

# USER'S MANUAL

## AUTOMATIC VOLTAGE REGULATOR

Model: AVR-REL-GUARD500-1000-1500-2000-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.

- 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.

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### 2. Specifications

Model No.	Power Capacity	Outlet	Cooling Mode	Circuit Protection
AVR-REL-GUARD500-WL	500VA/300W	1 x schuko	Nature	Circuit Breaker (5A, 250V)
AVR-REL-GUARD1000-WL	1000VA/600W	1 x schuko	Nature	Circuit Breaker (7A, 250V)
AVR-REL-GUARD1500-WL	1500VA/900W	2 x schuko	Nature	Circuit Breaker (12A, 250V)
AVR-REL-GUARD2000-WL	2000VA/1200W	2x schuko	Nature	Circuit Breaker (15A, 250V)

AC Input Voltage	140V~260V
Input Frequency	45Hz~65Hz
AC Output Voltage	220V
Output Frequency	Synchronized with mains
Output Precision	±8% (without load)
Distortion	<3% (compare to input wave form)
Display	Colorful LED Display
Power Factor	0.6
Efficiency	>0.95
Operating Temperature	-10°C~40°C
Operating Humidity	0~90%(Non-condensing)
USB Charging Port	1000mA
Noise	≤56dB (full load, distance at 1 meter)
Delay Time	6/180 seconds selectable
Protection	Under Voltage, Over Voltage, Overheat, Short Circuit, Overload
Certification	CE (EMC+LVD)
IP Class	IP20
Protection class	I
Cable Length	1.35m

#### 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

Delivered pack includes:

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

#### B. visual observation

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

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## AUTOMATIC VOLTAGE REGULATOR

Model: AVR-REL-GUARD500-1000-1500-2000-WL



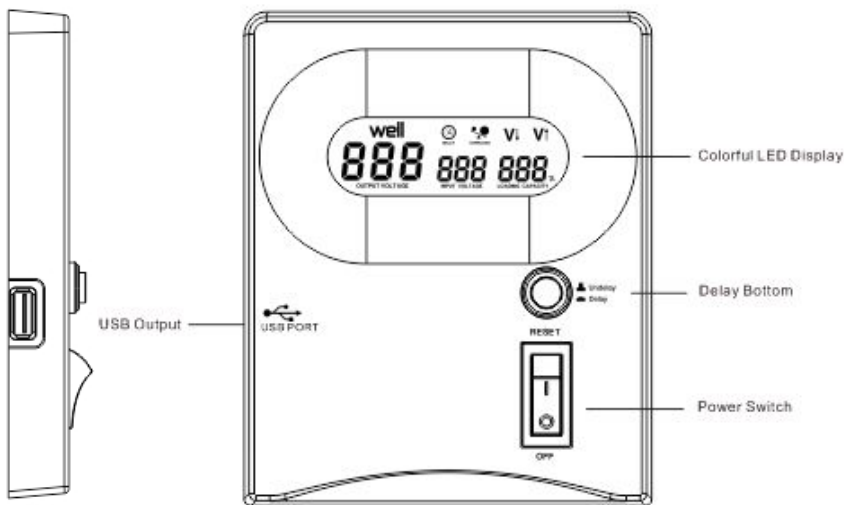
**Do not try to operate the AVR in this situation!**  
**Do not try to repair the AVR by yourself!**

### 4. Introduction to the Regulator

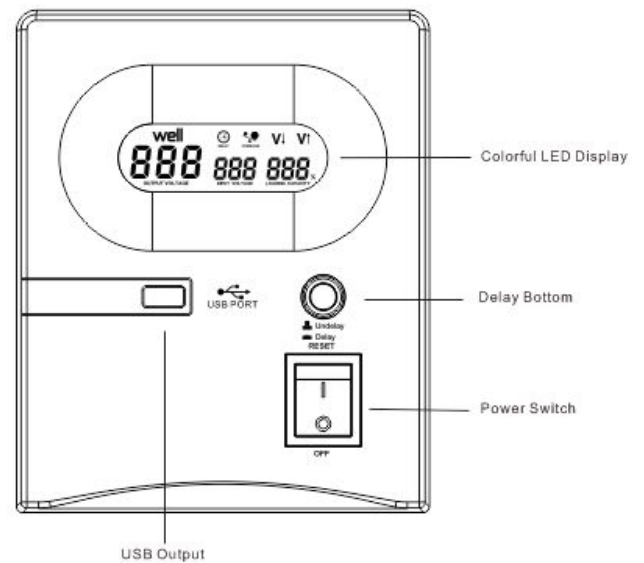
Familiarize yourself with the various features and facilities by studying the two diagrams below to obtain maximum benefit from the regulator.

