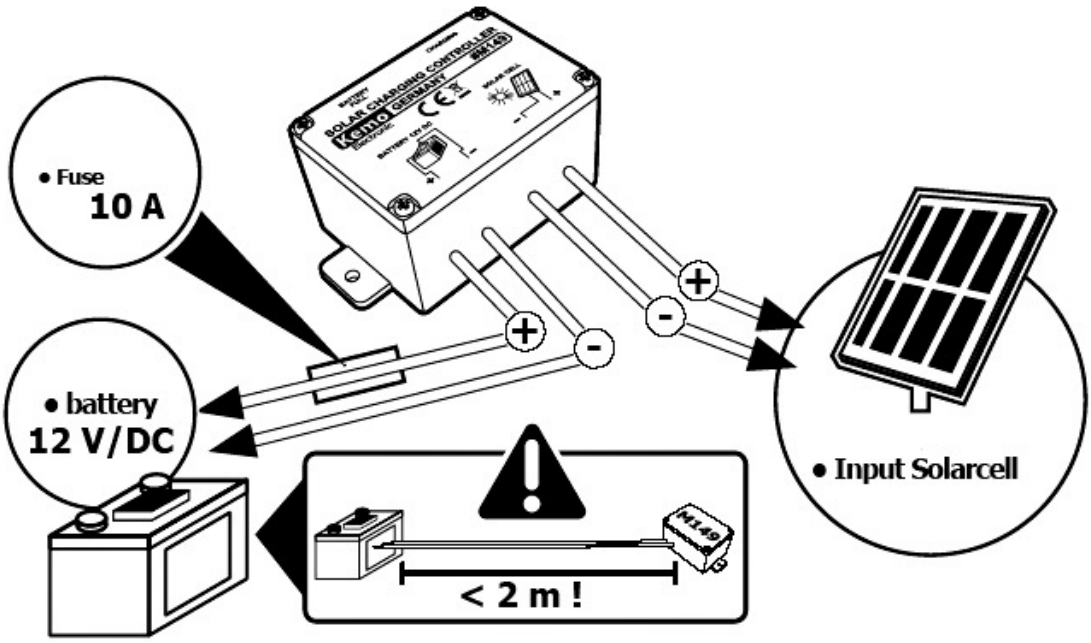
KEMO M149 Solar Charge Controller

Description

The KEMO M149 solar charge controller is connected between a 12 V/DC solar cell (open circuit voltage 14 - 30 V/DC) up to a maximum current of 6 A (80W solar panel) and a battery 12 V/DC to prevent an overcharging of the battery. LED displays for „battery full" (approx. 14.4 V/DC) and "charging".up. This module is an electronic switch which switches on the connection to the solar cells if the battery is empty and switches off again when the battery is fully charged. A MOSFET transistor that switches almost loss free is used as circuit element. The module should be mounted as close as possible to the battery or bank of batteries to be charged (ideal: max. 500mm). The cross section of the cable between the charging controller and battery should be at least 1,5 mm². Only connect solar cells up to a total power of 80 W as current source! Do not use stronger current sources and no transformers, battery chargers, batteries, wind generators, etc. A10A fuse must be connected in the lead between the battery and charging controller (not included)! After wiring everything according to the drawing and description, the device is ready for operation. When the battery is being charged the LED "CHARGING" lights up. If the battery is fully charged, the LED "BATTERY FULL" lights up. If the battery is empty (< 13.4 V) and is not being charged (the solar cell does not work, perhaps no solar radiation), no LED will light up.



Features

- Input voltage from solar panels: 14 - 30 V/DC open circuit voltage
- Nominal voltage: 12 V/DC
- Max. input current: 6 A, intermittent up to 5 min: 10 A
- Cut in voltage: battery voltage < approx. 13,4 V
- Cut out voltage: battery voltage > approx. 14,4 V
- Displays: 1 LED for “CHARGING”, 1 LED for “BATTERY FULL”
- Own power consumption: < 2,5 mA (LED switched on)
- Dimensions: approx. 72 x 50 x 42 mm (without fastening lugs)

Kemo® Electronic