicator Lamp will illuminate when the auxiliary start function is activated. Maximum current draw must be less than 125mADC using a 24VDC/3W lamp.

Battery Separator Installation Instructions

1. Verify the operation of the Battery Separator. While the MAIN battery is in charge, the Battery Separator will activate when MAIN battery voltage rises to 25.7~26.3VDC[7] and deactivate when voltage drops below 22~23VDC disconnecting the AUXILIARY battery from the MAIN battery.
2. For the bi-directional version[8], Battery Separator will activate if either the MAIN or AUXILIARY battery voltage is above 25.7~26.3VDC and deactivate when voltage drops below 22~23VDC.
3. Auxiliary start function should be used when the MAIN battery voltage is lower than the AUXILIARY battery. AUXILIARY battery voltage must be above 20VDC and the Start Signal must be above 3VDC.

Specifications typical at 25°C unless otherwise stated.

7. BAS200-24S (24VDC version)
8. Add suffix "D" for bi-directional version of the Battery Separator.

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