Battery coupling relay RCB+ fixed current 50A



Réf : **RCB50PL**

The RCB+ battery coupling relay provides secure and efficient energy flow management between a starter battery (lead-acid) and a service battery (LiFePO4) in 12 or 24 VDC systems. It limits current up to 200 A, with adjustable settings from 50 to 120 A for the service battery, ensuring optimal alternator protection and balanced charging.

Classic delivery

Public price TTC
155.87 €

CARACTERISTICS

BATTERY COUPLING RELAY RCB+ FIXED CURRENT 50A

Réf. **RCB50PL**

Dangerous material : non
Weight : 0,45 kg.
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- Dimensions : 159 x 100 x 36 mm
- Dimensions (LxWxH) : 159 x 100 x 36 mm
- Nominal current : 50 A
- Consumption : 1.2 - 0.9 mA
- Charge current : 50 A
- Maximum current : 50 A
- Length : 159 mm
- Model : Fixed current
- Standard : RoHS / IEC60335-1 / ISO8846/SAE J1171 compliant (Protected against ignition)
- Weight : 0.45 kg
- Depth : 36 mm
- Height : 36 mm
- Width : 100 mm

SPECIFICATION

The RCB+ battery coupling relay is designed to address the challenges of simultaneously using lead-acid starter batteries and Lithium (LiFePO4) service batteries in embedded electrical systems. This relay ensures optimal energy management by providing a secure connection between the two types of batteries while protecting critical system components, especially the alternator.

The RCB+ can handle up to 200 A of current from the alternator, with current limiting functionality between the alternator and the service battery. The adjustable version of the relay allows users to set the current between 50 and 120 A, offering flexibility to meet specific system needs. For instance, for a 110 Ah alternator, setting the limit to 70 A for the service battery is recommended to preserve the starter battery while optimizing service battery charging.

Its compact and lightweight design makes it suitable for installation in harsh environments. The low-frequency switching technology ensures stable charging current and provides reverse voltage protection to safeguard the alternator from damage. Additionally, on the RCB-ADJ-120A model, the selection dial can be removed for safety or maintenance purposes.

In certain systems, the RCB+ can also replace a DC-DC charger, providing a cost-effective and efficient solution for managing interconnection between different types of batteries. It is ideal for marine, automotive, or solar applications where precise energy flow management is essential.