#### a. Front of the Regulator

500/1000VA model

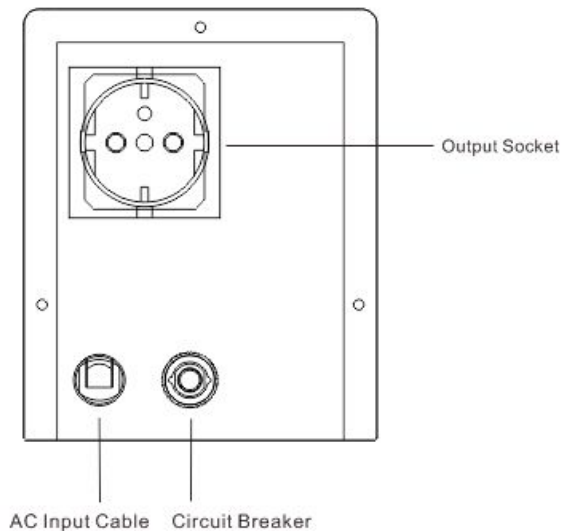


1500/2000VA model

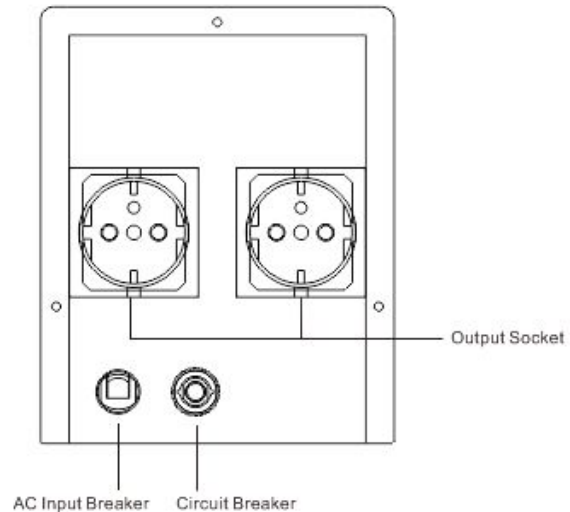


#### b. Rear of the Regulator

500/1000VA model



1500/2000VA model

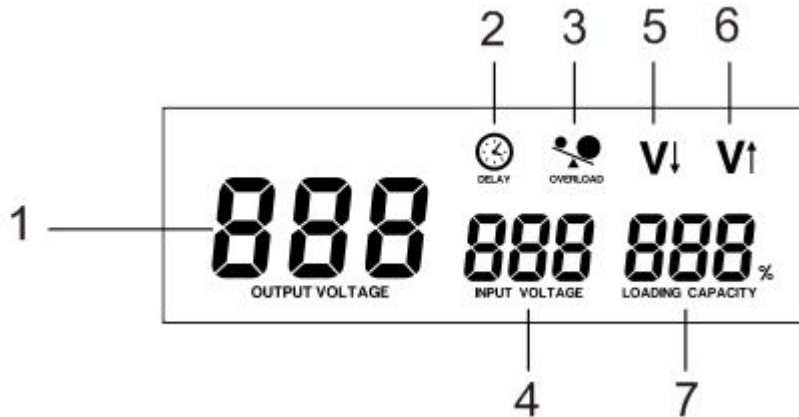


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## AUTOMATIC VOLTAGE REGULATOR Model: AVR-REL-GUARD500-1000-1500-2000-WL



### C. Display Content



- 1."OUTPUT VOLTAGE" Indicator
- 2."DELAY"Indicator
- 3."OVERLOAD" Indicator
- 4."INPUT VOLTAGE" Indicator
- 5."LOW VOLTAGE PROTECTION" Indicator
- 6."HIGH VOLTAGE PROTECTION" Indicator
- 7."LOADING CAPACITY" Indicator

### LED DISPLAY IN DIFFERENT STATUS

Status	Normal	Undelay (6s)	Delay (3mins)
OUTPUT VOLTAGE DISPLAY	Output Voltage	Count Down 	Count Down 
INPUT VOLTAGE DISPLAY	Input Voltage	Input Voltage	Input Voltage
LOAD CAPACITY DISPLAY	Load Capacity		
DELAY INDICATOR	Off	Flash	Flash
PROTECT INDICATOR	Off	Off	Off
OVERLOAD INDICATOR	Off	Off	Off

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Status	Low Voltage	High Voltage	Overload (output not cut off)	Overload (output cut off)	OverHeat
OUTPUT VOLTAGE DISPLAY	000	000	030-001	000	C
INPUT VOLTAGE DISPLAY	Input Voltage	Input Voltage	Input Voltage	Input Voltage	Input Voltage
LOAD CAPACITY DISPLAY	000	000	Load Capacity	000	000
DELAY INDICATOR	Off	Off	Off	Off	Off
PROTECT INDICATOR	V↓ On	V↑ On	Off	Off	Off
OVERLOAD INDICATOR	Off	Off	Flash	On	On

### 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.

#### b. Connect Regulator to Electrical Mains

- For model from 500VA to 2000VA, just plug the AC mains cord to wall mains socket.

#### c. Switch on the regulator

- Put the **POWER SWITCH** to "ON" position, the **LED DISPLAY** will light on, the **DELAYING LED** will light and blink . At the same time, the digital display will show the elapsing delay time. Generally delay time is set at 6 seconds.
- When the delay is finished, the **DELAYING LED** lights off, and the **LED DISPLAY** will show output voltage supplying to appliances connected to the AVR.
- 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 input voltage and output voltage will show in the LED DISPLAY after the AVR is switched on.

#### e. Overheat Protection

- This AVR is equipped with a unique TEMPERATURE PROTECTION CIRCUIT designed to protect the transformer, giving you longer and satisfactory use of the AVR.
- If the internal temperature of the windings of transformer reaches the limit or above, the output will be cut "OFF" automatically, and the OUTPUT LED DISPLAY will show "C".

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• When the internal temperature return to normal range, output power will be restored. After the delay time, the display will indicate output voltage.

### f. Output Over Voltage Protection

- This AVR is built in with a very specialized feature called OVER 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 will be cut "OFF" automatically and the LED DISPLAY will show “ V↑ ”.
- Once the input mains power returns to normal range, the AVR will restore the output automatically.

### g. Output Under Voltage Protection


- When the output voltage is below the normal range, the output will be cut off automatically and the LED DISPLAY will show “ V↓ ”.
- Once the input mains power returns to normal range, the AVR will restore the output automatically.

### h. Short Circuit Protection

In case of a short circuit or overload, the circuit breaker will burnt to cut of the input power supply.

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

### i. Smart Overload Protection

• Once the AVR is Overload, the “  ” will shine to remind you to remove extra appliance. However ,the AVR still can continue working for a period before cutting off the output ,due to its strong overloading ability. According to the different level of overload, the duration of working will be as:

Loading Capacity	Duration
> 121%	30 minutes

•It's recommended to remove some un necessary appliances when overload happen.

### j. Delay Operation

This model is designed with a delay feature to protect appliances with compressors which should not be switched on immediately after being switched off.

