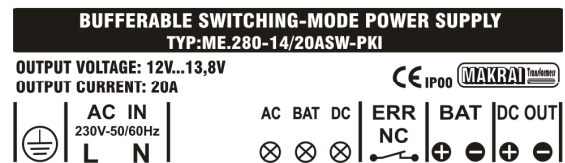


WARNING!

Touching of mains connector is dangerous after plug in this device. The device **MUST** be grounded to reduce risk of electrical shock. Ventilation should be insured for the device.

Input and output connectors and indicators of the device:



Usage of the device, choosing of the operating mode:

The device operates either as a battery charger or as a power supply. It detects automatically the presence of battery after connecting to the mains. If a battery is connected it operates as a battery charger, if not, it operates as a power supply. Attention! Before placing back the lid check the proper connection of the cooling fan.

1. **Battery charger**

Connect the output **BAT** to the battery and output **DC OUT** to the load. The output voltage is 13.8 V at both contacts, max. current is 20 A. At the design of the load please pay attention to the current of the charger, this is determined by the loadability of the charger. The total load at the outputs **BAT** and **DC OUT** can be max. 2 A or 4 A which can be selected by a jumper inside. In this mode of operation the device tests the battery in every 20 seconds. If any kind of error occurs a relay cuts the connection at **ERROR** output. An error message is sent to the system with delay according to the sheet below. The reason of failure can be known by the signals of the LEDs. Please pay attention to the right polarity! Plug the mains voltage to the input contact **AC IN 230 V 50/60 Hz**.

The meaning of the LED signals. In power supply mode the battery signals do not work.

LED signal state	LED not light	Error message	Delay
Mains OK: AC continuous	No power:	ERROR yes	20 s
DC output OK: DC continuous	No DC output:	ERROR yes	20 s
Battery OK: BAT continuous	Battery is flat:	ERROR yes	20 s
Battery change: BAT flashing		ERROR yes	20 s
System overheating: AC DC BAT flashing		ERROR yes	0 s
Power on self test: AC DC BAT + Fan		ERROR no	2 s

The device charges the battery automatically (according to I-U characteristic), there is no need to any intervention. In case of mains power cut the device prevents the deep discharge or failure of the battery by switching off the load at below 10.5 V battery voltage. After returning of power the charging process starts. If the charging voltage reaches 12.5 V on the battery the loading is reconnected. This solution is working with safe and avoiding possible trouble.

2. **Power supply mode (no battery is connected)**

Application example: supply of 12 VDC cameras

Connect the mains voltage to the input connector **230 V 50/60 Hz**. Adjust the output voltage by potentiometer installed inside the device to 12 V measured by a multimeter. Max. loading current is 20 A. In this operating mode the charger and deep discharge function are not in operation.

Specifications:

Input: 230 V ±10% 50/60 Hz

Output voltage: 12 V to 13.8 V

Max. current: max. 20 A

Error contact max.load: 30 V 100 mA

Insulation class: I.

Protection: IP 00

Max. ambient temperature: -10 °C...+50 °C

Dimensions (WxDxH): 145 x 95 x 52 mm

Built-in protections against:

Overloading, short-circuit, overheating, deep discharge