

ASC+ Assured Start

AUTO SPLIT CHARGE + EMERGENCY START FROM AUXILIARY BATTERY



The main engine-start battery has been accidentally flattened. . So what do you do? Answer: ASC+ Assured Start. Here the power in the auxiliary battery can be used to start the vehicle.

How? Simply by pressing the dash-mounted switch, the auxiliary battery will be temporarily connected to the starter battery providing enough combined power to start the vehicle, thereby avoiding the disruption normally associated with a flat engine-start battery.

Product Highlights:

- No wasted time
- No loss of operations
- No expensive and inconvenient call outs!

Simple and quick to install, the ASC+ Assured Start provides peace of mind for less than the price of a single call-out!

The unit comprises of a high performance latching contactor, a control box, isolator switch assembly and all connecting looms.

Key features

- Built-in Split Charge
- Built-in Assured Start
- 12V and 24V versions
- No power consumption with fully latching contactor
- Compatible with 250A starter motors
- Auto timed isolation
- Auxiliary system service isolation
- Dual sensing of charge voltage
- Feed for clocks/ICE/central locking etc.
- Push button assured/emergency start
- High intermittent capability up to 1500A
- Illuminated dash-board switch
- Minimal power consumption at all times
- Over voltage battery/load protection
- Battery sensing short circuit protect
- Anti-chatter when charging large batteries
- Customised versions.

Why use ASC+ priority split charging method?

The Antares priority split charge approach uses a battery sensed "switch" to overcome common problems. Being almost 100% efficient and with no voltage drop. This allows the full charging voltage available from standard alternators to recharge the batteries more quickly.

Years ago blocking diodes were used to "split" power between the start battery and the auxiliary battery. In this way the start battery is protected from being discharged by loads connected to the auxiliary battery and vice versa. This is the origin of the term split charge

This apparently simple approach does have several inherent disadvantages – unlike relays, diodes lose precious charging voltage, particularly important in cold



FM 37786
ISO 9001:2008

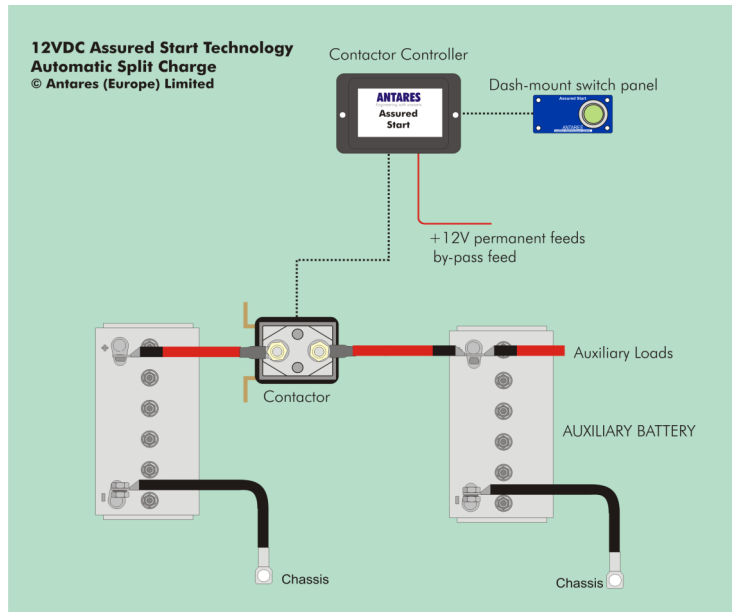
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weather.

Diodes are also incompatible with some electronic regulators which require direct battery connection to operate correctly.

Another commonly used approach uses the alternator D+ feed to detect the running of the alternator and join the batteries. This approach does not check to see if the alternator has sufficient capacity, and is therefore unsuitable for applications which run auxiliary loads whilst the alternator is running.

The “D+” system cannot recognise charging/power supplies from shore lines or other on-board generators.

How it works

The module consists of a latching heavy duty contactor controlled by a remotely mounted micro-processor. The system is automatic in operation, but can be controlled manually to provide assured starting, provided that there is remaining capacity in the

auxiliary battery.

Voltage Protection

The system protects by continually monitoring the voltage on the primary system and will automatically disconnect if excessively high voltages are detected. This protects both the auxiliary battery from gassing and any voltage sensitive loads from damage from an alternator or on-board charger fault.

Installation

A complete set of parts is supplied. The contactor can be conveniently located close to the battery positive post connection and interrupts the power cable to the auxiliary loads. The control module is located close to the control switch in the cab.

Customised versions

The controller contains a micro-processor and can be programmed with different operating regimes to suit different applications. We can also configure the hardware to meet specific OE manufacturing requirements. Please contact applications engineering to discuss your particular requirements.

ASC+ Range

This unit can be installed on its own as a single function module, or twinned with other ASC+ modules to offer a range of power management functions such as battery isolation, engine start protect, low voltage protection of battery, deep discharge protection against sulphation.

Antares offer a facility to pre-wire the equipment into customized packages which save installation time, helps with future servicing and is supported as a system by Antares throughout its life on the vehicle.

SPECIFICATIONS				
Part number	90907	90908	90917	90918
System voltage/current	12V/125A	12V/250A	24V/125A	24V/250A
Permanent feed	3A continuous 8A short term peak			
Contactor rating	125A continuous 950A peak	250A continuous 1500A peak	125A continuous 950A peak	250A continuous 1000A peak
Contactor connections	power: M8 studs	power: M10 studs	power: M8 studs	power: M10 studs
Controller dimensions	120mm x 70mm x 30mm (flange mounted)			
Contactor dimensions	97x50x38mm (excl mount)	152x55x70mm (excl mount)	97x50x38mm (excl mount)	152x55x70mm (excl mount)