•All AVR models now include a delay feature. The delay time will be 6 Seconds & 3 mins. This feature is required for products, using motor& compressors to prevent those from being damaged due to frequent switching on & off.

To select Delay mode, press the DELAY button on front panel. Delay LED will switch “ON”, & display will indicate “Zero” voltage.

•When delay time has elapsed, delay LED will switch “OFF” and display will indicate the AC output voltage.

## 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

### b. Environmental

Keep away from unstable base or sources of excessive vibration.

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

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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.

#### **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**

Importer & distributor:

SC VITACOM ELECTRONICS SRL  
CIF: RO 214527, 400495 Cluj-Napoca,  
Str. Buna Ziua FN, Tel: 0264-438401\*,  
[sales@vitacom.ro](mailto:sales@vitacom.ro), [www.vitacom.ro](http://www.vitacom.ro)





# MANUAL DE UTILIZARE

**REGULATOR AUTOMAT DE TENSUNE (AVR)**  
Model: AVR-REL-GUARD500-1000-1500-2000-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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# MANUAL DE UTILIZARE

**REGULATOR AUTOMAT DE TENSUNE (AVR)**  
Model: AVR-REL-GUARD500-1000-1500-2000-WL



## **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, al panoului frontal sau conexiuni principale, stropiri cu lichide sau caderea de orice materiale straine in aparat) opriti AVR-ul, 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-ul 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-REL-GUARD500-1000-1500-2000-WL



### 2. Specificatii

Nr. Model	Putere	Iesire	Mod racire	Protectie circuit
AVR-REL-GUARD500-WL	500VA/300W	1 x schuko	Natural	Intrerupator resetabil (5A, 250V)
AVR-REL-GUARD1000-WL	1000VA/600W	1 x schuko	Natural	Intrerupator resetabil (7A, 250V)
AVR-REL-GUARD1500-WL	1500VA/900W	2 x schuko	Natural	Intrerupator resetabil (12A, 250V)
AVR-REL-GUARD2000-WL	2000VA/1200W	2x schuko	Natural	Intrerupator resetabil (15A, 250V)

Tensiune de intrare AC	140V~260V
Frecventa de intrare	45Hz~65Hz
Tensiune de iesire AC	220V
Frecventa de iesire	Sincronizat cu reseaua
Precizie de iesire fara sarcina	±8%
Distorsiune	<3% (in comparatie cu forma undei de intrare)
Afisaj	Digital color
Coeficient de putere	0.6
Eficienta	>0.95
Temperatura de operare	-10°C~40°C
Umiditate de operare	0~90%(Non-condens)
Iesire USB	1000 mA
Nivel zgomot	≤56dB (capacitate maxima, distanta de 1 m)
Timp intarziere	6/180 secunde selectabile
Protectie	Tensiune scazuta la iesire, Supratensiune, Supraincalzire, Scurt Circuit, Suprasarcina
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

# MANUAL DE UTILIZARE

## REGULATOR AUTOMAT DE TENSUNE (AVR) Model: AVR-REL-GUARD500-1000-1500-2000-WL



### 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.



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

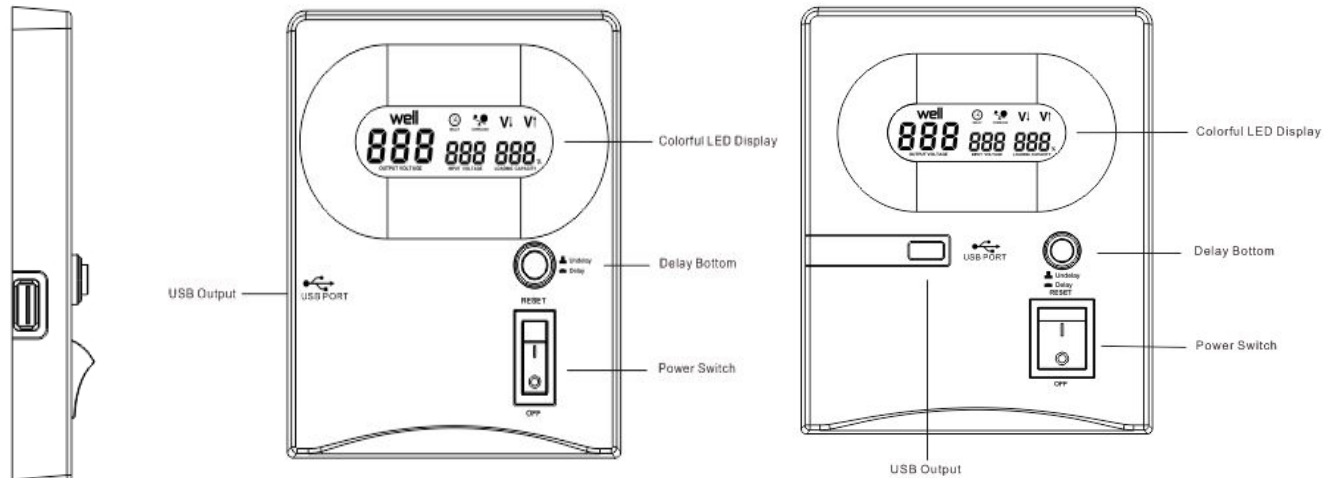
### 4. Introducere

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 500/1000VA

Pentru modelele 1500/2000VA



- USB output.....iesire USB  
Colorful LED Display.....Afisaj LED color  
Delay buton .....Buton selectare timp intarziere  
Power switch.....Intrerupator principal

