

# USER'S MANUAL

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## AUTOMATIC VOLTAGE REGULATOR

*Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL*



Thank you for choosing a **WELL** product. Please read carefully the following instructions and keep them within reach.

**Please read and save this manual!**

Thank you for selecting this smart automatic voltage regulator (AVR). It provides you with a perfect protection for connected equipment.

This manual is a guide to install and use the AVR. It includes important safety instructions for operation and correct installation of the AVR. Should you have any problems with the AVR, please refer to this manual before calling customer service.



**This symbol gives information regarding the points important for user's own health and safety, AVR operation and the safety of your data.**



**This symbol gives information, warnings, and other suggestions.**

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### 1. Important Safety Instructions

This AVR has been designed to provide all the necessary safety conditions needed to protect electronic office equipment including information systems. In case of any questions, refer to your authorized technical service representative.

- In order to avoid any damage to the equipment, it is advised to transport it in its own packing.
- In the event of sudden temperature changes such as from cold to the normal working temperature, mist can form inside the AVR. It is absolutely essential that the AVR be dry before switching it on. Due to this reason wait for at least 2 hours before operating it.
- Once it's dry, make sure you observe all the conditions in the environment section of the technical specifications table, before introducing it into the circuit.



***Earth cable should be chosen concerning the current capacity. All units' earth connections, which are connected to AVR, should be done with this earth cable. Without earth connection or unproved earth connected units are dangerous for user health and have high risk of electronic circuit board faults. When installing the AVR to use cable with improper diameter can be dangerous for user's health and safety of the unit.***

- Place all the cables in a proper place so that they are not stepped on or get caught into people's feet. Before connecting the AVR to the circuit makes sure you carefully read all the instructions and warnings in the "Installation" section of this manual.
- Don't drop any foreign materials (like clips, nails etc...) into the equip- ment.
- In emergencies (damage to the cabinet, front panel, or mains connections, splashing of liquid dropping of any foreign materials into the equipment) switch-off the AVR, pull out the plug and inform the authorized service center.
- Do not connect any loads to the AVR, which exceed its power range.
- When input distortion or resistance is too high, AVR may not work properly.
- Keep the packing for maintenance or moving.
- Wiring must be tight, to prevent falling off and oxidation.



***The AVR can only be repaired by the authorized technical service personnel. Any attempt to open and to repair by the user on his own could prove to be dangerous.***

Intended for installation in a controlled environment.

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- a. The controlled environment should accord with the requirement of the specification.
- b. Do not install or operate your AVR in or near water.
- c. Do not place AVR on an unstable cart, stand or table.
- d. Do not place AVR under direct sunlight or close to heat emitting sources.
- e. Do not place AVR power cord in any area where it may get damaged by heavy objects.



**Placing magnetic storage media on top of the AVR may result in data corruption.**



**Special precautions:**

**When the AVR input comes from a generator:**

- a. Output power capacity must be higher than the AVR rating, or the AVR and generator may not work properly;
- b. Output frequency of generator must be in range of 45 to 65Hz, and wave form must be sine wave, otherwise the AVR and generator may not work properly.

**2. Specifications**

| Model No.              | Power Capacity | Outlet         | Cooling Mode | Circuit Protection                       |
|------------------------|----------------|----------------|--------------|--|
| AVR-SRV-SECURE500-WL   | 500VA/300W     | 1 x schuko     | Nature       | Circuit Breaker, Output Fuse (4A, 250V)  |
| AVR-SRV-SECURE1000-WL  | 1000VA/600W    | 1 x schuko     | Nature       | Circuit Breaker, Output Fuse (7A, 250V)  |
| AVR-SRV-SECURE2000-WL  | 2000VA/1200W   | 2 x schuko     | Nature       | Circuit Breaker, Output Fuse (12A, 250V) |
| AVR-SRV-SECURE3000-WL  | 3000VA/1800W   | Block terminal | Nature       | Air Switch ( 20A)                        |
| AVR-SRV-SECURE5000-WL  | 5000VA/3000W   | Block terminal | Nature       | Air Switch ( 32A)                        |
| AVR-SRV-SECURE10000-WL | 10000VA/6000W  | Block terminal | Cooling fan  | Air Switch ( 63A)                        |

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## AUTOMATIC VOLTAGE REGULATOR

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|                           |  |
|---------------------------|--|
| AC Input Voltage          | 150V~260V  |
| Input Frequency           | 45Hz~65Hz  |
| AC Output Voltage         | 230V   |
| Output Frequency          | Synchronized with mains frequency  |
| Output Precision w/o load | ±3% (without load) ±3V   |
| Distortion                | <3% (compare to input wave form)   |
| Display                   | Dual Digital   |
| Power Factor              | 0.6  |
| Efficiency                | >0.95  |
| Operating Temperature     | -10°C~40°C   |
| Operating Humidity        | 0~90%(Non-condensing)  |
| Noise                     | ≤56dB (full load, distance at 1 meter)                                       |
| Delay Time                | 6/180 seconds selectable   |
| Protection                | Output Low Voltage, Output High Voltage,<br>High Temperature, Short Circuit. |
| Certification             | CE (EMC+LVD)   |
| IP Class                  | IP20   |
| Protection class          | I  |

### Remarks:

**We reserve the right to change specifications or discontinue models without notice.**

### 3. Before Installation

Each AVR was tested 100% before shipment, check if the AVR has been subjected to any damage after unpacking it according to the following steps:

#### A. Contents

**AUTOMATIC VOLTAGE REGULATOR**

Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL



Delivered pack includes:

|               |         |
|---------------|---------|
| AVR           | 1 piece |
| User's manual | 1 piece |
| Warranty card | 1piece  |

**B. visual observation**

- a. Check the name plate to verify the rated capacity is according to your purchase order.
- b. Make sure appearance of the AVR is not damaged. If you notice any damage, contact the transport firm and the authorized dealer.



**Do not try to operate the AVR in this situation!**

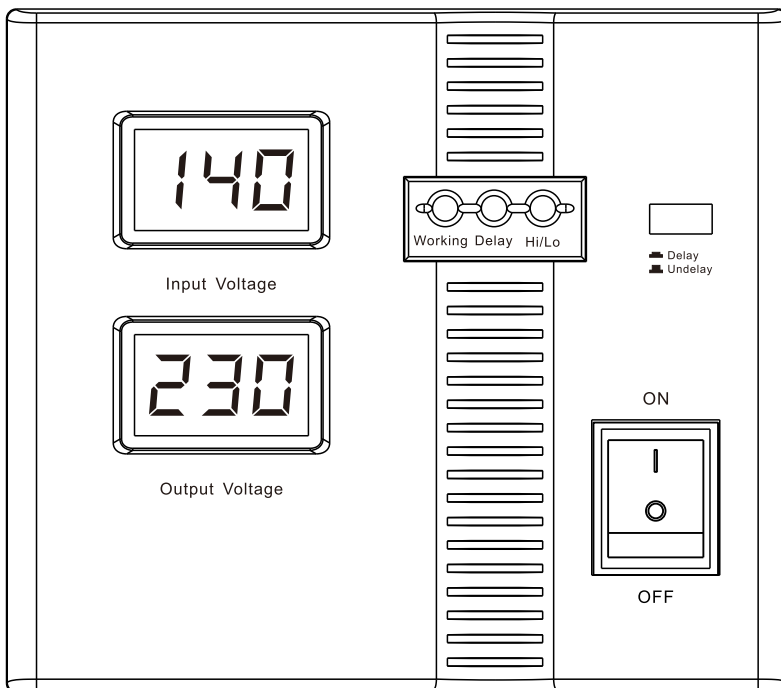
**Do not try to repair the AVR by yourself!**

**4. Introduction to the Regulator**

Familiarize yourself with the various features and facilities by studying the two diagrams below to obtain maximum benefit from the regulator.

