

ME.280-14/20ASW-PKI BUFFERABLE POWER SUPPLY USER'S MANUAL
280 W-12 VDC / 13.8 VDC

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.

1. Usage of the device, choosing of the operating mode

The device can be operated either in **UPS** or **PS** power supply mode. It detects the presence of the battery automatically. If a battery is connected before the device is connected to the mains **UPS** operating mode is selected. Without battery connection it operates in **PS** mode. The device has **ERROR** output contact which breaks in case of error. The **STATE** LEDs show the actual operation.

2. UPS buffered operating mode (default)

A) It is advisable to check DC network without battery

B) Connect the battery in switched off state and after switch on to the mains

Connect the output **BAT** to the battery and **DC OUT** to the load. The output voltage is 13.8 V at both contacts. Charging current can be set by jumper being inside the box. The upper cover can be removed by slightly pushing the lower part. Pay attention to the proper polarity! Plug the mains voltage to the input **AC IN 230 V 50/60 Hz**.

The meaning of LED signals. There is no battery signals in PS mode!

LED lighting state			LED not light	Error message	Error 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 need:	BAT	flashing		ERROR yes	20 s
System overheating:	AC DC BAT	flashing		ERROR yes	0 s
Switch on test:	AC DC BAT + Fan			ERROR no	2 s
Battery test in UPS mode:	20 s	repeatedly			

3. Operation of deep discharge

The load is switched off if battery voltage is below 10.5 V.

The load is switched on if battery voltage is 12.5 V (battery is charged).

4. PS power supply mode (no battery connected)

Adjust the output voltage by potentiometer installed inside the device between 12 V. Connect **DC OUT** to the load. Max loading current is 20 A. Plug the mains voltage to **AC IN 230 V 50/60 Hz**. In this operating mode the battery test and deep discharge function are not in operation.



Specifications	Protections
Input: 230 V $\pm 10\%$ 47...63 Hz 2.22 A Insulation class: I. Protection: IP 00 Rated power: 280 W Output voltage: PS 12 VDC to 13.8 VDC Output voltage: UPS 13.8 VDC Loading current: PS 20 A Loading current UPS: Low 17 A or High 15 A Charging current: Low – 2 A or High – 4 A Recommended battery: 12 V/18 Ah to 60 Ah Error contact: max 30 VDC – 100 mA Max ambient temperature: -10 °C...+ 40 °C Dimensions: L=145 W=95 H=52 (mm) Weight: 0.46 kg	<u>AC input</u> Mains impulse overvoltage <u>DC output</u> Overloading (OLP) Short-circuit (SCP) Overheating (OHP) Overvoltage (OVP) Deep discharge (UVP) Reverse polarity (RCP)