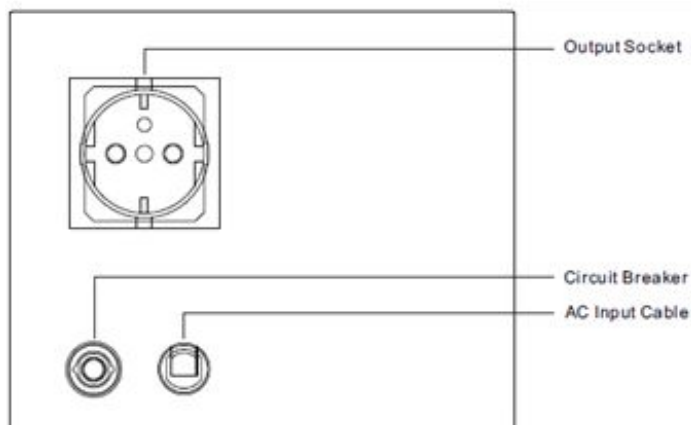
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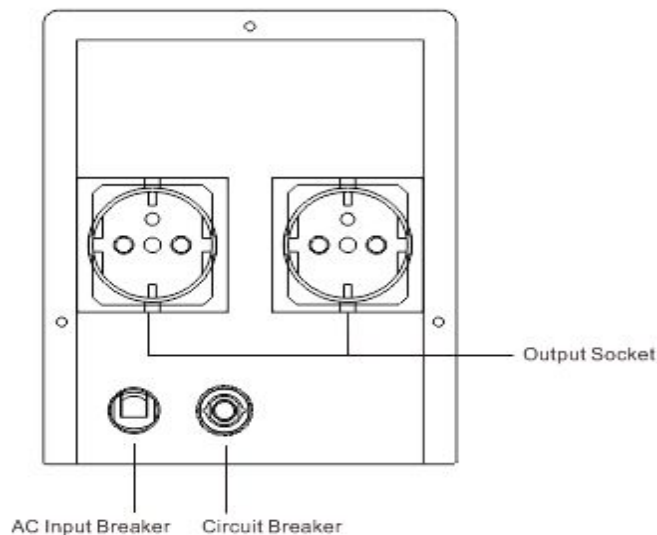


### b. Spatele regulatorului

Pentru modelele 500/1000VA

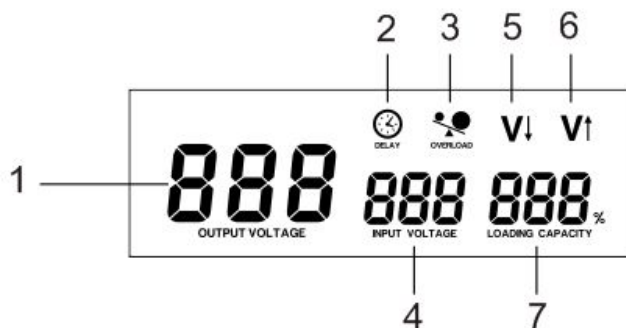


Pentru modelele 1500/2000VA



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

### c. Afisaj digital




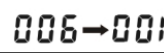
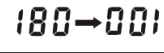







1. Indicator TENSIUNE IESIRE
2. Indicator FUNCTIE DECALAJ
3. Indicator SUPRASARCINA
4. Indicator TENSIUNE INTRARE
5. Indicator PROTECTIE TENSIUNE SCAZUTA
6. Indicator PROTECTIE SUPRATENSIUNE
7. Indicator CAPACITATE INCARCARE




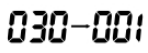












# MANUAL DE UTILIZARE

## REGULATOR AUTOMAT DE TENSUNE (AVR) Model: AVR-REL-GUARD500-1000-1500-2000-WL



### MESAJE AFISAJ

Status	Normal	Decalaj (6s)	Decalaj (3min)
INDICATOR TENSIVNE IESIRE 	Tensiune Iesire	Numaratoarea inversa 	Numaratoarea inversa 
INDICATOR TENSIVNE INTRARE 	Tensiune Intrare	Tensiune Intrare	Tensiune Intrare
INDICATOR CAPACITATE INCARCARE 	Capacitate Incarcare		
INDICATOR DECALAJ 	Oprit	Intermitent	Intermitent
INDICATOR PROTECTIE 	Oprit	Oprit	Oprit
INDICATOR SUPRASARCINA 	Oprit	Oprit	Oprit

Status	Tensiune Scazuta	Supratensiune	Suprasarcina (cu tensiune de iesire)	Suprasarcina (fara tensiune de iesire)	Supra-inalzire
INDICATOR TENSIVNE IESIRE 					C
INDICATOR TENSIVNE INTRARE 	Tensiune Intrare	Tensiune Intrare	Tensiune Intrare	Tensiune Intrare	Tensiune Intrare
INDICATOR CAPACITATE INCARCARE 			Capacitate incarcare		
INDICATOR DECALAJ 	Oprit	Oprit	Oprit	Oprit	Oprit
INDICATOR PROTECTIE 	 Pornit	 Pornit	Oprit	Oprit	Oprit
INDICATOR SUPRASARCINA 	Oprit	Oprit	Intermitent	Pornit	Pornit

# MANUAL DE UTILIZARE

## REGULATOR AUTOMAT DE TENSUNE (AVR) Model: AVR-REL-GUARD500-1000-1500-2000-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" "O"
- 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.

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

- Pentru modele 500 VA – 2000 VA, pur și simplu conectați cablul de alimentare la tensiunea de rețea.

#### **c. Pornirea / oprirea regulatorului**

Plasați comutatorul de pornire / oprire în poziția "ON" (PORNIT). **AFISAJUL DIGITAL** va lumina, apoi va lumina intermitent **INDICATORUL DECALAJ**, în același timp afisajul digital va arăta trecerea decalajului de timp. În general decalajul de timp este reglat la 6 secunde.

- După expirarea decalajului **INDICATORUL DECALAJ** se stinge, iar **AFISAJUL DIGITAL** va arăta tensiunea de alimentare furnizată aparatelor conectate la RAT.
- Porniți una câte una aparatele.

#### **In cazul problemelor de curent:**

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

#### **d. Afisarea tensiunii de intrare și ieșire**

- După pornire afisajul digital va indica tensiunea de intrare și de ieșire.