**a. Front of the Regulator**

**500/1000/2000/3000/5000/10000VA model**



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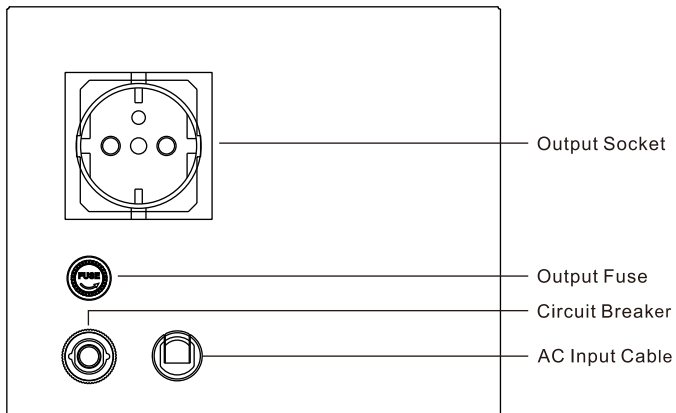
## AUTOMATIC VOLTAGE REGULATOR

Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL

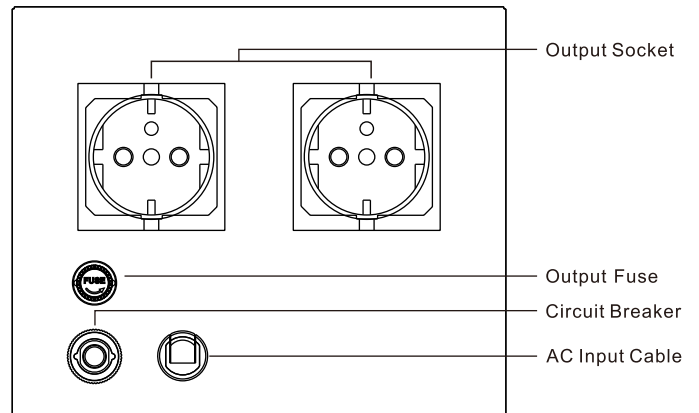


### b. Rear of the Regulator

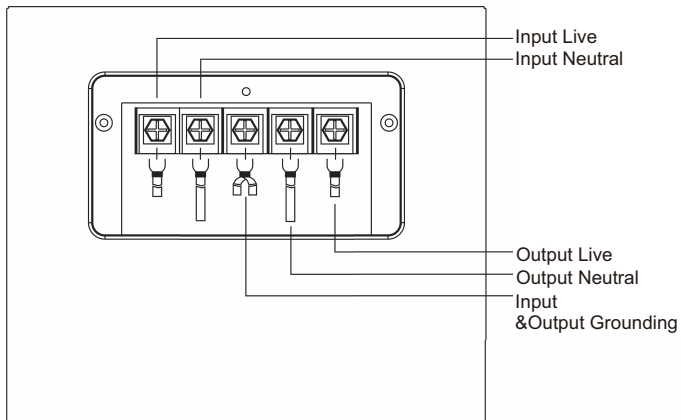
500/1000/VA model



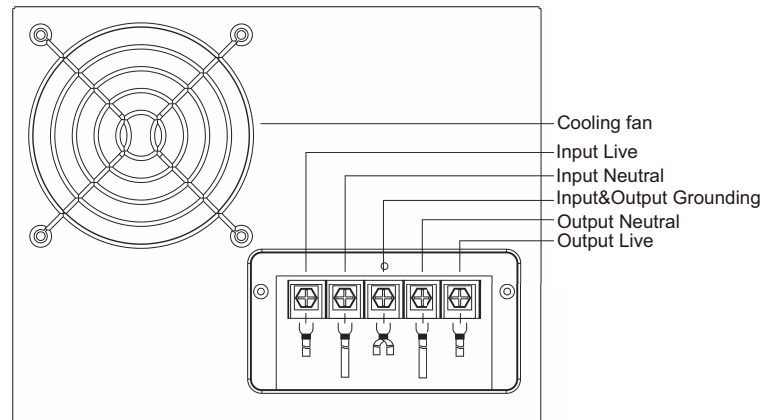
2000VA model



3000/5000/VA model



10KVA model



Remark: AVR-SRV-SECURE500/1000/2000/3000/5000-WL don't have cooling fan.

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### **5. Operation of the AVR**

#### **a. Connect the Electrical Appliances to Regulator**

- Make sure all appliances are turned "OFF", and put power switch of AVR to "OFF" position.
- For model from 500VA to 2000VA, plug the AC mains cord of the appliances into the output socket of AVR, ensuring that the total starting power needed does not exceed the rated maximum output power of the AVR.
- **For model from 3000VA to 10KVA, please unscrew the terminal cover and you will find block terminal inside. Use the heavy duty cables to connect the electrical appliances to the output terminal. Connect all cables in correct position. (see page 3)**

#### **b. Connect Regulator to Electrical Mains**

- For model from 500VA to 2000VA, just plug the AC mains cord to wall mains socket.
- **For model from 3000VA to 10KVA, Use the heavy duty cables to connect the AVR to the mains. Connect all cables in correct position. (see page 3)**

#### **c. Switch on the regulator, Switch the power "ON"**

- Put the power switch to "ON" position, the yellow LED will illuminate and blink . At the same time, the digital display will show the elapsing delay time. Generally delay time is set at 6~180 seconds.
- Then the yellow LED lights off and the green will illuminate.
- The digital display will show output voltage supplying to appliances connected to the regulator.
- Switch "ON" the appliances one by one.

#### **In Case of Power Failure:**

- Switch "OFF" the regulator and all the appliances.
- Repeat above steps when power is restored.

#### **d. Display of Input Voltage and Output Voltage**

- The Digital display will show the input voltage and output voltage after the AVR switched on.

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### e. LED Operation

- When the Green LED is "ON", it indicates Power ON and also that the input voltage and output voltage is normal, the AVR is working.
- When the Yellow LED is "ON" and flash, it indicates that the regulator is in a delay status, the output will be delayed.
- When the Red LED is "ON" and flash, it indicates the regulator is in a protection status.

### f. Delay Operation

- This model is designed with a delay feature to protect appliances especially the appliances with compressors (like air-conditioner, fridge, motor, pump, and etc). which should not be switched on immediately after being switched off.
- The delay time is generally set at 6/180 seconds selectable. **Select delay or undelay before switch on the AVR.**
- Press down the delay button, then you select the delay, the delay time will be 180 seconds. After switch on the AVR, wait for 180 seconds, then the AVR delivers output; Press up the delay, it means undelay, under "undelay" status, the delay time is 6 seconds.



If you connect the appliances with compressors, we suggest that you select "delay" before switch on the AVR.

- The delay time will show in the display after switch on the AVR. When delay time has elapsed, delay LED will switch "OFF" and display will indicate the AC output voltage.

### g. Integrated Automatic Protection Circuit (IAPC)

- This model is equipped with a specially designed INTEGRATED AUTOMATIC PROTECTION CIRCUIT.
- This very specialized and unique circuitry is now redesigned to automatically cut off the input voltage whenever the input voltage is above the input voltage range, rendering full and comprehensive protection to the regulator and connected appliances.
- When the input voltage returns to within Low and Normal ranges, the IAPC will automatically switch the regulator back "ON" and also restore power to all connected appliances.

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### **h. Temperature Protection**

- This AVR is equipped with a unique TEMPERATURE PROTECTION CIRCUIT designed to protect the transformer, giving you longer and satisfactory use of the Regulator.
- If the internal temperature reaches the limit or above, the output will be cut "OFF" automatically, and the display will show "C". At the same time, the Red LED lights up.
- When the internal temperature returns to normal range, output power will be restored. After the delay time, the display will indicate output voltage.

### **i. High Output Voltage Protection**

- This AVR is built in with a very specialized feature HIGH OUTPUT VOLTAGE PROTECTION CIRCUIT.
- This special and unique circuitry is designed to protect connected appliances whenever the output voltage is higher than the normal range.
- If the output voltage is over the normal range, the output power supply will cut "OFF" automatically and the display will show "H". At the same time, the Red LED lights up.
- Once the input city power returns to normal range, the AVR will restore the output

### **j. Low Output Voltage Protection**

- When the output voltage is below the normal range, the output will be cut "OFF" automatically and the display will show "L". At the same time, the Red LED lights up.
- Once the input city power returns to normal range, the AVR will restore the output to the loads.

### **k. Short Circuit Protection.**

In case of a short circuit or overload, the POWER SWITCH (integrated with a resettable fuse function) or OUTPUT FUSE will trip off to cut of the input power supply. The OUTPUT FUSE should be replaced in case if will burn out. The Power Switch with the resettable fuse function must be resettled on the initial position.

- Check if the AVR is overloaded, if so, please remove some loads.
- Check if the appliances are short circuit, if so, please disconnect the appliances.

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### **6. Placement**

For safety and better performance and longer lifespan, please handle and place the AVR according to the follow instructions:

#### **a. Moving**

- a. Cut off input; remove all wires connected to the AVR
- b. Do not move the AVR upside down
- c. Rough handling is prohibited

#### **Environmental**

Keep away from unstable base or sources of excessive vibration.

Do not place the AVR under direct sunlight or excessive humidity.

Keep away from fire, heat sources.

Keep the AVR in well ventilated place. Leave at least a distance of 10 cm between the AVR and the walls in order to maintain adequate air-flow.

Operating Temperature: -10°C~40°C

Operating Humidity: 0~90% (Non-condensing)

Keep away from corrosive gas or fluid.



***Install the AVR in a cool, dry, clean place – away from windows, dust, moisture and cold To prevent fire or electrical shock, do not expose this unit to rain or water.***

### **7. Maintenances**

This AVR is basically maintenance free! But regular maintenance can extend the lifespan of AVR by the following steps:

#### **Regular inspection**

Shut down the AVR completely

Use cotton cloth and detergent to clean the body and ventilation holes.

