

# Bistable disconnecting relay

## Operating principle

Disconnecting relays consist of an electronics running a high current (max. 100A) relay, which disconnects the battery connected to its input from the battery/consumer connected to its output when it is necessary.

Bistable disconnecting relay ensures that the system doesn't load the battery when it is not in use because the consumption is appr. 1mA. During change of state it takes only impulse-like current meanwhile switching from one stable state to the other.

## Function:

### ***Charging disconnecting***

Keeping the starting ability of the starter battery in a 2-batteries system.

Ensures the charging of both batteries during charging.

Disconnects the 2 batteries when they are not under charging. (12,8 V and 25,6V)

In assistant mode the well charged secunder battery can help the primer battery during starting.

### ***Prevents against deep discharge***

Restrains discharging of the battery below 11V and 22V by the consumers.

Types:

	Switch on	Switch off
.LK-BI_11,0V	12,4V	11,0V
.LK-BI_12,8V	13,4V	12,8V
.LK-BI_22,0V	24,8V	22,0V
.LK-BI_25,6V	26,8V	25,6V

## ***Startbooster***

In each case when the voltage of the starting battery falls below 11-6,7V eg. during starting, the relay connects the 2 batteries for 30 sec.. Necessary condition of the connection is the voltage drop within 0,5 sec must be more than 1V and the voltage of the secunder battery must be above 12V before the connection. If you experience that the primer battery cannot start the engine with the right speed, wait for 2 minutes and start the engine again. This time the 2 batteries will start the engine together. After 30 sec the relay disconnects unless the generator increases the voltage of the primer battery above 13,4V, because in that case the relay switches in charging mode: the batteries will have been charged.

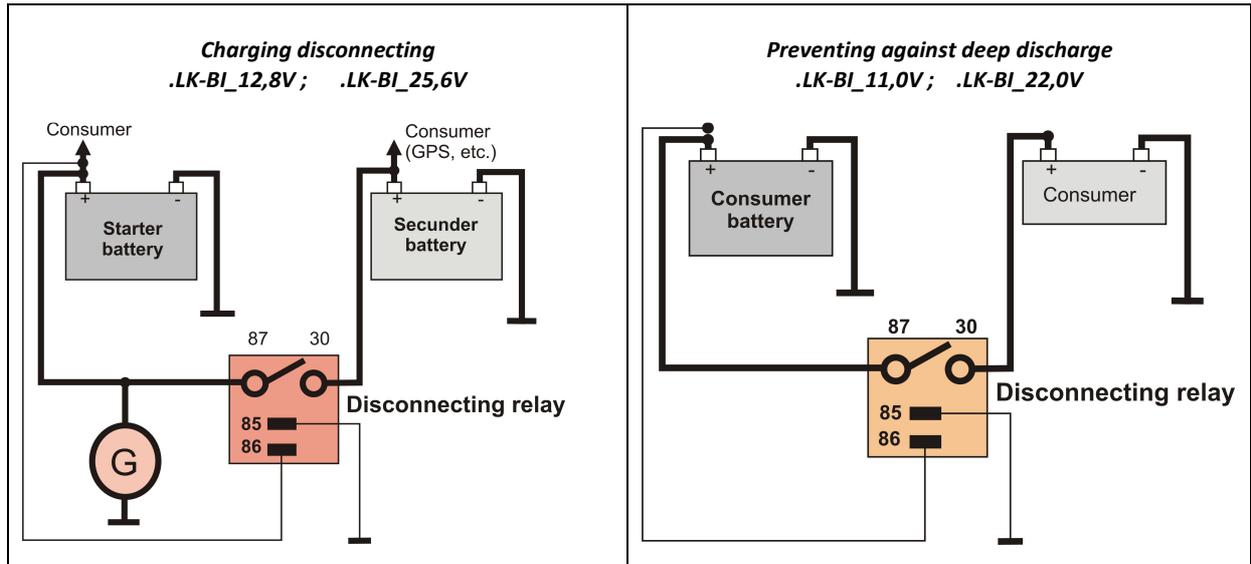
## Technical data:

Nominal voltage:	12V	24V
Max. switching current:	100A	80A
Continuos duty:	80A	60A
Switching voltages:	See above table	
Accuracy:	±0,1V	
Size:	45×45×75mm	
Weight:	10dkg	

***Current consumption: 1mA***

**Installation:**

Please follow the below drawings to install the disconnecting relay.



When wiring please take care of the right cross-section which depends on the current and lenght of the wire.

Due to startboosting the cable between the primer and secunder battery should take at least 100-120A.

**IMPORTANT! During installing take care of vibration-proof fixation!**

