

Operating instructions for Avansa 500 W backup power supply

Thank you for purchasing this power and trust in AVANSA®. Please read carefully the instructions for installation and safe use

This product belongs to a group of professional UPSs specially designed and manufactured to continuously supply boilers for solid fuels in the event of a main power failure. In the event of a power outage, the backup power supply (UPS) provides instantaneous power from the battery, so the water pumps will keep running and the boiler will cool down safely.

WARNING! It is only a safety device that is used only in the event of a power outage.

This system can be used to ensure the operation of other electrical appliances that require stability and stable electrical energy parameters. This product should not be used as a converter (with unlimited 12 V battery operation).

The main feature of this device is the input power of a battery-powered curve. The curve is a pure sinusoid, identical to the main power source of your home. When the main energy from your home is turned on, the backup source will charge the battery and ensure long battery life. The Backup (UPS) works only with an external 12V battery (for a 1050W model with a 24V battery). Only a lead-acid battery type should be used, as the backup source is designed to charge this type of battery. Use of gel batteries may cause explosions.

WARNING! Be careful when handling the battery. Attach metal objects (such as bracelets, chains, watches, rings ... etc) when attaching a backup source. Due to the fact that the electrical current can be short-circuited and the metallic material can be subsequently discharged to the consumer's body. When connecting the battery, keep polarization: the red (+ positive) cable will be connected to the terminal + battery and the black (-negative) wire will be connected to the terminal terminal -. The metal connectors are used to connect the cable to the battery terminals. Tighten the connector using the key to secure the fixed contact. Also observe all the rules in the battery user manual.

Install the UPS in a dry place, free of humidity, out of reach of water or snow. The location of the UPS must be large enough to prevent the backup system from cooling. In addition, this site should be free from dust and coal dust that could block the back-up fan. At the installation site, it should be well ventilated to prevent overheating. To avoid electrical shock, ensure that all cables are in good condition and free of isolation. Running and UPS may cause sparking. The backup source should not be installed in flammable environments.

WARNING! The UPS only works when it is connected to an external battery. It should not be used without connecting the battery. After the battery is plugged in, plug the main power cable into a power outlet (230V, 50Hz) with grounding from the mains mains. On the back of the power supply, connect the device that you want to work in the event of a power failure. Follow these steps: connect the battery, connect the main power supply, and then connect the consumer (device) to a backup power source (UPS). To turn on the power, press and hold the power button (ON / OFF) for 4 seconds.

Operation starts with automatic battery voltage detection. If the battery voltage falls below 10.8V, it may be assumed that the battery is damaged and can not be started. If the battery is OK and the battery is not charging after

for a longer time, please charge the battery with a special charger until the voltage rises to 10.8V. Normal operation and battery level can be monitored on the LCD color display.

When there is no main energy or if its parameters are not within the normal range, the backup source (UPS) automatically switches to the battery. Switching the backup battery to the battery is displayed on the Backup UPS (UPS) display. The device (UPS) announces the switching of the backup battery (UPS) to the battery as well as the audio signal.

When the battery voltage drops below the minimum value (the battery is discharged), the backup source (UPS) will increase the frequency of the warning sound and disconnect the power.

If the device that is connected to the UPS (Power Supply) exceeds the maximum power by 110%, the Backup UPS will start delivering an intermittent acoustic signal and close automatically. For inductive devices (eg, water pumps and electric motors), it is recommended to use a device up to 50% of maximum power from a UPS, as inductive devices may need a double startup power.

WARNING! Danger! Do not touch the battery terminals during operation.

If you want to stop the backup source (UPS), hold the ON / OFF button for 4 seconds. The backup source then emits a beep and stops. To extend the life of the battery, it is recommended to perform a battery empty and full charge cycle at least once every 2 months. Perform this operation even if there were no outages within 2 months and the battery was still fully charged.

WARNING! It is only a safety device that is used only in the event of a power outage. When using this unit, please do not leave it near the fuel.

Main features:

- If the backup source (UPS) heats the cooling fan is automatically controlled as required by the UPS. You do not have to worry if you hear the fan running, even if the battery is fully charged or there is no electricity consumption. The fan automatically switches on and off as required by the emergency power supply (UPS).
- Grounding: The UPS stops in the event of leakage of the battery. If the battery is discharged to 10.8V, the backup power supply disconnects the power supply to prevent battery damage. The high-speed alarm sounds: - Overload protection: If the UPS load exceeds 110% of the rated power, the UPS stops to prevent destruction.
- Short circuit protection: The UPS stops in case of a short circuit. - Voltage regulator (AVR) ensures a constant voltage for the devices at a given interval. Turn on the battery: the system switches to battery and provides continuous power for the device. -Property Bypass: If the electric motor requires more power to start, it is necessary to add a difference. – Microprocessor: All functions are supported by a high frequency microprocessor (32 bit).
- Automation: Unless the main switch is a suitable network, the backup source automatically switches to the battery. - Conversion to start a job: In some cases, a higher startup power is needed than the rated power of the UPS. In this case, the UPS will resolve this problem by delivering 110% of its capacity. After shipping, it shuts down.

- High charging current: The initial charging current is about 10A. It charges the battery in shorter time than normal chargers.
- Keeping the battery in standby mode: When the battery is fully charged, the backup power supply (UPS) keeps the battery charged. To achieve optimal results, the battery must have a capacity in the range of values: 50 Ah -150 Ah. Do not use a battery with a capacity of less than 50Ah, as the initial UPS (up to 10A) can reduce the life of the battery. For a backup power source (UPS) of 1050W / 1500, you need to use a 24V battery or two 12V batteries. If you use two 12 volt batteries, it should be batteries that are of the same age and the same capacity.

Below you can find theoretical values for new, fully charged and high quality batteries.

For 100W consumption:

- a backup source (UPS) with a 65 Ah battery will work for 3.5 hours.
- a backup power supply (UPS) with a 120 Ah battery will work for 6.5 hours.
- a backup battery (UPS) with a battery of 150 Ah will work for 8 hours.

For 200W consumption:

- a backup power source (UPS) with a 65 Ah battery will work for 2 hours.
- a UPS with a 120 Ah battery will work for 3 hours.
- a backup battery (UPS) with a battery of 150 Ah will work for 4 hours.

For 300W consumption:

- a backup power supply (UPS) with a 65 Ah battery will work for 1.5 hours.
- a backup source (UPS) with a 120 Ah battery will work for 2.5 hours.
- a backup battery (UPS) with a 150 Ah battery will work for 3 hours.

Maximum capacity	500VA 800VA 1000VA 1500VA
Maximum rated power	300W 500W 700W 1050W
Main Input Power Supply	150 – 270 VCA
Input frequency	45 – 65 Hz
Output power	207 – 241 VCA
Input frequency	50 – 60 Hz
Switching time	<4ms
Battery capacity	12V DC / 24V DC (for 1050 W)
Overload protection	110% 130% (30 seconds)

A problem	Possible cause	What to do
The UPS does not start, the LCD does not work	ON button not pressed down Battery not connected Backup (UPS) has burnt fuses	Press the ON button for 4 seconds Connect the battery Replace the fuses
The backup battery only works on the battery	The main power cord is broken Fuses are burned The main power source is below 160V or above 260V The UPS is damaged	Replace the cable Replace fuses Check the power contact Repair or replace the backup source
A fast beep	Overload The battery is discharged	Disconnect the device Replace or charge the battery
The backup battery (UPS) only works for a short time on the battery	Batteries are exhausted due to intense work or not charging correctly during use Batteries are old or damaged	Let the backup battery (UPS) charge the battery Replace the battery