Check all the terminals, replace the abnormal one with that of the same specification.

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**Extraordinary inspection**

When malfunction occurs, or the AVR is abnormal, please measure and check the parameters, refer to the authorized dealer if needed.

In thunder and lightning or rainy season, Extraordinary Inspection should be executed to prevent malfunction.

Maintenance should not be operated when AVR is working.

**8. Other**

This AVR is designed and made by strict standards and quality control system for common use, but if apply to purposes may cause any dangerous to human or other lives, include but not limited to the following case, please refer to our company.

- a. Apply to traffic system;
- b. Apply to medical purpose;
- c. Apply to nuclear, power system;
- d. Apply to aviation and aerospace;
- e. Apply to all kinds of safety devices;
- f. Other special usages.

Waste electrical and electronic equipment are a special waste category, collection , storage, transport, treatment and recycling are important because they can avoid environmental pollution and are harmful to health  
Submitting waste electrical and electronic equipment to special collection centers makes the waste to be recycled properly and protecting the environment. Do not forget !Each electric appliance that arrive at the landfill, the field , pollute the environment!

**SYMBOL FOR THE MARKING OF ELECTRICAL AND ELECTRONIC EQUIPMENT**



# MANUAL DE UTILIZARE

REGULATOR AUTOMAT DE TENSUNE (AVR)  
Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL



## **Va rugam sa cititi si sa pastrati acest manual!**

Va multumim ca ati ales acest regulator automat de tensiune (AVR) marca WELL. Cu ajutorul acestuia veti putea proteja perfect echipamentele conectate.

Acest manual este un ghid pentru instalarea si utilizarea AVR-ului. Include instructiuni importante de siguranta pentru operarea si instalarea corecta a AVR-ului. Daca aveti probleme cu AVR-ul, mai intai consultati acest manual inainte sa sunati a service.



Acest simbol va ofera informatii cu privire la sanatatea si securitatea utilizatorului, operarea AVR-ului si siguranta datelor.



Acest simbol va ofera informatii, atentionari si alte sugestii.

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REGULATOR AUTOMAT DE TENSUNE (AVR)  
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## 1. Instructiuni importante de siguranta

Acest AVR asigura protectia aparatelor si echipamentelor electrice si de birou, inclusiv a sistemelor informatice. Pentru orice intrebari adresati-va reprezentantului tehnic autorizat pentru service.

- Pentru evitarea oricaror deteriorari ale AVR-lui , este indicat sa fie transportat in ambalajul sau original.
- In cazul schimbarilor bruste de temperatura cum ar fi trecerea de la frig la temperatura normala de lucru, in interiorul AVR-lui se pot forma aburi datorita condensului. Este absolut esential ca AVR sa fie uscat inainte de a fi pornit. Pentru aceasta asteptati cel putin 2 ore inainte de a-l pune in functiune.
- Dupa ce s-a uscat asigurati-va ca sunt indeplinite toate conditiile din partea de mediu a specificatiilor tehnice, inainte de a-l conecta la circuit.



***Cablul de pamantare trebuie ales in functie de puterea instalata. Pamantarile tuturor aparatelor conectate la AVR trebuie realizate cu acest cablu de pamantare. Fara pamantare sau pamantare nesigura, aparatele conectate sunt periculoase pentru sanatatea utilizatorilor si aduc un risc ridicat de defectare a circuitelor electronice. La instalarea AVR-lui folosirea unui cablu de diametru necorespunzator poate fi periculoasa pentru sanatatea utilizatorului si siguranta aparatului.***

-- Plasati toate cablurile in locuri corespunzatoare, astfel ca sa nu se calce pe ele si nimeni sa nu se impiedice de ele. **Inainte de conectarea AVR-lui la sursa de curent, asigurati-va ca ati citit cu grija instructiunile si atentionarile din capitolul "Instalarea AVR" din acest manual.**

- Nu aruncati materiale straine de niciun fel (cum ar fi cleme, cuie etc...) in aparat.
- In caz de urgente (deteriorari ale carcasei, panoului frontal sau conexiuni principale, stropiri cu lichide sau caderea de orice materiale straine in aparat) opriti AVR, scoateti-l din priza si informati centrul de service autorizat.
- Nu cuplati la AVR sarcini care depasesc limita de putere al regulatorului,
- Daca distorsiunile sau rezistenta de intrare sunt prea mari, este posibil ca AVR sa nu functioneze bine.
- Contactele cablajelor trebuie sa fie stranse pentru evitarea caderii sau oxidarii.



***AVR poate fi reparat numai de catre personalul unui service tehnic autorizat. Orice incercare de deschidere sau reparare de catre utilizator se poate dovedi periculoasa.***

Instalarea se face intr-un mediu controlat.

- Mediul controlat trebuie sa fie in concordanta cu cerintele din specificatii.
- Nu instalati sau operati AVR-ul in sau langa apa.
- Nu plasati AVR-ul pe un carucior, stand sau masa instabila.
- Nu plasati AVR-ul direct la soare sau aproape de surse de caldura.
- Nu plasati cablul AVR-ului in zone unde poate fi avariat de catre obiecte grele.



***Plasarea de medii de stocare magnetice pe AVR poate rezulta in coruperea de date.***



**Precautii speciale:**

**Cand AVR-ul este alimentat de la un generator:**

- Puterea de iesire trebuie sa fie mai mare decat puterea nominala al AVR-lui, altfel AVR si generatorul ar putea sa nu functioneze corespunzator;
- Frecventa de iesire a generatorului trebuie sa fie in raza 45 si 65Hz, si forma de unda trebuie sa fie sinusoidală, altfel AVR-ul si generatorul nu vor functiona corespunzator.

# MANUAL DE UTILIZARE

## REGULATOR AUTOMAT DE TENSUNE (AVR) Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL



### 2. Specificatii

| Nr. Model              | Putere        | Iesire         | Mod racire | Protectie circuit                               |
|------------------------|---------------|----------------|------------|---|
| AVR-SRV-SECURE500-WL   | 500VA/300W    | 1 x schuko     | Natural    | Intrerupator resetabil<br>Siguranță (4A, 250V)  |
| AVR-SRV-SECURE1000-WL  | 1000VA/600W   | 1 x schuko     | Natural    | Intrerupator resetabil<br>Siguranță (7A, 250V)  |
| AVR-SRV-SECURE2000-WL  | 2000VA/1200W  | 2 x schuko     | Natural    | Intrerupator resetabil<br>Siguranță (12A, 250V) |
| AVR-SRV-SECURE3000-WL  | 3000VA/1800W  | Block terminal | Natural    | Disjunctur ( 20A)                               |
| AVR-SRV-SECURE5000-WL  | 5000VA/3000W  | Block terminal | Natural    | Disjunctur ( 32A)                               |
| AVR-SRV-SECURE10000-WL | 10000VA/6000W | Block terminal | Ventilator | Disjunctur ( 63A)                               |

|                                 |  |
|---------------------------------|--|
| Tensiune de intrare AC          | 150V~260V  |
| Frecventa de intrare            | 45Hz~65Hz  |
| Tensiune de iesire AC           | 230V   |
| Frecventa de iesire             | Sincronizat cu rețeaua   |
| Precizie de iesire fara sarcina | ±3% (without load) ±3V   |
| Distorsiune                     | <3% (in comparatie cu forma undei de intrare)                                |
| Afisaj                          | Digital  |
| Coeficient de putere            | 0.6  |
| Eficienta                       | >0.95  |
| Temperatura de operare          | -10°C~40°C   |
| Umiditate de operare            | 0~90%(Non-condens)   |
| Zgomot                          | ≤56dB (capacitate maxima, distanta de 1 m)                                   |
| Timp intarziere                 | 6/180 secunde selectabile  |
| Protectie                       | Tensiune scazuta la iesire, Supratensiune,<br>Supraincalzire, Scurt Circuit. |
| Certificare                     | CE (EMC+LVD)   |
| Clasa IP                        | IP20   |
| Clasa de protectie              | I  |

#### Observatie:

**Ne rezervam dreptul sa schimbam specificatiile sau sa scoatem modelele fara anuntare prealabila.**

### 3. Inainte de instalare

Fiecare AVR a fost testat 100% inainte de transport. Dupa despachetare verificati daca AVR-ul nu a fost supus unei avarii, urmand pasii de mai jos:

#### A. Continut

Ambalajul include:

|                        |          |
|------------------------|----------|
| AVR                    | 1 bucata |
| Manual de utilizare    | 1 bucata |
| Certificat de garantie | 1 bucata |

#### B. Observare vizuala

- Controlati placa de nume pentru a verifica daca capacitatea este in concordanta cu modelul comandat.
- Asigurati-va ca AVR-ul nu este avariata. Daca observati orice avarii, contactati firma de transport si distribuitorul autorizat.

