



 $[\]ensuremath{^{*}}$ Fuse recomended. Please verify directive for applicable installation regarding fuses

Date: 2017-12-19 Version: 1.0

Title: SMARTPASS 120 with Charger at Service battery



General Information

Starter battery:

Typically 55Ah to 100Ah for automotive applications.

A start battery should never be deeply discharged

Service battery:

Size 28Ah to 800Ah.

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

Suitable deep cycle batteries should be used.

Temperature sensor:

Attach the temperature sensor onto the service battery.

Battery charger (AC):

When regular discharge on Service battery but not on the Starter battery, a Battery charger is required. Connect the Battery charger on Service battery.

Select a charger that is suitable regarding the capacity of the battery bank and also the requirement of recharge time. A typical charger is MXS25 or M300.

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.

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.

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 drivning, to make the charing of the Service battery faster

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.