#### **e. Protecție la supraîncălzire**

- 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".
- Când temperatura internă va reveni la limitele normale, tensiunea de ieșire se va restaura. După timpul de întârziere, afisajul va indica tensiunea de ieșire.

#### **f. 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 "V↑".
- De îndată ce puterea internă va reveni la normal, AVR-ul va furniza tensiunea de ieșire potrivită.

#### **g. 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 "V↓".
- De îndată ce puterea internă va reveni la normal, AVR-ul va furniza ieșirea potrivită.

#### **h. Protecție la scurt circuit.**

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


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

# MANUAL DE UTILIZARE

## REGULATOR AUTOMAT DE TENSUNE (AVR) Model: AVR-REL-GUARD500-1000-1500-2000-WL



### i. Protecție la suprasarcină

- În cazul unei supraîncărcări pe afișaj va apărea mesajul de supraîncărcină  indicând că trebuie eliminate din consumatorii conectați. AVR-ul va mai funcționa o perioadă de timp înainte de întreruperea furnizării tensiunii de ieșire conform tabelului de mai jos.

Capacitate de încărcare	Durată
> 121%	30 minute

Dacă AVR-ul este supraîncărcat este recomandat să deconectați câțiva consumatori.

### j. Operare cu mod de întârziere

- Acest model dispune de funcție de decalaj 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 (3 minute) selectabile. **Alegeți “delay” sau “underlay” înainte de pornirea AVR-ului.**

- Apăsând butonul “DELAY” (mod de întârziere), afișajul va indica modul de întârziere, iar tensiunea de ieșire va fi “zero”. După pornirea AVR-ului, se va aștepta 180 secunde, după care AVR-ul va începe funcționarea. Când timpul de întârziere s-a scurs, LED-ul “delay” se va stinge și afișajul va indica tensiunea AC de ieșire. Apăsând 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.

## 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.

### b. 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% (Fără condensare)

Țineți-l departe de gaz sau lichid coroziv.



**Instalați AVR-ul într-un spațiu răcoros, uscat și curat – departe de ferestre, praf, umezeala și frig. Pentru a preveni incendiul sau socul electric, nu expuneți acest produs la apă sau ploaie.**



# MANUAL DE UTILIZARE

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## REGULATOR AUTOMAT DE TENSUNE (AVR) Model: AVR-REL-GUARD500-1000-1500-2000-WL



### **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 laveta din 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 ( pubela taiata cu un x ) reprezinta obiectul unei colectari separate a DEEE:

Importator si Distribuitor:

SC VITACOM ELECTRONICS SRL  
CIF: RO 214527, 400495 Cluj-Napoca,  
Str. Buna Ziua FN, Tel: 0264-438401\*,  
[sales@vitacom.ro](mailto:sales@vitacom.ro), [www.vitacom.ro](http://www.vitacom.ro)



# HASZNALATI UTASITAS

ARAM FESZULTSEG SZABALYZO (AVR)  
Model: AVR-REL-GUARD500-1000-1500-2000-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 ovni a rakapcsolt keszulekeket.

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

<b>1. Fontos biztonsagi intezkedesek.....</b>	<b>1</b>
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b. Megfigyeles	
<b>4. Bevezetes.....</b>	<b>3.4.5</b>
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b. stabilizator hata	
C. LED kijelzo	
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a) Csatlakoztassa az elektromos keszulekeket a stabilizatorhoz	
b) Csatlakoztassa a stabilizator a halozati feszultseghez	
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d) A bemeneti es kimeneti feszultseg kijelzese	
e) Tulmelegedes elleni vedelem	
f) Magas kimeneti feszultseg elleni vedelem	
g) Alacsony kimeneti feszultseg elleni vedelem	
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# HASZNALATI UTASITAS

**ARAM FESZULTSEG SZABALYZO (AVR)**  
Model: AVR-REL-GUARD500-1000-1500-2000-WL



## **1. Fontos biztonsagi intezkedes**

Ez az AVR azért volt kifejlesztve hogy megfelelo korulmenyek kozott vedje az irodai keszulekeket beleertve az informatikai rendszereket. Ha kerdesere 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 tablazatban szereplo kornyezetre vonatkozó eloirasokat, mielott rakotne 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 kovetkezteben. Az AVR-re felszerelése egy nem megfelelo atmeröju kabellel veszelyt jelenthet a felhasználó egeszsegere es a termekre.**

- Helyezze az osszes kablet egy olyan helyre ahol nem lepnek ra es nem akadnak bele az emberek. Az AVR halozati feszultsegre valo csatlakozasa elott olvassa el figyelmesen a hasznalati utasitasokat es a figyelmezteto bekezdeseket.
- Ne dobjon semmifele idegen targyat (csipesz, szeg, stb) a keszulekbe.
- Surogoseg eseteben (vaz karosodasa, elso pano, illetve fovezetek karosodasa, folyadakkal 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 ezaltal a levalast vagy oxidalast.



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

A felszerelést ellenorzott kornyezetben vegezze.

- a. Az ellenorzott kornyezetnek meg kell felelnie a specifikaciokban leirtakkal.
- b. Ne szerelje fel illetve ne mukodtesse az AVR-t vizben illetve viz mellett.
- c. Ne helyezze az AVR-t kocsira, allvanyra vagy ingovany asztalra.
- d. Ne helyezze az AVR-t direkt a napra vagy hoforras kozelebe.
- e. Ne helyezze az AVR kableit olyan helyre ahol nehez targy hatasara megkarosodhat.



