



\* Fuse recommended. Please verify directive for applicable installation regarding fuses

## General Information

### Starter battery:

Typically 55Ah to 100Ah for automotive applications.

A start battery should never be deeply discharged

### Alternator:

If the alternator is a "smart alternator" that can adjust voltage level by the engine control module or similar. To get D250SA support a Smart alternator you connect the Red Smart Alternator cable to the ignition.

### Consumers:

**Critical consumers** are connected directly to the service battery bank. A critical consumer could be VHF radio. **Non critical consumers** are connected directly to the consumer output terminal at SMARTPASS 120. If battery voltage reach a critical low level, the consumer output terminal is deactivated to protect the Service battery. Non critical consumers receive current from the alternator instead of the Service battery during driving, to make the charging of the Service battery faster

### Service battery:

Size 40Ah to 800Ah.

Batteries are connected in parallel to increase capacity (Ah).

Suitable deep cycle batteries should be used.

### Fuses:

If fuses are used, mount the fuses as close to each battery as possible.

Suitable fuse size:

D250SA: 30A

D250SA and SMARTPASS 120: 300A

Please verify directive for applicable installation regarding fuses.

### SMARTPASS 120:

Install according to instruction manual.

### Start assistance.

SMARTPASS 120 automatically connects the service battery to the starter battery to assist, if the starter battery on its own is unable to start the engine. After the start assistance function has been activated, SMARTPASS 120 will display a fault indication until starting has been achieved without using the start assistance function.

### D250SA:

Install according to instruction manual.

### Temperature sensor:

Attach the temperature sensor onto the service battery.

### Wiring:

Please see instruction manual for suitable dimensions. Please verify directive for applicable installation regarding wiring.

A thick wire generate less voltage drop than a thinner wire at high current.

### Charge voltage:

You can choose between 14.4V and 14.7V (AGM) on D250SA.

If you not connect the Black AGM cable you get 14.4V

If you connect the Black AGM cable to minus you get 14.7V.