

RCB+

Battery Coupler

3 Warranty 3 years

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Presentation

The RCB+ Charge Relay is designed to couple a starting battery and the house battery when the alternator is ON either in 12VDC or 24VDC. The coupler has the ability to limit the current flowing from the alternator to the house battery in order to protect the charge of the starting battery. The current limitation flowing to the house battery is fixed (50 or 80A) or can be set with a rotary encoder from 50 to 120A with the RCB-ADJ-120A model.

Always keep at least 30% of the alternator current to charge the starting battery.

This unique charge relay can be used with heavy duty alternators up to 200A. Its innovating technology based on low frequency switching mode offers stabilized output charge current and protection against reverse voltage to avoid dammages to alternators.

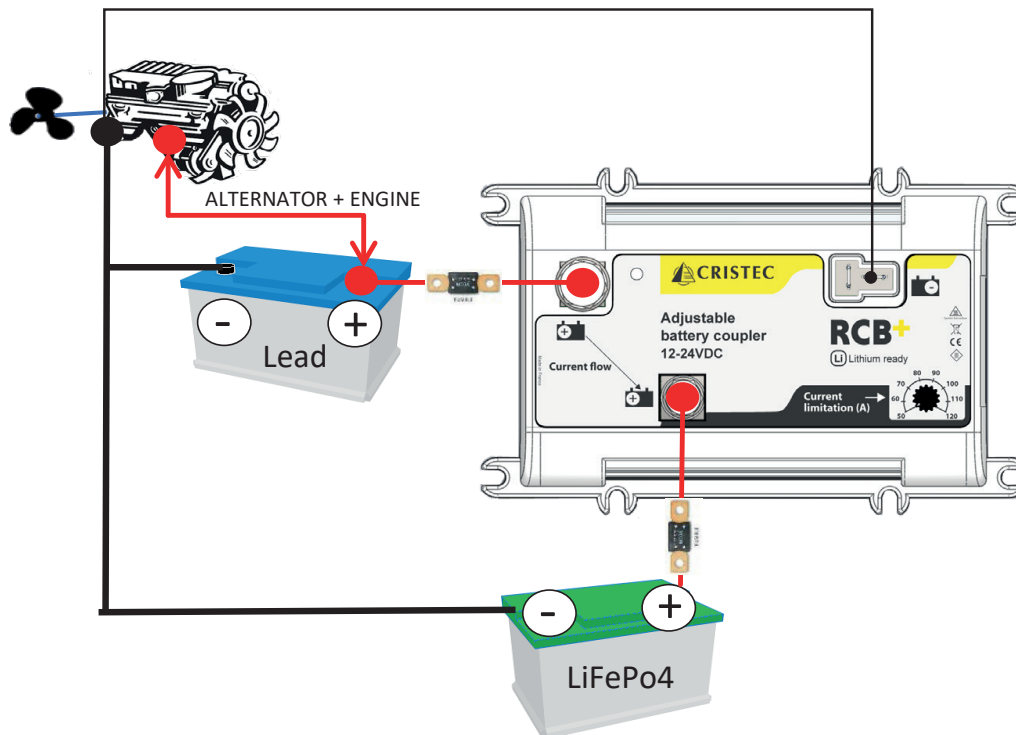
Coupling and decoupling principle

12 VDC	Input		Output
Coupling	> 13V for more than 90s	&	10,5V
	or		
	>13.6V for more than 30s	&	10,5V
Decoupling	> 16V		
	or		
	< 12.4V for more than 10s		
	< 12.7V for more than 30s		