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



**Specialis elovigyazatosagok:**

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

- a. A generator kapacitasa nagyobb kell legyen mint az AVR-e, kulonben az AVR es a generator nem fognak megfeleloen mukodni.
- b. 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) Model: AVR-REL-GUARD500-1000-1500-2000-WL



### 2. Specifikacio

Model	Kapacitas	Kimenet	Hutes	Biztositek
AVR-REL-GUARD500-WL	500VA/300W	1 x schuko	Termeszetes	Visszaallithato kapcsolo (5A, 250V)
AVR-REL-GUARD1000-WL	1000VA/600W	1 x schuko	Termeszetes	Visszaallithato kapcsolo (7A, 250V)
AVR-REL-GUARD1500-WL	1500VA/900W	2 x schuko	Termeszetes	Visszaallithato kapcsolo (12A, 250V)
AVR-REL-GUARD2000-WL	2000VA/1200W	2x schuko	Termeszetes	Visszaallithato kapcsolo (15A, 250V)

Bemeneti AC feszultseg	140V~260V
Bementi frekvencia	45Hz~65Hz
Kimeneti AC feszultseg	220V
Kimeneti frekvencia	Szinkronizalva a halozati feszultseggel
Kimeneti pontossag terheles nelkul	±8%
Torzulas	<3% (bemeneti hullamformaval hasonlitva)
Kijelzo	Szines LED-es kijelzo
Teljesitmény faktor	0.6
Hatekonysag	>0.95
Mukodesi homerseklet	-10°C~40°C
Mukodesi paratartalom	0~90%(Non-condensing)
USB kijovetel	1000mA
Zajszint	≤56dB (maximalis kapacitas, 1 m tavolsag)
Kesleltetesi ido	6/180 masodperc - valaszthato
Vedelem	Alacsony kimeneti feszultseg, Magasfeszultseg, Tulmelegedes, Rovidzarlat, Tulterheles
Tanusitvany	CE (EMC+LVD)
IP osztaly	IP20
Erintesvedelmi osztaly	I

### Megjegyzes:

Fenntartjuk a jogot hogy a specifikaciokat megvaltoztassuk illetve kulonbozo modelleket kivonjuk forgalombol, elsodleges informalas nelkul.

### 3. Installacio elott

Mindenik AVR 100 %-an volt tesztelve szallitas elott. Kicsomagolas utan ellenorizze ha az AVR nem-e karosodott a szallitas során, kovetve az alabbi lepeseket:

#### A. Tartalom

A csomag tartalma:

AVR	1 darab
Hasznalati utasitas	1 darab
Garancia level	1 darab

#### B. Megfigyeles

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

# HASZNALATI UTASITAS

## ARAM FESZULTSEG SZABALYZO (AVR) Model: AVR-REL-GUARD500-1000-1500-2000-WL



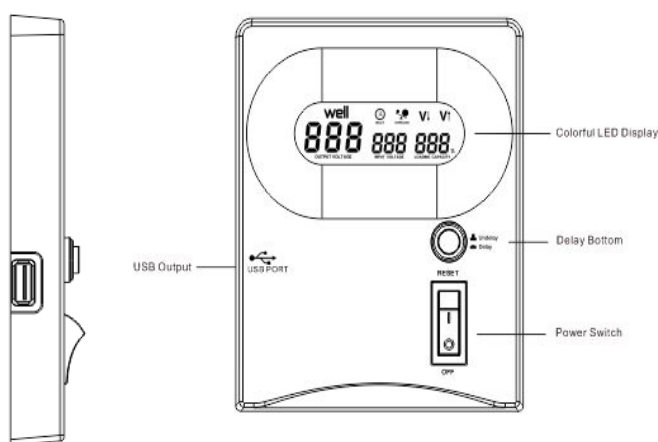
**Ilyen korulmenyek kozott ne probalja meg mukodtetni az AVR-t!  
Ne probalja meg megjavitani az AVR-t!**

### 4. Bevezetes

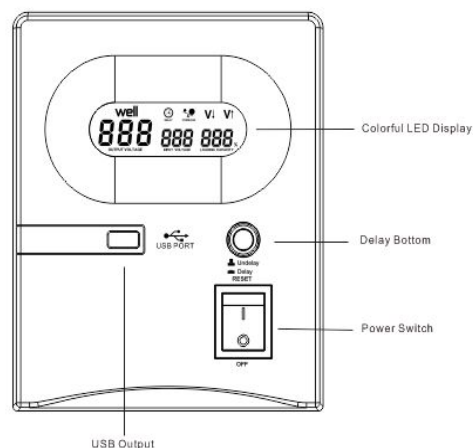
Ismerje meg a keszulek kulonbozo karakterisztikait es specifikacioit, tanulmanyozva a lenti abrakat.

#### a. Az aramszabalyzo elso resze

##### 500/1000VA modellekhez



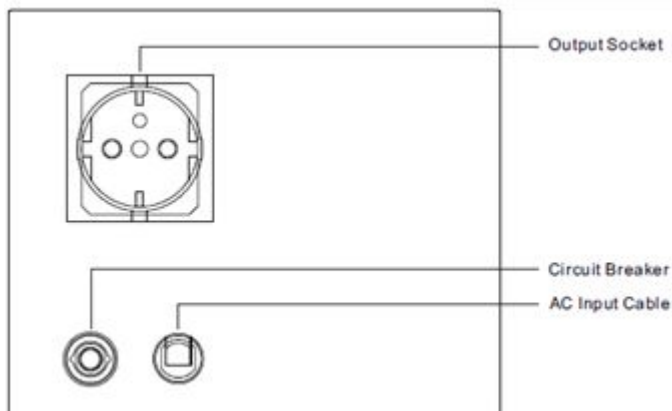
##### 1500/2000VA modellekhez



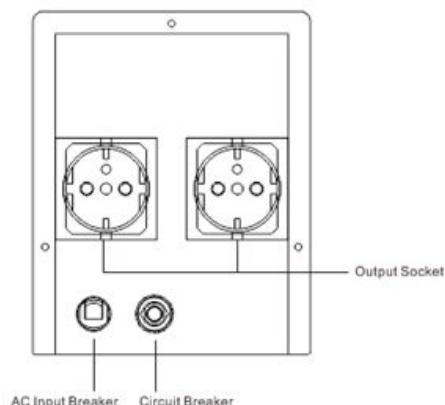
USB output.....USB kimenetel  
Colorful LED display..... Szines, LED-es kijelzo  
Delay button.....Kesleltetes funkcio kivalaszto gomb  
Power switch .....Halozati kapcsolo

