

# Charge ahead with the Smart Start® BCDC

Take charge of your auxiliary batteries with the Smart Start® BCDC.

If the distance between your start and auxiliary batteries is significant, the voltage drop across a long cable run can be enough to prevent your auxiliary battery ever reaching a 100% charge.

The Smart Start® BCDC is a three stage, 12V, 20A charger that operates from any input voltage between 9V and 32V DC.

Simply install the Smart Start® BCDC as close as possible to your auxiliary battery and forget about any voltage drop.

If it's worth having a second battery, it's worth protecting it with the Smart Start® BCDC.

## Primary features and benefits

- Compact in size and easy to install
- Saves you money by maximising battery life
- Suitable for harsh and marine environments
- Suitable for charging from 12V or 24V electrical system inputs
- Ensures you won't have a flat start battery
- Provides you with safety and security



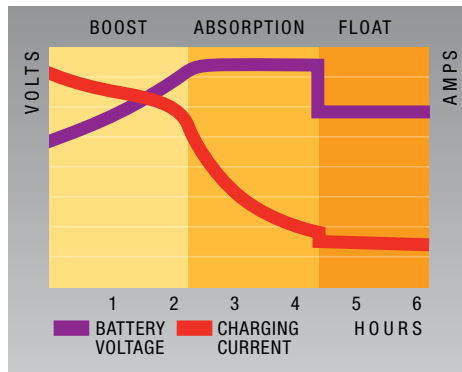
**REDARC**®  
THE POWER CONVERSION SPECIALISTS

The Smart Start® BCDC is a three stage, 12V, 20A, DC-DC battery charger that operates from an input between 9V and 32V DC. It is designed to charge any commonly used automotive battery to 100%.

The input voltage of the Smart Start® BCDC can be above, below or equal to the output voltage making it ideal for charging an auxiliary 12V battery from a 12V or 24V system where the distance from the main battery may cause a significant voltage drop.

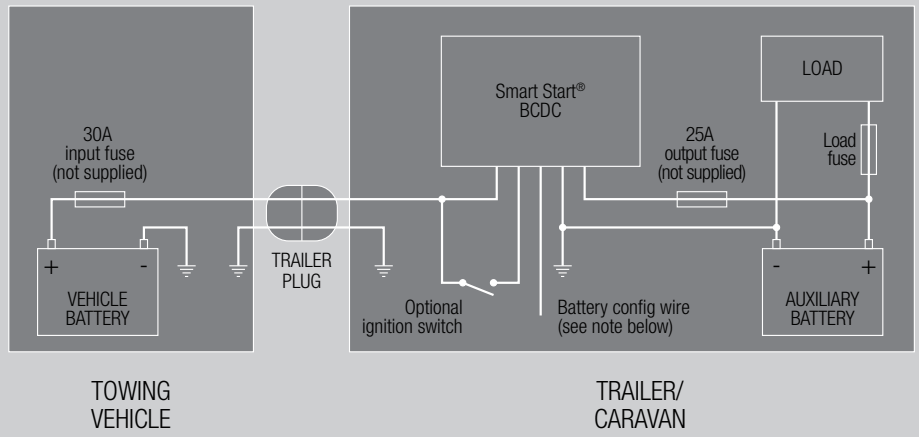
### Three stage charging

The Smart Start® BCDC is a three-stage battery charger, those stages being *boost*, *absorption* and *float*.



The three battery type settings available enable optimal charging profiles for the specific battery chemistry.

The voltage level, current output and time spent in each of the three charging stages is determined by the battery chemistry. By tailoring the stages to the particular battery type, the Smart Start® BCDC is able to achieve 100% charge in your auxiliary battery.



The battery type is set by connecting the battery type configuration wire to either ground, positive supply or left unconnected during installation. The Smart Start® BCDC will check the status of this wire on power up and display the selected battery type via the LEDs on the unit.

#### Battery type configuration wire (orange) connections

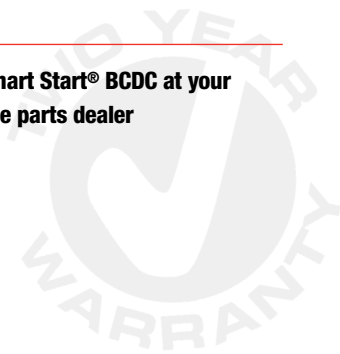
Battery type	Connection
Standard lead acid	Ground
Calcium content	Positive supply
AGM or GEL	Not connected

#### Specifications

Part number	BCDC1220		
DC input voltage range	9V-32V		
Recommended battery type	Gel/AGM	Standard lead acid	Calcium content
Maximum voltage	14.4V	14.7V	15.0V
Float voltage	13.3V	13.3V	13.3V
No load current	< 100mA		
Standby current	< 5mA		
Input fuse rating	30A (Not Supplied)		
Output fuse rating	25A (Not Supplied)		
Output power(max)*	300W		
Efficiency	Typically 95%		
Weight	450g		
Dimensions	100 x 120 x 37mm		
Standards	C-Tick, AS/NZS CISPR11:2004 (CISPR 11 ED.4.1)		
Warranty	Two years		

\*Output power is dependant on installation.

See the Redarc Smart Start® BCDC at your nearest automotive parts dealer



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