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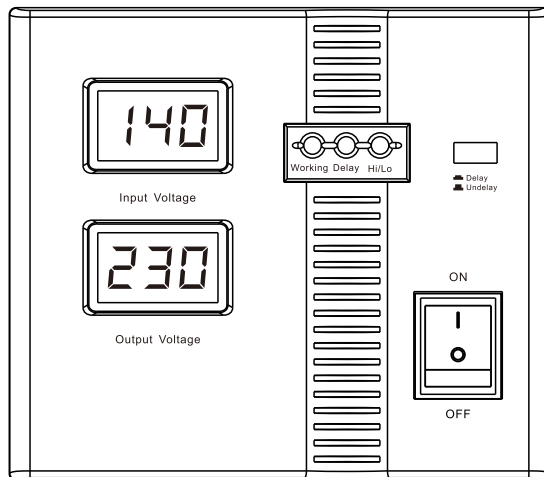
**Nu incercati sa operati AVR-ul in aceste situatii!**  
**Nu incercati sa reparati AVR-ul!**

## 4. Introducere

Familiarizati-va cu diferitele caracteristici si facilitati prin studierea diagramelor de mai jos, pentru a obtine beneficii maxime de la regulator.

### a. Partea frontala a regulatorului

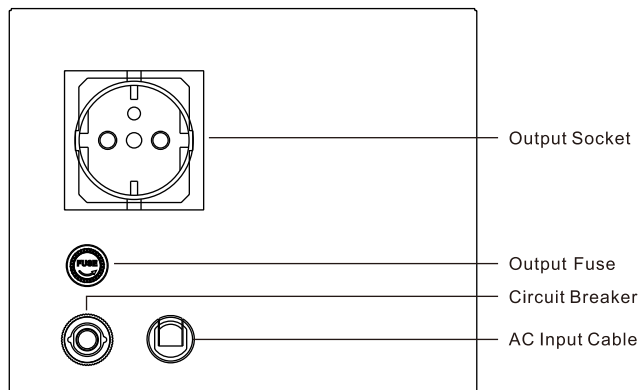
Pentru modelele 500/1000/2000/3000/5000/10000VA



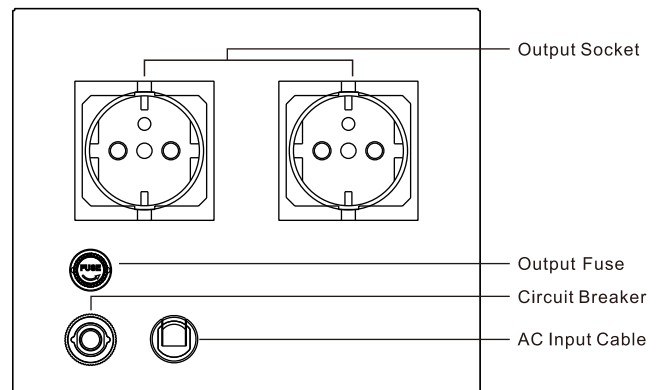
Input voltage.....Tensiunea de intrare  
Output voltage.....Tensiunea de iesire  
Working.....Indicator de functiune normala  
Delay.....Indicator decalaj  
Hi/Lo.....Indicator Supra/ Subtensiune  
Delay/ Undelay.....Buton selectare timp intarziere  
ON/OFF.....Intrerupator principal

### b. Spatele regulatorului

Pentru modelele 500/1000VA



Pentru modelele 2000VA



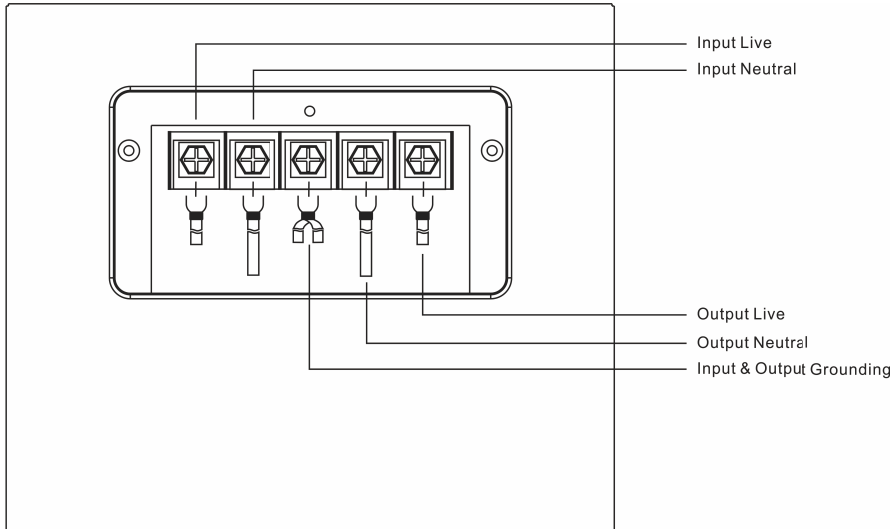
Output socket..... Soclu iesire  
Circuit Breaker.....Intrerupator resetabil  
AC Input Cable.....Cablu de alimentare AC  
Output Fuse.....Siguranță

# MANUAL DE UTILIZARE

## REGULATOR AUTOMAT DE TENSUNE (AVR) Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL

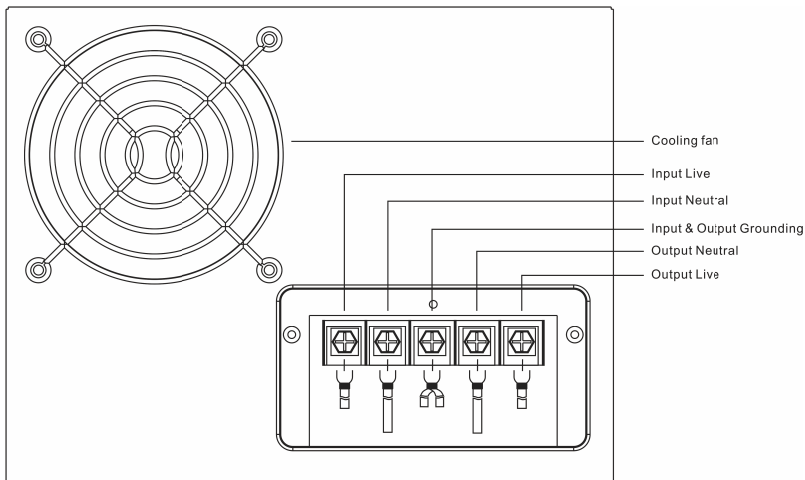


### Pentru modelele 3000/5000VA



Input Live.....Intrare Live  
Input Neutral....Intrare Neutru  
Output Live.....Iesire Live  
Output Neutral..Iesire Neutru  
Input & Output Grounding.....Impamantare

### Pentru modelele 10KVA



Cooling Fan... Ventilator racire  
Input Live.....Intrare Live  
Input Neutral....Intrare Neutru  
Output Live.....Iesire Live  
Output Neutral..Iesire Neutru  
Input & Output Grounding.....Impamantare

**Observatie:** modelele AVR-SRV-SECURE500/1000/2000/3000/5000-WLnu sunt prevazute cu ventilator de racire

# MANUAL DE UTILIZARE

## REGULATOR AUTOMAT DE TENSUNE (AVR)

Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL



### 5. Operarea AVR-ului

#### a. Conectarea aparatelor electrice la regulator

- Asigurați-vă ca toate aparatele sunt oprite și poziționați comutatorul de pe AVR în poziție "OFF".
- Pentru modele 500 VA – 2000 VA, conectați mufa de alimentare AC a aparatului la soclul de ieșire de pe AVR, asigurându-vă că puterea totală necesară de pornire nu depășește puterea maximă a AVR-ului.
- **Pentru modelele 3000VA – 10KVA, desurubati protectorul de terminal și veți găsi terminalul bloc înăuntru. Folosiți cablurile potrivite pentru conectarea aparatelor la acest terminal de ieșire. Conectați toate cablurile în poziția corectă. ( vezi schița din pagina anterioară)**

#### b. Conectarea regulatorului la rețeaua de tensiune

- Pentru modele 500 VA – 2000 VA, pur și simplu conectați cablul de alimentare la tensiunea de rețea.
- Pentru modelele 3000VA – 10KVA, folosiți cablurile potrivite pentru a conecta AVR-ul la tensiunea de rețea. Conectați toate cablurile în poziția corectă. ( conf. schitei de mai sus)

#### c. Pornirea / oprirea regulatorului

##### Pornirea regulatorului

- Plasati comutatorul de pornire / oprire în poziția "ON", LED-ul galben se va lumina și va palpa. În același timp afișajul digital va arăta scurgerea timpului de întârziere. În mod general timpul de întârziere este setat la 6~180 secunde.
- Apoi LED-ul galben se va stinge și LED-ul verde se va aprinde.
- Afișajul digital va arăta tensiunea de ieșire furnizată pentru aparatele conectate la regulator.
- Porniți fiecare aparat unul câte unul.