#### b. A aramszabalyzo hata

##### 500/1000VA modellekhez



##### 1500/2000VA modellekhez



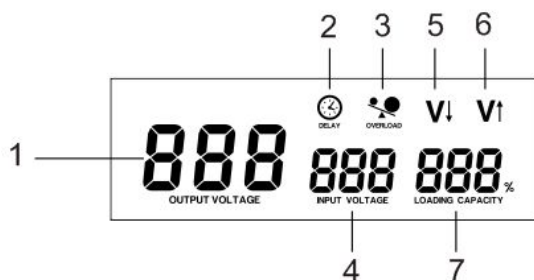
Output socket..... Kimeneteli csatlakozaljzat  
Circuit breaker..... Visszaallithato kapcsolo  
AC Input cable.....AC tapkabel bemenet

# HASZNALATI UTASITAS

ARAM FESZULTSEG SZABALYZO (AVR)  
Model: AVR-REL-GUARD500-1000-1500-2000-WL



## c. Digitális kijelző



1. Kimeneti feszultseg kijelzo
2. Kesleltetes kijelzo
3. Tulterheles kijelzo
4. Bemeneti feszultseg kijelzo
5. Alacsony feszultseg kijelzo
6. Magasfeszultseg kijelzo
7. Terhelhetoseg kijelzo

## LED kijelzo

Állapot	Normál	Késleltetés nélkül (6s)	Késleltetés (3min)
KIMENETI FESZÜLTÉS KIJELZŐ	Kimeneti feszültség	Visszaszámlálás 	Visszaszámlálás 
BEMENETI FESZÜLTÉS KIJELZŐ	Bemeneti feszültség	Bemeneti feszültség	Bemeneti feszültség
TERHELHETŐSÉG KIJELZŐ	Terhelesi kapacitás		
KESLELTETES KIJELZŐ	Kikapcsolva Off	Villog	Villog
VEDELEM KIJELZŐ	Kikapcsolva Off	Kikapcsolva Off	Kikapcsolva Off
TULTERHELES KIJELZŐ	Kikapcsolva Off	Kikapcsolva Off	Kikapcsolva Off

Állapot	Alacsony feszültség	Magas feszültség	Túlterhelés (kimeneti feszültséggel)	Túlterhelés (kimeneti feszültség nélkül)	Magas hőmérséklet
KIMENETI FESZÜLTÉS KIJELZŐ					C
BEMENETI FESZÜLTÉS KIJELZŐ	Bemeneti feszültség	Bemeneti feszültség	Bemeneti feszültség	Bemeneti feszültség	Bemeneti feszültség
TERHELHETŐSÉG KIJELZŐ			Terhelesi kapacitás		
KESLELTETES KIJELZŐ	Kikapcsolva Off	Kikapcsolva Off	Kikapcsolva Off	Kikapcsolva Off	Kikapcsolva Off
VEDELEM KIJELZŐ	Bekapcsolva 	Bekapcsolva 	Kikapcsolva Off	Kikapcsolva Off	Kikapcsolva Off
TULTERHELES KIJELZŐ	Kikapcsolva Off	Kikapcsolva Off	Villog	Bekapcsolva	Bekapcsolva

## ARAM FESZULTSEG SZABALYZO (AVR) Model: AVR-REL-GUARD500-1000-1500-2000-WL



### **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" / "O" pozicioba.
- Az 500 VA – 2000 VA modelleknel, csatlakoztassa a keszulek AC dugaszat az AVR-n levo kimeneti csatlakozaljzatba, meggyozodve arrol hogy a szukseges inditasi teljesitmeny nem haladja meg az AVR maximalis kimeneti teljesitmenyet.

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

- Az 500 VA – 2000 VA modelleknel, egyszeruen csatlakoztassa az aramkabelt a halozati feszultseghez.

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

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

- Allitsa a ki / be kapcsolot az "ON"/ "1" pozicioba, a LED kijelzo kigyul es pislog. Egyidoben a kijelzon meg fog jelenni a kesleltetesi ido mulasa. Alltalaban a kesleltetesi ido 6 masodpercre van beallitva.
- A kesleltetesi ido leteltevel a kesleltetesi LED indikator kialszik, majd a digitalis kijelzon a kimeno feszultseg fog megjelenni amely a rakapcsolt keszulekeket taplalja.
- Inditsa be mindenik keszuleket egyenkent.

##### **Ha aramproblemat eszlel:**

- Allitsa le a stabilizatort 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 kimeneti , illetve a bemeneti feszultseg.

#### **e. Magas homerseklet elleni vedelem**

- Ez az AVR egy egyedi homerseklet szabalyzo aramkorrel van felszerelve, ami a transzformatort vedi, meghosszabbitva ezaltal az AVR mukodesi elettartamat.
- Ha a belso homerseklet eler, vagy meghalad egy bizonyos felso hatart a kimenet automatikusan meg fog szakadni es a kijelzon a "C" jelenik meg.
- Amikor a homerseklet visszaall a normalis keretek koze, a kimeneti feszultseg ujbol beindul. A kesleltetesi ido lejarta utan a kijelzon megjelenik a kimeneti feszultseg.

#### **f. Magas kimeneti feszultseg elleni vedelem**

- Ez az AVR egy egyedi magas kimeneti feszultseg elleni aramkorrel van felszerelve
- Ezaltal a keszulekek vedve vannak akkor is ha a kimeneti feszultseg nagyobb mint a normalis.
- Ha a kimeneti feszultseg nagyobb mint a normalis, a kimeneti aramellatas automatikusan le fog allni es a kijelzon megjelenik a "  $V\uparrow$  ".
- Amikor a feszultseg ismet normalis lesz, az AVR kimeneti feszultseget fog biztosítani.

