

# Digital Rectifier

## Models: 270.60 60A / 15V

Impulse Power Supply -Precision current & voltage regulator. Self-restore internal short circuit protection  
Works under maximum loads for extended periods-Dual voltage 110 V/ 230 V 50-60 Hz

### User's manual

Features

#### 1. General specifications

- INPUT: 115 V AC, 5 A max., 60 Hz; 230 V AC, 2,5 A max., 50 Hz
- OUTPUT: 15 V DC, 60 A max Efficiency not less than 80 %
- Short circuit protection self-restoring after elimination of short circuit
- Range of operating temperatures + 5 C min, + 40 C max
- Overall dimensions 295 x 230 x 130 mm
- Mass 2.8 kg max

#### 2. The mode of voltage stabilization

- Display of operating conditions - light, green
- Range of output voltage adjustment - 1,2 V min, 15 V max
- Precision of output voltage adjustment - 0,1 V
- Amplitude of output impulse voltage - 1..5% max
- Instability of output terminal voltage (Depends on time and external factors) - not more than 1 %

#### 3. The mode of current stabilization

- Display of operating conditions - light, red
- Range of output current adjustment - 0-60 A
- Precision of output current adjustment - 0,1 A
- Amplitude of output impulse voltage under maximum load - not more than 2%
- Instability of load current (depends on time and external factors) - not more than 1,5 %

### Basic Operations

#### Connecting to AC source

1. Place the PS on horizontal, stable surface avoiding direct sunshine.
2. Place the PS at least 10 cm away from the walls for good air circulation.
3. Check the correspondence of the position of input voltage value switch to the specifications of AC circuit, to which you connect the PS.

**In case there is no such correspondence the Power Supply may be damaged.**

**Do not use the DC or another AC which does not correspond 110-120 V or 200 – 240 V, 50-60 Hz.**

4. Put the AC cord into the socket on the backside of the PS.

#### “ON”

Check the correspondence of the position of input voltage value switch to the specifications of the network.

1. Plug the AC cord into the outlet.
2. Connect the load to the output terminals with the help of DC cable.
3. Put the voltage and current regulators into the extreme left position.
4. Put the power switch into the position “ON”.

#### Voltage stabilization mode

Check the correspondence of the position of input voltage value switch to the specifications of the network.

1. Plug the AC cord into the outlet.
2. Connect the load to the output terminals with the help of DC cable.

3. Put the voltage and current regulators into the extreme left position.
4. Put the power switch into the position "ON".

#### **Current stabilization mode**

1. Put the current regulator into the maximum left position;
2. Put the voltage regulator into the maximum right position;
3. Set the switch "CURRENT LOAD" in the "OPERATING" position;
4. Set the necessary value of current which is flowing through the load, on the appropriate digital indicator with the help of current regulator. The current indicator constantly shines (red arrow);
5. If necessary set maximum possible value of the current in the external network. To do this put the switch "CURRENT LOAD" in "LIMITING" position and set the maximum possible value of the current in the external network on digital indicator.

#### **"OFF"**

1. Put the voltage and current regulators into the extreme left position.
2. Switch off the power switch ("OFF" position).
3. Switch off the clamps of DC cord from the load.
4. Take the plug out of the outlet.

#### **Troubleshooting**

1. When switched the voltage and current indicators do not light up
  - 1) Check if there is power in the network current indicators do not light up
  - 2) Check the connection of AC cord in the outlet
2. When adjusting voltage and current the indicator does not change the value (constant "0").  
Check the connection of the cord to the load
3. When set, the current does not stay in current current stabilization mode (red arrow switches off and green arrow lights up).  
The load does not correspond to the given value of voltage and current

#### **WARNING:**

##### **For your safety, follow the Precautions:**

1. Do not expose the Power Supply to rain or moisture
2. Do not remove the cover
3. Do not place Power Supply in direct sunlight or near heating source
4. When unplugging the unit from the AC outlet, hold the plastic part.  
Do not jerk the power cord and hold the metal part
5. Do not block the ventilation holes. Place the Power Supply at least 10 cm ( 4 inches )  
away from the walls or other obstacles, that may restrict air circulation
6. Do not stand on or place heavy objects on the Power Supply.  
Use Power Supply in flat stable position only
7. When Power Supply is not used for an extended period –  
disconnect the AC cord from the AC outlet