##### In cazul problemelor de curent:

- Opriti regulatorul și toate aparatele.
- Repetați pașii de mai sus când a fost remediată problema sau a revenit furnizarea curentului.

#### d. Afișarea tensiunii de intrare și ieșire

- După pornire pe cele două afișaje digitale vor apărea tensiunea de intrare și tensiunea de ieșire.

#### e. LED

- Când LED-ul verde este aprins, indică faptul că AVR-ul este pornit, că tensiunea de intrare și ieșire sunt normale și AVR-ul funcționează.
- Când LED-ul galben este aprins și palpaie, indică faptul că AVR-ul este în statusul de întârziere, iar ieșirea va fi întârziată.
- Când LED-ul roșu este aprins și palpaie, indică faptul că regulatorul este în statusul de protecție.

#### f. Operare cu mod de întârziere

- Acest model dispune de funcție de întârziere pentru a proteja aparatele, mai ales acele aparate care au compresor (ca de exemplu aparat de aer condiționat, frigider, motor, pompa, etc) care nu trebuie să fie pornite imediat după ce sunt oprite.

• Timpul de întârziere este de obicei setat la 6/180 secunde selectabile. **Alegeti "delay" sau "underlay" înainte de pornirea AVR-ului.**

- Apasați butonul "delay" ( mod de întârziere) , apoi alegeti întârzierea, timpul de întârziere va fi 180 de secunde. După pornirea AVR-ului, se va aștepta 180 secunde, după care AVR-ul va începe funcționarea. Apasați din nou "delay" pt. a comuta AVR-ul în funcția de "underlay" ( mod fără întârziere) , iar sub statusul "undelay" timpul de întârziere este de 6 secunde.



Dacă veți conecta aparate cu compresor, vă sugerăm să selectați "delay" înainte de pornirea AVR-ului.

# MANUAL DE UTILIZARE

## REGULATOR AUTOMAT DE TENSUNE (AVR)

Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL



• După pornirea AVR-ului pe ecran se va afișa timpul de întârziere. Când timpul de întârziere s-a scurs, LED-ul de delay se va stinge și afișajul va indica tensiunea AC de ieșire.

### g. Circuit Integrat de Protecție Automată (IAPC = Integrated Automatic Protection Circuit)

- Acest model este echipat cu circuit integrat de protecție automată
- Acest circuit unic și specializat este regândit pentru a tăia automat tensiunea de intrare atunci când aceasta este deasupra la raza de tensiune de intrare, furnizând protecție totală și cuprinzătoare pentru regulator și aparatele conectate.
- Când tensiunea de intrare revine la normal sau mai scade, IAPC-ul va porni automat regulatorul și va restaura curentul la fiecare aparat conectat.

### h. Protecție la supraincalzire

- Acest AVR este echipat cu un circuit unic de protecție la temperatură, dezvoltat pentru a proteja transformatorul, extinzând astfel viața regulatorului.
- Dacă temperatura internă va depăși limitele superioare, tensiunea de ieșire se va tăia/ opri automat, iar pe ecran va apărea "C". În același timp se va aprinde LED-ul roșu
- Când temperatura internă va reveni la limitele normale, tensiunea de ieșire se va restaura. După timpul de întârziere, afișajul va indica tensiunea de ieșire.

### i. Protecție la tensiune ridicată de ieșire

- Acest AVR dispune de un circuit pentru protecție în cazul tensiunii de ieșire ridicate.
- Acest circuit special și unic a fost dezvoltat pentru a proteja aparatele conectate ori de câte ori tensiunea de ieșire este mai mare decât cea normală.
- Dacă tensiunea de ieșire este mai mare decât limita normală, alimentatorul de curent de ieșire se va deconecta automat și pe ecran va apărea "H". În același timp LED-ul roșu va palpa.
- De îndată ce puterea internă va reveni la normal, AVR-ul va furniza tensiunea de ieșire potrivită.

### j. Protecție la tensiune scăzută de ieșire

- Dacă tensiunea de ieșire este mai mică decât limita normală, alimentatorul de curent de ieșire se va deconecta automat și pe ecran va apărea "L". În același timp LED-ul roșu va palpa.
- De îndată ce puterea internă va reveni la normal, AVR-ul va furniza ieșirea potrivită.

### k. Protecția la scurt-circuit.

În cazul unui scurt-circuit sau al unei suprasarcini, ÎNTRERUPĂTORUL (cu funcție integrată de siguranță automată resetabilă) sau SIGURANȚA se va declanșa și va întrerupe alimentarea cu electricitate.

SIGURANȚA arsă trebuie înlocuită, iar ÎNTRERUPĂTORUL (cu funcție integrată de siguranță automată resetabilă) trebuie readus în poziția inițială,

- Verificați dacă RAT este supraîncărcat, dacă este, atunci deconectați câțiva consumatori.
- Verificați dacă aparatele au scurt-circuit, dacă da, atunci deconectați aparatele.

## 6. Plasare

Pentru siguranța și performanța mai ridicată precum și o durată de viață mai mare, vă rugăm să transportați și plasați AVR-ul în conformitate cu cele de mai jos:

### a. Transportarea

- a. Îndepărtați toate cablurile conectate la AVR
- b. Nu transportați AVR cu capul în jos
- c. Manuire fără milă este interzisă.

### Mediu

Nu-l depozitați pe suporturi instabile, țineți departe de surse excesive de vibrație.

Nu plasați AVR-ul direct la soare sau în mediu cu umiditate excesivă.

Țineți-l departe de foc, surse de căldură.

Țineți AVR-ul într-un spațiu bine ventilat. Lăsați cel puțin 10 cm distanță dintre AVR și pereți pentru a permite fluxul de aer adecvat.

Temperatura de operare: -10°C~40°C

Umiditate de operare: 0~90% (Non-condensing)

Țineți-l departe de gaz sau lichid coroziv.

# MANUAL DE UTILIZARE

## REGULATOR AUTOMAT DE TENSUNE (AVR)

Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL



**Instalati AVR-ul intr-un spatiu racoros, uscat si curat – departe de ferestre, praf, umezeala si frig. Pentru a preveni incendiul sau socul electric, nu expuneti acest produs la apa sau ploaie.**

### **7. Intretinere**

AVR-ul in principiu nu necesita intretinere! Dar intretinerile regulate pot prelungi durata de viata a AVR-ului. Urmati pasii de mai jos:

#### **Inspectie regulata**

Opriti AVR-ul complet

Folositi carpa de bumbac si detergent pentru curatarea carcasei si a gaurilor de ventilatie.

Verificati fiecare terminal in parte, inlocuiti cele anormale cu unul nou de aceleasi specificatii.

#### **Inspectie extraordinara**

Cand apar probleme sau AVR-ul functioneaza anormal, va rugam sa masurati si sa controlati parametrii si adresati-va distribuitorului autorizat daca este cazul.

Dupa furtuna sau in perioada ploioasa, recomandam inspectie extraordinara pentru a evita avarierea.

Este interzisa intretinerea in timp ce AVR-ul este in functiune.

### **8. Altele**

Acest AVR a fost dezvoltat si realizat pe baza unor standarde stricte si sisteme de calitate pentru folosinta obisnuita, dar nu este destinat pt. aplicatii cu scopuri speciale, folosinta neadecvata poate fi un pericol la viata persoanei

- a. Aplicare pe sistemul de trafic;
- b. Aplicare pentru scopuri medicale;
- c. Aplicare pe sistem nuclear, aplicatii de putere ;
- d. Aplicare in aviatie si aeronave;
- e. Aplicare pentru toate aparatele de securizare;
- f. Alte intrebuintari speciale.

#### **Informati ecologice:**

Deseurile de echipamente electrice si electronice sunt o categorie speciala de deseuri , colectarea , depozitarea , tratatarea si reciclarea sunt importante deoarece se pot evita poluari ale mediului cu gaze de efect de sera sau metale grele, si care pot fi daunatoare sanatatii. Depunand la centrele speciale de colectare a DEEE, va debarasati responsabil de aceste deseuri, va asigurati ca acestea ajung sa fie reciclate corect si totodata protejati natura. Nu uitati! Fiecare aparat electric ajuns la groapa de gunoi , pe camp sau pe malul apei polueaza! Simbolul ( pubea taiata cu un x ) reprezinta obiectul unei colectari separate a DEEE:



# HASZNALATI UTASITAS

## ARAM FESZULTSEG SZABALYZO (AVR)

Kod: Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL



### **Kerjuk olvassa el figyelmesen ezt a hasznalati utasitast!**

Koszonjuk hogy ezt a WELL automata feszultseg stabilizator (AVR-t) valasztotta. Ennek segitsegevel tokeletesen meg tudja ovisni a rakapcsolt keszulekeket.