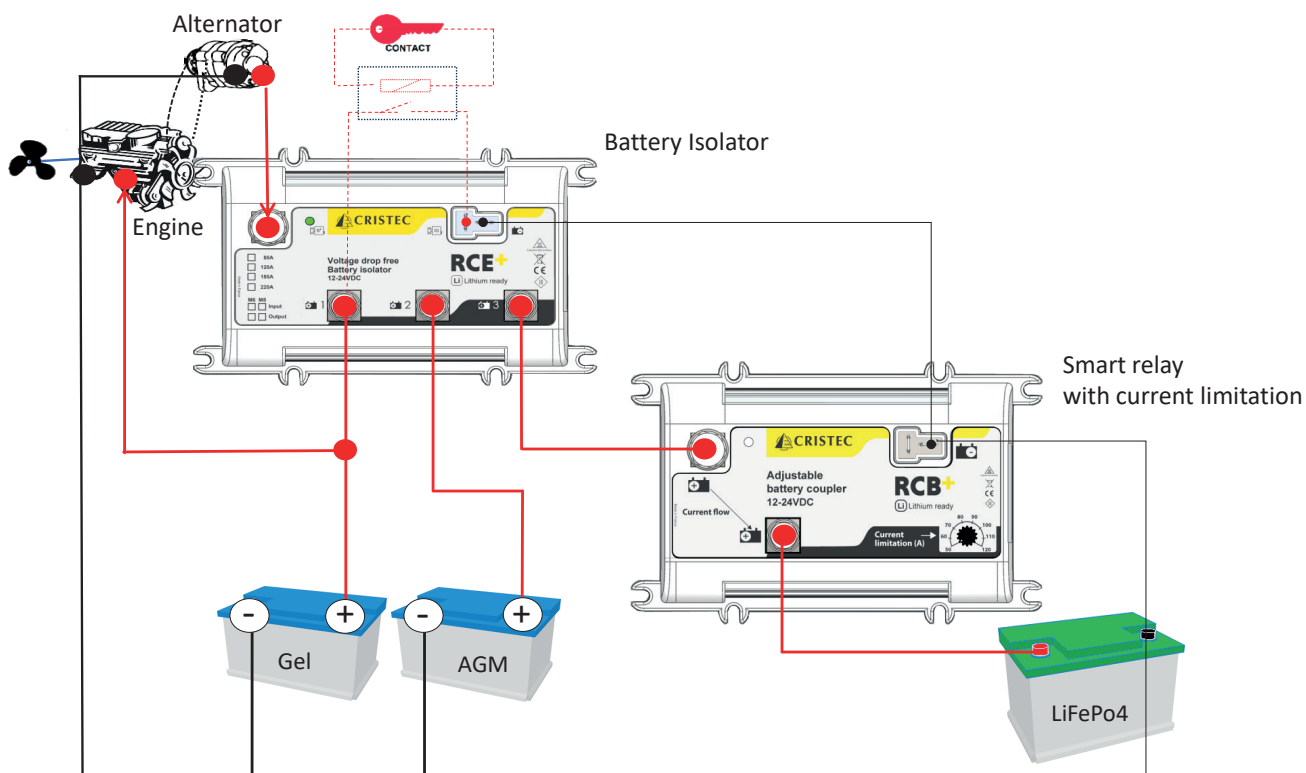
24 VDC	Input		Output
Coupling	> 26.0V for more than 90s	&	21V
	or		
	>27.2V for more than 30s	&	21V
Decoupling	> 32V		
	or		
	< 24.8V for more than 10s		
	< 15.4V for more than 30s		

Part number	RCB-ADJ-120A	RCB-50PL	RCB-80PL
Maximum current to the house battery	Adjustable (50 to 120A)	50A	80A
Input			
Input voltage tolerance	From 8VDC to 32VDC		
Voltages	12VDC or 24VDC		
Protection current decoupling	200A +/-10%		
Outputs			
Both size Input & Output	2 x M8		
Ground isolation	>500VDC		
Maximum voltage drop	0.2VDC		
Environment			
Cooling	Natural (Fanless)		
Operating temperature	From -25°C to +65°C (-13°F to 149°F)		
Consumption	1.2mA@12V / 0.9mA@24V		
Casing			
Length, height, depth	159 x 100 x 36 mm (6,25 x 3,93 x 1,41 in)		
Weight	0,45kg (1 lb)		
Standards			
RoHS Compliant / IEC60335-1 / ISO8846 (Ignition protected)			

Typical installation



Typical installation with various types of batteries



RCB+ smart relay limits current to the lithium battery from the RCE+ battery isolator.