#### **g. Alacsony kimeneti feszultseg elleni vedelem**

- Ha a kimeneti feszultseg kisebb mint a normalis, a kimeneti aram automatikusan le fog allni es a kijelzon megjelenik a "  $V\downarrow$  ".
- Amikor a feszultseg ismet normalis lesz, az AVR kimeneti feszultseget fog biztosítani.

#### **h. Rövidzárlat elleni vedelem.**

Rövidzárlat vagy túlterhelés esetén a biztosíték funkcióval ellátott visszaallithato kapcsoló kikapcsol, megszakítva az áramellátást.


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

# HASZNALATI UTASITAS

## ARAM FESZULTSEG SZABALYZO (AVR) Model: AVR-REL-GUARD500-1000-1500-2000-WL



### i. Tulterheles vedelem

• Ha a rakapcsolt keszulekek teljesitmenye meghaladja az AVR kapacitasat, a kijelzon megjelenik a “” tulterheles kijelzo, ezalatt figyelmeztetve, hogy tavolitson el fogyasztokat. Tulterheles vedelmi kapacitasanak koszonhetoen az AVR meg mukodni fog egy bizonyos ideig mielott a kimeneti feszultseg megszakad. Lasd az alabbi tablazatban feltuntett adatokat.

Terhelesi szint	Idotartam
> 121%	30 minutes

•Ellenőrizze ha az AVR túl van e terhelve, ha igen, akkor távolítsa el a fogyasztókat.

### j. 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, kivaszthato. **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 kesleltetést, az ido 180 masodperc lesz. Az AVR bekapcsolasa utan a kesleltetesi kijelzo villog, a kimeneti feszultseg nullat fog jelezni. Amikor a kesleltetesi ido letelt, a LED ki fog aludni es a kijelzon a kimeneteli AC feszultseg fog megjelenni. 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.

## 6. Elhelyezes

Biztonsagosabb hasznalat es magasabb teljesitmeny, valamint hosszabb elettartam erdekeben, kerjuk szallitsa es helyezze az AVR-t az alabbiak figyelembe vetelevel.

### a. Szallitas

- Csatlakoztassa le az AVR-t a halozatrol, tavolitson el minden kabelet az AVR-rol
- Ne szallitsa/ tarolja, hasznalja az AVR-t fejjel lefele tartva,
- Ugyeljen a kezelesre, durva kezelesmod tilos..

### d. Kornyezet

Tartsa tavol ingatag alapoktol illetve tulzott vibralo forrastol.

Ne helyezze az AVR-t direkt a napra illetve hoforras kozelebe.

Tartsa tavol a tuztol, hoforrasoktol.

Tartsa az AVR-t egy jól szellozött tersegben. Hagyjon legalabb 10 cm-t az AVR es a fal kozott, biztositva ezalatt a levegozteteset.

Mukodesi homerseklet: -10°C~40°C

Mukodesi paratartalom: 0~90% (Non-kondenzacios)

Tartsa tavol koroziv gazaktol vagy folyadekoktol.



**Szerelje fel az AVR-t egy huvos, szaraz es tiszta tersegbe – tavol ablaktol, portol, nedvessegtol es hidegtol. Tuz illetve elektromos sokk elkerulese erdekeben, ne tegye ki a termeket az esore vagy vizbe.**



# HASZNALATI UTASITAS

**ARAM FESZULTSEG SZABALYZO (AVR)**  
Model: AVR-REL-GUARD500-1000-1500-2000-WL



## **7. Karbantartas**

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

### **Rendszeres ellenorzes**

Kapcsolja ki teljesen az AVR-t.

Használjon pamut torlot es mososzert a vaz es a ventilacios lyukak tisztitasara.

Ellenorizze le mindenik terminalt, cserelje ki a meghibasodottakat/ serulteket egy ugyanolyan ujra..

### **Rendkivuli ellenorzes**

Ha problema jelentkezik vagy az AVR rendellenesen mukodik, kerjuk merje meg a parametereket es ertesitse a forgalmazot.

Dorges vagy villamlas vagy esos idoszakban, ajanljuk hogy vegezzen rendkivuli ellenorzest a karosodas elkerulese erdekeben.

Amig az AVR mukodesben van, tilos a karbantartasa / ellenorzese.

## **8. Egyebek**

Ez az AVR szigoru standardok es minosegi rendszer alapjan volt megtervezve alltalanos alkalmazasra ajanlatos, de ha nem ennek megfelelo cellal használja veszelyes lehet a személyek eletere. Nem alkalmas az alábbi ( de nem csak) környezetben használatos szerkezetekkel együtt működtetni:

- a. Forgalmi rendszer
- b. Orvosi celokra hasznalt keszulekek
- c. Nuklearis erorendszer
- d. Legi kozlekedes es repulogep
- e. Biztonsagi rendszerek
- f. Mas specialis felhasznalas

### **Ekologikus informaciok:**

A hasznalt elektromos es elektronikus keszulekek specialis hulladek kategoriaba tartoznak, begujtesuk, tarolasuk es ujrafeldolgozasuk fontos, ezalltal elkerulhetjuk az uveghaz hatast okozo gazok vagy nehezfemek alltal okozott kornyezeti szennyezodest, melyek artalmasak az emberi egeszsegre es testi epegere. Ez okbal kifolyalag kerjuk a hasznalt elektromos es elektronikus keszulekeket, berendezeseket, leadni az erre a celra létrehozott specialis hulladek gyujto kozpontokba, ezalltal hozzájárulva a helyes újrahasznosítási folyamathoz, oltalmazva környezetünket es eroforasainkat.

Ne feledje! Minden egyes elektromos es elektronikus keszulek amely a hulladek lerakohoz, a foldre , vagy a viz partjara kerul szennyezi a kornyezetet!

Az elkulonitett gyujtest igenylo , hulladekka valt elektromos , elektronikus berendezes jelolese:



### **Forgalmazo:**

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