Ez egy utmutato az AVR felszerelesere es hasznalatara. Megtalalja benne a fontos biztonsagi utasitasokat amik segitseguvel jonnek felszereleskor es hasznalatkor. Ha gond van az AVR-vel, eloszor olvassa el ezt a hasznalati utasitast mielott a szervizhez fordulna.



**Ez a jel a felhasznalo egeszsegere es biztonsagara illetve az AVR mukodesere es az adatok biztonsagara vonatkozik.**



**Ez a jel informaciokat, figyelmezteteseket es mas otleteket ajanl.**

## TARTALOM

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# HASZNALATI UTASITAS

## ARAM FESZULTSEG SZABALYZO (AVR)

Kod: Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL



### 1. Fontos biztonsagi intezkedes

Ez az AVR azért volt kifejlesztve hogy megfelelo korulmenyek kozott vedje az irodai keszulekeket beleertve az informatikai rendszereket. Ha kerdesre van forduljon az autorizalt szervizhez.

- A keszulek karosodasanak elkerulese erdekeben, ajanlott hogy saját csomagolasaban szállítsa.
- Gyors homerseklet ingadozas eseteben mint peldaul hidegrol normalis homersekletre valo atteres, para keletkezhethet az AVR belsejeben. Nagyon fontos hogy az AVR inditaskor szaraz legyen. Ezert varjon legalabb 2 orat a beinditas elott.
- Mikor a termék szaraz, olvassa el a tablatatban szereplo kornyezetre vonatkozó eloirasokat, mielőtt rakotná az AVR-t a halozati feszultsegre.



**A foldeleskabel megfelelo kell legyen az aram kapacitasanak. Az AVR-re kotott keszulekek ugyanilyen kabellel kell legyenek csatlakoztatva.**



**Foldeles nélküli csatlakozással vagy nem megfelelo csatlakozással veszelyt jelenthet a felhasználó egeszsegere illetve karosodhat a keszulek rovidzarlat kovetkeztesben. Az AVR-re felszeresele egy nem megfelelo atmeröju kabellel veszelyt jelenthet a felhasználó egeszsegere es a termekre.**

- Helyezze az osszes kábelt egy olyan helyre ahol nem lepnek ra es nem akadnak bele az emberek. Az AVR halozati feszultseghez valo csatlakozasa elott olvassa el figyelmesen a hasznalati utasitasokat es a figyelmezteto bekezdeseket.
- Ne dobjon semmifele idegen tárgyat (csipesz, szeg, stb) a keszulekbe.
- Surgosseg eseteben (vaz karosodasa, elso pano, illetve fovezetek karosodasa, folyadekkal valo locsolas, idegen test a keszulekbe valo esese) allitsa le az AVR-t, csatlakoztassa le a dugaszt es ertesitse a megfelelo szervizt.
- Ne csatlakoztasson az AVR-hez olyan fogyasztokat amelyeknek a teljesitmenye nagyobb mint az AVR kapacitasa.
- Amikor a belso torzulas vagy ellenallas tul nagy, az AVR nem fog megfeleloen mukodni.
- Tartsa meg a csomagolast karbantartashoz illetve koltozeshez.
- A kabelezes szoros kell legyen, elkerulve ezáltal a levalast vagy oxidalast.



**Az AVR-t csak megfelelo, autorizalt személy javithatja. Barmilyen a felhasználó által megprobalt szetszedes vagy javitas veszelyes lehet.**

A felszereselet ellenorzott kornyezetben vegezze.

- Az ellenorzott kornyezetnek meg kell felelnie a specifikaciokban leirtakkal.
- Ne szerelje fel illetve ne mukodtesse az AVR-t vizben illetve viz mellett.
- Ne helyezze az AVR-t kocsira, allvanyra vagy ingovany asztalra.
- Ne helyezze az AVR-t direkt a napra vagy hoforras kozelebe.
- Ne helyezze az AVR kabelejeit olyan helyre ahol nehez tárgy hatásara megkarosodhat.



**Ne helyezzen magneses adattarolat az AVR-re, az ezen tarolt adatok karosodasahoz vezethet.**



**Specialis elovigyazatosagok:**

**Amikor az AVR-t generator uzemelteti:**

- A generator kapacitasa nagyobb kell legyen mint az AVR-e, kulonben az AVR es a generator nem fognak megfeleloen mukodni.
- A generator kimeneti feszultsege 45 - 65Hz, es szinuszoidalis hullam kell legyen, kulonben az AVR es a generator nem fognak megfeleloen mukodni.

# HASZNALATI UTASITAS

## ARAM FESZULTSEG SZABALYZO (AVR)

Kod: Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL



### 2. Specifikacio

| Modell                 | Kapacitas    | Kimenet        | Hutes       | Aramkor vedelem                                 |
|------------------------|--------------|----------------|-------------|---|
| AVR-SRV-SECURE500-WL   | 500VA/300W   | 1 x schuko     | Termeszetes | Visszaállítható kapcsoló Biztosíték (4A, 250V)  |
| AVR-SRV-SECURE1000-WL  | 1000VA/600W  | 1 x schuko     | Termeszetes | Visszaállítható kapcsoló Biztosíték (7A, 250V)  |
| AVR-SRV-SECURE2000-WL  | 2000VA/1200W | 2 x schuko     | Termeszetes | Visszaállítható kapcsoló Biztosíték (12A, 250V) |
| AVR-SRV-SECURE3000-WL  | 3000VA/1800W | Block terminal | Termeszetes | Visszaállítható Kapcsoló (20A)                  |
| AVR-SRV-SECURE5000-WL  | 5000VA/3000W | Block terminal | Termeszetes | Visszaállítható Kapcsoló (32A)                  |
| AVR-SRV-SECURE10000-WL | 10KVA/6000W  | Block terminal | Ventilator  | Visszaállítható Kapcsoló (63A)                  |

|                                    |   |
|------------------------------------|---|
| Bemeneti AC feszultseg             | 150V~260V   |
| Bementi frekvencia                 | 45Hz~65Hz   |
| Kimeneti AC feszultseg             | 230V  |
| Kimeneti frekvencia                | Szinkronizalva a halozati feszultseggel                                   |
| Kimeneti pontosság terheles nélkül | ±3% (without load) ±3V  |
| Torzulas                           | <3% (bemeneti hullamformával hasonlítva)                                  |
| Teljesítmény faktor                | 0.6   |
| Hatekonysag                        | >0.95   |
| Mukodesi homerseklet               | -10°C~40°C  |
| Mukodesi paratartalom              | 0~90%(Non-condensing)   |
| Zajszint                           | ≤56dB (maximalis kapacitas, 1 m tavolsag)                                 |
| Kesleltetesi ido                   | 6/180 masodperc - valaszthato   |
| Vedelem                            | Alacsony kimeneti feszultseg, Magasfeszultseg, Tulmelegedes, rovidzarlat. |
| Tanusitvány                        | CE (EMC+LVD)  |
| IP osztaly                         | IP20  |
| Erintesvedelmi osztaly             | I   |

#### Megjegyzes:

Fenntartjuk a jogot hogy a specifikacikat megvaltoztassuk illetve kulonbozo modelleket kivonjuk forgalombol, elsodleges informalas nélkül.

### 3. Installacio előtt

Mindenik AVR 100 %-an volt tesztelve szallitas előtt. Kicsomagolas utan ellenorizze ha az AVR nem-e karosodott a szallitas során, kovetve az alábbi lépéseket:

#### A. Tartalom

A csomag tartalma:

|                     |         |
|---------------------|---------|
| AVR                 | 1 darab |
| Hasznalati utasitas | 1 darab |
| Garancia level      | 1 darab |

#### B. Megfigyeles

- Ellenorizze le ha a nevrezen feltüntetett kapacitas megfelel a rendelt modellel.
- Bizonyosodjon meg hogy az AVR nincs megkarosodva. Ha barmifele karosodast eszlel, ertesitse a szallitasi ceget es a forgalmazot.



**Ilyen korulmenyek kozott ne probalja meg mukodtetni az AVR-t!  
Ne probalja meg megjavítani az AVR-t!**

# HASZNALATI UTASITAS

## ARAM FESZULTSEG SZABALYZO (AVR)

Kod: Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL

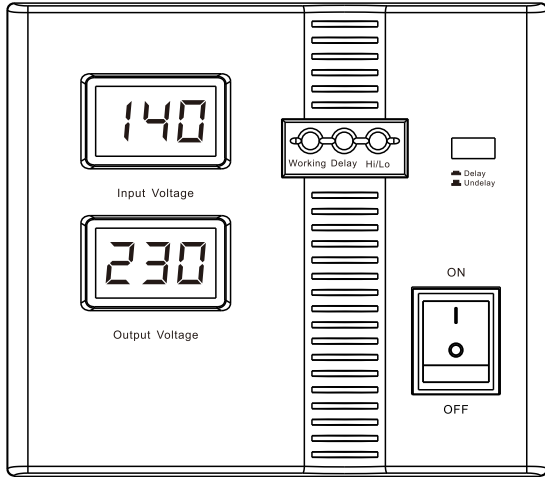


### 4. Bevezetes

Ismerje meg a keszulek kulonbozo karakterisztikait es specifikacioit, tanulmányozva a lenti abrakat.

