

# OPERATION MANUAL



**NEO R 500**

**NEO R 600**

**NEO R 850**

**NEO R 1000**

### ***Thanks for your purchasing the SVEN Automatic Voltage Regulator!***

Please read this operation manual before using the unit and retain this operation manual in safe place for future reference.

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#### **UNPACKING**

Unpack the device carefully. Make sure there are no accessories left in the box. Check up the device for damages; if the product was damaged during transportation, address the firm which carried out the delivery; if the product functions incorrectly, address the dealer at once.

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## 1. DESCRIPTION

NEO R 500/600/850/1000 Automatic Voltage Regulators (AVR) are designed to protect your electronic equipment from unstable mains voltage. Over- and undervoltage and pulse interferences prevent electronic equipment from normal operation and can easily damage it. NEO R 500/600/850/1000 is suitable to protect all types of TVs, DVD players/recorders, audio and PC equipment and other home electronic appliances. Its operating principle is based on discrete regulation of the input voltage. NEO R 500/600/850/1000 AVRs provide power supply to the connected load within  $220\text{ V} \pm 10\%$  at mains voltage ranging from 150 to 280 V. If input voltage increases over 280 V or falls lower than 150 V, the AVR will provide safe switching. The built-in surge protector provides protection from pulse interferences.

## 2. SAFETY PRECAUTIONS

- Do not connect the AVR to 380 V power mains.
  - Do not operate the AVR in the environment with temperature other than allowed in Technical Specifications.
  - The case heats up during operation. Operate the AVR in the environment with good air convection only.
  - In case of emergency, switch off the AVR and unplug the power cord.
  - The socket for connection should be located close to the device and be easily accessible.
  - Do not open the device or make repairs by yourself.
  - Do not connect household appliances with power higher than allowed.
- ⚠ Connection of electric heating devices is forbidden.



**Caution! High voltage inside! To avoid the risk of electric shock do not open or touch elements inside.**

## 3. PACKAGE CONTENTS

- Automatic Voltage Regulator — 1 pc
- Operation manual — 1 pc
- Warranty card — 1 pc

## 4. SPECIAL FEATURES OF NEO R 500/600/850/1000 AVR

- Auto voltage regulation
- Microprocessor control
- Wide range of input voltage
- Short circuit, overload and overheat protection
- Built-in surge protector
- LED indication of operating modes

## 5. INSTALLATION AND OPERATION GUIDE

- Connect the load to output sockets of the AVR.
- Connect the AVR to a 220V power line.
- Switch on the power switch. The indicator built into the switch will light up. «Стабилизатор» (Regulator) LED will light up for a short moment, and «Перегрузка» (Overload) and «Сеть» (Line) LEDs will be on during the whole self-testing.
- After a 10-second self-testing, «Перегрузка» (Overload) LED will go off, «Сеть» (Line) LED will light up and the voltage will be connected to the output sockets. If «Перегрузка» (Overload) LED doesn't go off after testing, it's forbidden to operate the AVR until the trouble is shot.
- When the AVR operates to boost or buck input voltage, the «Стабилизатор» (Regulator) LED lights up.
- In case of overload or short circuit at the output, the AVR will disconnect voltage supply. After the cause of overload is removed, switch on the AVR again by pressing the power switch.
- If the input voltage increases over 280V or falls lower than 150V, the AVR will be disconnected, and «Перегрузка» (Overload) LED will be on.

## 6. TROUBLESHOOTING

Problem	Cause	Solution
The AVR does not work.	<ol style="list-style-type: none"> <li>1. The power switch is off.</li> <li>2. There is no voltage in the mains socket.</li> <li>3. Too much load is connected.</li> </ol>	<ol style="list-style-type: none"> <li>1. Press the power switch again.</li> <li>2. Make sure there is input voltage.</li> <li>3. Disconnect a part of load.</li> </ol>
The AVR is on, «Перегрузка» LED does not go off and there is no output voltage.	<ol style="list-style-type: none"> <li>1. Failure of the testing scheme.</li> <li>2. The AVR is faulty.</li> </ol>	Switch the AVR off and on again. If the problem is not solved, address a service center.
The AVR emits repeated clicks, though «Стабилизатор» LED lights up.	The input voltage is very unstable.	It is normal. The AVR is regulating the output voltage.
The AVR has disconnected the load. «Перегрузка» LED is on.	The input voltage is too high.	When the input voltage reaches 150–280 V, the AVR will resume its operation.

If none of the above methods can solve the problem, please seek professional advice at your nearest service center. Never attempt to repair the product yourself.

## 7. TECHNICAL SPECIFICATIONS

Parameter/Model	NEO R 500	NEO R 600	NEO R 850	NEO R 1000
Load carrying capacity, VA/W	500/280	600/300	850/450	1000/500
Fuse, A	4	5	6	8
Input voltage, V	150 – 280			
Input frequency, Hz	50			
Output voltage, V	220 ± 10%			
Output frequency, Hz	50			
Maximum energy absorption, J	320			
Input socket, pc	1 × CEE7/4			
Output socket, pc	2 × CEE7/4		2 × CEE7/4 + 1 IEC 320	
Indicators	on-line operation, voltage overload, stabilization			
Protection	over-/undervoltage, high-voltage pulses, short circuit, overload, built-in thermal protection			
Operating environment	0-40°C, 10-90% humidity, non-condensing			
Dimensions, mm	118 × 112 × 106		124 × 124 × 119	

### Notes:

- **Technical specifications given in this table are supplemental information and cannot give occasion to claims.**
- **Technical specifications are subject to change without notice due to improvement of SVEN production.**

## Automatic Voltage Regulator

**SVEN**®  
YOU WANT – WE CAN



### Моделі: **NEO R 500/600/850/1000**

Імпортер в Росії: ООО «СКАНДИТРЕЛ»,  
111024, РФ, г. Москва, ул. Авиамоторная, д. 65, стр. 1.  
Уполномоченная организация в России: ООО «РТ-Ф»,  
105082, г. Москва, ул. Фридриха Энгельса, д. 75, стр. 5.  
Условия гарантийного обслуживания смотрите  
в гарантийном талоне или на сайте [www.sven.fi](http://www.sven.fi)  
Гарантийный срок: 24 мес.  
Срок службы: 5 лет.  
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### Моделі: **NEO R 500/600/850/1000**

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