

Merlin DC/DC BATTERY CHARGER



Smart Regenerative Charging Systems (SRCS) do not charge batteries in a conventional manner. Instead of the vehicle alternator operating continuously, it only switches on during peak load periods; Upon coasting and over-run, energy is harvested from the brakes, fly-wheel, drive-shafts and other moving parts. In order to make the system operate properly, battery state of charge and charge voltages are kept low - meaning that conventional charging systems cannot operate in all charging scenarios.

The Merlin Abso DC/DC Charger was designed as an easy to install Solution to the above - especially where vehicles are used for short journeys or in congestion where start/stop systems are continuously activated.*

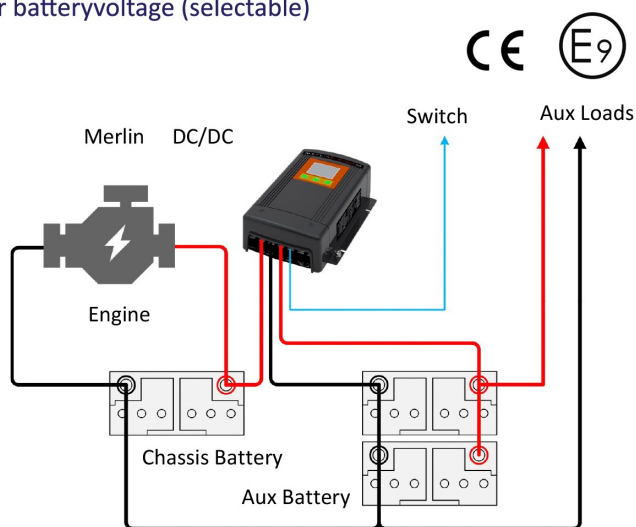
*Note that numerous Euro 6 vehicles still operate in a conventional manner and are best suited to Merlin SmartBankSplit Charge solutions -speak to an engineer at Merlin for guidance.

- Continuously rated (Output) at 30 and 50 amps.
- 4 Stage Smart Charging for Lead/Acid, Gel, AGM, HighCalcium and Lithium-Ion Batteries—plus custom charge profiles.
- Easy programming & monitoring using built in front panel(optional remote panel available)
- Can be automatically activated by ignition feed or battery voltage (selectable)

Installation Example:

No modifications to existing chassis wiring required (maintains vehicle warranty and integrity of OEM system). DC/DC Charger sits between engine and auxiliary battery—it can operate automatically (via sensing) or with a switched ignition feed (recommended for SRCS Systems).

When used with the ignition feed, the unit will stay connected for longer (when voltage reduces during SRCS mode or stop/start activated) but will ensure enough power remains in the chassis battery to ensure reliable engine starting.



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PART	12 VOLT		24 VOLT
	04-6002	04-6003	04-6004
OUTPUT CHARGE CURRENT (BULK, MAX)	30A	50A	30A
CHARGING VOLTAGE RANGE	10.5V - 16V		21 - 32V
BATTERY/ ALTERNATOR INPUT VOLTAGE	12V or 24V (AUTO RANGING)		
OUTPUT PROFILE (CHARGER)	4 STAGE SMART CHARGING		
OUTPUT PROFILE (POWER SUPPLY - PROGRAM SETTING)	CONSTANT POWER SUPPLY		
NUMBER OF OUTPUTS	SINGLE OUTPUT		
BATTERY TYPE ADJUSTMENT	LEAD/ACID, GEL, AGM, LI-ION, CUSTOM		
EFFICIENCY	ALL MODELS >90%		
POWER CONSUMPTION	<10mA		<5mA
PROTECTION	THERMAL, SHORT & OVERLOAD		
BATTERY TEMPERATURE CHARGING VOLTAGE COMPENSATE	YES		
E-MARK CERTIFICATION	YES		
DIMENSIONS (LxWxH) mm	242 x 172 x 74		
WEIGHT (KG)	2.7	2.9	

Accessories:

The Merlin ABSO DC/DC charger has manual temperature compensation (Cold/Warm/Hot), however, the unit can automatically adjust charge voltage for temperature by using a remote probe - ideal for batteries in vehicles and engine rooms with large temperature variations. A remote display is also available for remote control and monitoring of the device.

Beware Ratings!

Merlin always provides continuous output ratings at 20 degrees celsius. Competitive unit specifications often mislead by quoting 30 minute or, input current ratings. Be aware that all power-conversion products de-rate as the ambient temperature increases. Consult with a Merlin Engineer for guidance if required.

Four Stage Battery Charging