#### a. Az aramszabalyzo elso resze

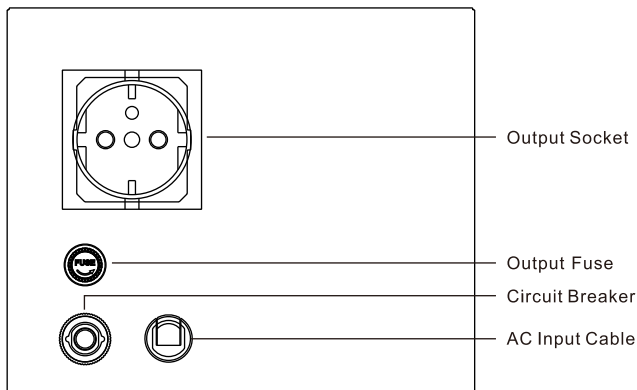
500/1000/2000/3000/5000/10000VA model



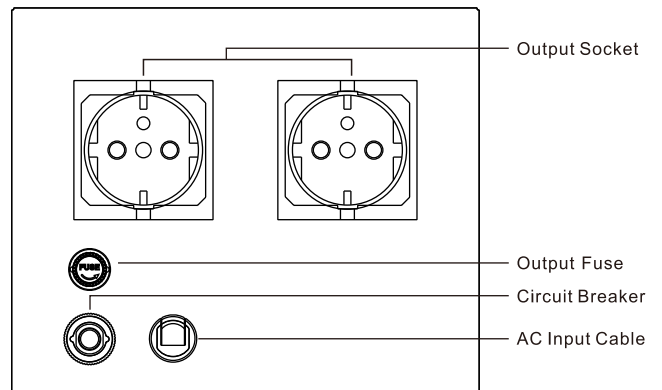
Input voltage..... Bementi feszultseg  
Output voltage.....Kimeneti feszultseg  
Working.....Normal mukodes LED kijelzo  
Delay..... Kesleltetesi kijelzo  
Hi/Lo.....Magas/ alacsony feszultseg jelzo  
Delay/Undelay ....Kesleltetest kivalaszto gomb  
ON/OFF.....KI/ BE kapcsolo gomb

#### b. A Stabilizator hata

500/1000/VA modellekhez



2000VA modellekhez



Output socket..... Kimeneteli csatlakozaljzat  
Circuit breaker.... Visszaallithato kapcsolo  
AC Input cable.....AC tapkabel bemenet  
Output Fuse.....Biztositék

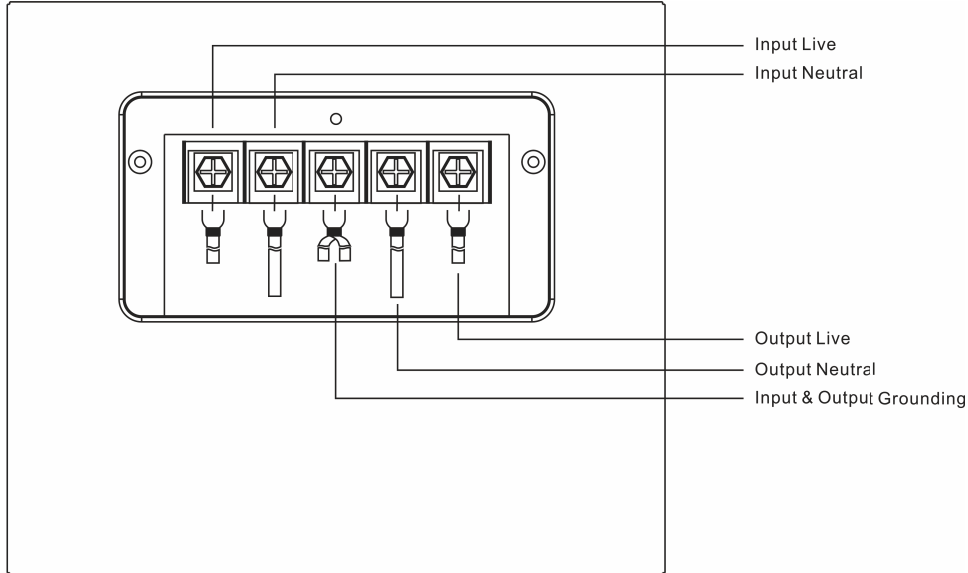
# HASZNALATI UTASITAS

## ARAM FESZULTSEG SZABALYZO (AVR)

Kod: Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL

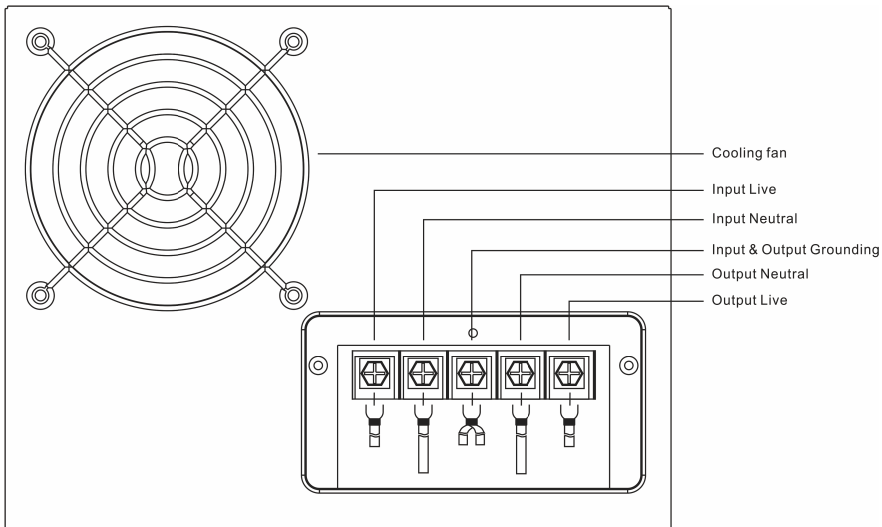


### 3000/5000VA modellekhez



Input Live.....Live bemenet  
Input Neutral.....Semleges bemenet  
Input & Output Grounding.....Foldeles  
Output Live.....Live kimenet  
Output Neutral.....Semleges kimenet

### 10KVA modellekhez



Cooling fan.....Ventilator  
Input Live.....Live bemenet  
Input Neutral.....Semleges bemenet  
Input & Output Grounding.....Foldeles  
Output Live.....Live kimenet  
Output Neutral.....Semleges kimenet

**Megjegyzés: az AVR-SRV-SECURE500/1000/2000/3000/5000-WLmodellnek nincs ventilatorja.**

# HASZNALATI UTASITAS

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### 5. Az AVR mukodtetese

#### **a. Az elektromos keszulekek az AVR-hez valo csatlakoztatasa**

- Bizonyosodjon meg hogy minden keszulek ki van kapcsolva es allitsa a kapcsolot az "OFF" pozicioba.
- Az 500 VA – 2000 VA modelleknel, csatlakoztassa a keszulek AC dugaszat az AVR-n levo kimeneti csatlakoaljzatba, meggyozodve arrol hogy a szukseges inditasi teljesitmeny nem haladja meg az AVR maximalis kimeneti teljesitmenyet.
- **A 3000 VA – 10K VA modelleknel, csavarja le a terminal- vedot es bent megtalalja a terminal tombbot. Használja a megfelelo kablert a keszulekek csatlakoztatasa. Minden kablert megfeleloen csatlakoztasson.**

#### **b. A stabilizator csatlakoztatasa a halozati feszultseghez**

- Az 500 VA – 2000 VA modelleknel, egyszeruen csatlakoztassa az aramkablert a halozati feszultseghez.
- A 3000-5000 VA – 10K VA modelleknel, használja a megfelelo kablert az AVR halozati feszultseghez valo csatlakoztatasa. Minden kablert megfeleloen csatlakoztasson. (lasd a fenti abrat)

#### **c. A stabilizator ki / be kapcsolasa**

##### **A stabilizator bekapcsolasa**

- Allitsa a ki / be kapcsolot az "ON" pozicioba, a sarga LED kigyul es pislog. Egyidoben az LCD-kijelzon meg fog jelenni a kesleltetesi ido mulasa. Alltalaban a kesleltetesi ido 6-180 masodpercre van beallitva.
- Majd a sarga LED kialszik es kigyul a zold LED.
- Az digitalis kijelzon a kimeno feszultseg fog megjelenni amely a rakapcsolt keszulekeket taplalja..
- Inditsa be mindenik keszuleket egyenkent.

##### **Ha aramproblemat eszel:**

- Allitsa le a stabilizator es az osszes rakapcsolt keszuleket.
- Amikor az aram helyreallt, ismetelje meg a fenti lepeseket.

#### **d. A bemeneti es kimeneti feszultseg kijelzese**

- Beindulas utan a digitalis kijelzokon meg fog jelenni a bemeneti, illetve kimeneti feszultseg.

#### **e. LED**

- Amikor a zold LED aktiv, jelzi hogy az AVR be van kapcsolva, a bemeneti es kimeneti feszultseg normalis es az AVR mukodik.
- Amikor a sarga LED aktiv es pislog, jelzi hogy az AVR keslelteto modban van es a kimeneti feszultseg a beallitott kesleltetes szerint fog beindulni.
- Amikor a piros LED aktiv es pislog, jelzi hogy a stabilizator vedelmi modban van.

#### **f. Kesleltetes**

- Ez a model kesleltetes funkcioval rendelkezik, megvedve ezalatt azokat a keszulekeket is amelyeknek kompresszorral mukodnek (peldaul legkondicionalo keszulek, hutoszekreny, motor, pompa, stb) amelyeket nem szabad egybol ujrainditani miutan kikapcsoltak.

• A kesleltetesi ido 6/180 masodperc, kivalaszthato. **Valassza ki a "delay" ( keslelteto mod ) vagy "undelay"-t ( nem keslelteto mod) az AVR beinditasa elott.**

- Nyomja meg a "delay" gombot, majd valassza ki a kesleltetesi ido 180 masodperc lesz. Az AVR bekapcsolasa utan, 180 masodperc mulva az AVR elkezd mukodni. Nyomja meg a "delay"-t ujbol ami most underlay-t jelent, es az "undelay" statusz alatt a kesleltetesi ido 6 masodperc lesz.



Ha kompresszorral rendelkezo keszulekeket csatlakoztat, ajanljuk hogy valassza ki a "delay"-t az AVR elinditasa elott.

- Az AVR elindulasa utan a kijelzon megjelenik a kesleltetesi ido. Amikor ez letelt, a kesleltetesi LED ki fog aludni es a kijelzon a kimeneteli AC feszultseg fog megjelenni.

# HASZNALATI UTASITAS

## ARAM FESZULTSEG SZABALYZO (AVR)

Kod: Model: AVR-SRV-SECURE500/1000/2000/3000/5000/10000-WL



### g. Automata integrált áramkor védelem (IAPC = Integrated Automatic Protection Circuit)

- Ez a model automata integrált áramkor védelemmel rendelkezik
- Ez az egyedi és specializált áramkor automatikusan leállítja a bemeneteli feszültséget ha ez az AVR bemeneti feszültségtartományánál nagyobb, ezáltal teljes védelemet nyújtva így a stabilizatornak és a rákapcsolt készülékeknek.
- Ha a bemeneteli feszültség helyreáll vagy csökken, az IAPC automatikusan beindítja a stabilizátort és visszállítja minden készülékbe az áramot.

### h. Homorseklet elleni védelem

- Ez az AVR egy egyedi homorseklet szabályzó áramkorrel van felszerelve, ami a transzformatort védi, meghosszabítva ezáltal az AVR működési élettartamát.
- Ha a belső homorseklet eléri, vagy meghalad egy bizonyos felső határt a kimenet automatikusan meg fog szakadni és a kijelzőn a "C" jelenik meg. Ekközben kigyul a piros LED.
- Amikor a homorseklet visszaáll a normális keretek közé, a kimeneti feszültség újból beindul. A kesleltetési idő lejárta után a kijelzőn megjelenik a kiemeneti feszültség.

### i. Magas kimeneti feszültség elleni védelem

- Ez az AVR egy egyedi magas kimeneti feszültség elleni áramkorrel van felszerelve
- Ezáltal a készülékek védve vannak akkor is ha a kimeneti feszültség nagyobb mint a normális.
- Ha a kimeneti feszültség nagyobb mint a normális, a kimeneti áramellátás automatikusan le fog állni és a kijelzőn megjelenik a "H". Ekközben a piros LED elkezd pislogni.
- Amikor a feszültség ismét normális lesz, az AVR kimeneti feszültséget fog biztosítani.

### j. Alacsony kimeneti feszültség elleni védelem

- Ha a kimeneti feszültség kisebb mint a normális, a kimeneti áram automatikusan le fog állni és a kijelzőn megjelenik a "L". Ekközben a piros LED elkezd pislogni
- Amikor a feszültség ismét normális lesz, az AVR kimeneti feszültséget fog biztosítani.

### k. Rövidzárlati védelem.

Rövidzárlat vagy túlterhelés esetén a KAPCSOLÓ (visszaállítható biztosíték funkcióval ellátva) vagy BIZTOSÍTÉK kikapcsol, megszakítva az áramellátást.

Kérjük cserélje ki a kiégett biztosítékot és állítsa vissza a KAPCSOLÓT az eredeti állapotba.

- Ellenőrizze ha az AFS túl van e terhelve, ha igen, akkor távolítsa el a fogyasztókat.
- Ellenőrizze, ha a fogyasztók rövidzárlatosak, ha igen, kapcsolja ki azokat.

## 6. Elhelyezés

Biztonságosabb használat és magasabb teljesítmény, valamint hosszabb élettartam érdekében, kérjük szállítsa és helyezze az AVR-t az alábbiak figyelembe vételével.

### a. Szállítás

- a. Csatlakoztassa le az AVR-t a halozatról, távolítsa el minden kábelt az AVR-ról
- b. Ne szállítsa/ tárolja, használja az AVR-t fejjel lefele tartva,
- c. Ugyeljen a kezelesre, durva kezelesmod tilos..

### b. Környezet

Tartsa távol ingatag alapoktól illetve túlzott vibráló forrástól.

Ne helyezze az AVR-t direkt a napra illetve hőforrás közelébe.

Tartsa távol a tűztől, hőforrasoktól.

Tartsa az AVR-t egy jól szellőzött teremben. Hagyjon legalább 10 cm-t az AVR és a fal között, biztosítva ezáltal a levegőztetést.

Működési homorseklet: -10°C~40°C

Működési páratartalom: 0~90% (Non-kondenzációs)

Tartsa távol korrózió gázoktól vagy folyadékoktól.



**Szerelje fel az AVR-t egy hűvös, száraz és tiszta terembe – távol ablaktól, portól, nedvesegtől és hidegtől. Tűz illetve elektromos sokk elkerülése érdekében, ne tegye ki a terméket az esőre vagy vízbe.**

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### **7. Karbantartás**

Az AVR-t elvileg nem igényel különösebb karbantartást. A rendszeres karbantartás azonban meghosszabbítja az élettartamát. Kövesse az alábbi lépéseket:

#### **Rendszeres ellenőrzés**

Kapcsolja ki teljesen az AVR-t.

Használjon pamut törlet és mosószerrel a ház és a ventilációs lyukak tisztítására.

Ellenőrizze le mindenik terminált, cserélje ki a meghibásodottakat/ sérülteket egy ugyanolyan ujjal.

#### **Rendkívüli ellenőrzés**

Ha probléma jelentkezik vagy az AVR rendellenesen működik, kerjük meg a paramétereket és értesítse a forgalmazót.

Dörgés vagy villámlás vagy esős időszakban, ajánljuk hogy végezzen rendkívüli ellenőrzést a károsodás elkerülése érdekében.

Amíg az AVR működésben van, tilos a karbantartása / ellenőrzése.

### **8. Egyebek**

Ez az AVR szigorú standardok és minőségi rendszer alapján volt megtervezve általános alkalmazásra ajánlatos, de ha nem ennek megfelelő csellal használja veszélyes lehet a személyek életére. Nem alkalmas az alábbi ( de nem csak) környezetben használatos szerkezetekkel együtt működtetni:

- Forgalmi rendszer
- Orvosi célokra használt készülékek
- Nukleáris erőrendszer
- Legi közlekedés és repülőgép
- Biztonsági rendszerek
- Más speciális felhasználás

#### **Ekológikus információk:**

A használt elektromos és elektronikus készülékek speciális hulladék kategóriába tartoznak, begyűjtésük, tárolásuk és újrafeldolgozásuk fontos, ezáltal elkerülhetjük az üvegház hatást okozó gázok vagy nehézfémek által okozott környezeti szennyezést, melyek ártalmasak az emberi egészségre és testi épiségre.

Ez okból kifolyólag kerjük a használt elektromos és elektronikus készülékeket, berendezéseket, leadni az erre a célra létrehozott speciális hulladék gyűjtő központokba, ezáltal hozzájárulva a helyes újrahasznosítási folyamathoz, oltalmazva környezetünket és erőforrásainkat.

Ne feledje! Minden egyes elektromos és elektronikus készülék amely a hulladék lerakóhoz, a földre , vagy a víz partjára kerül szennyezi a környezetet!

Az elkülönített gyűjtést igénylő , hulladékká vált elektromos , elektronikus berendezés jelölése:

