

USER'S MANUAL

AUTOMATIC VOLTAGE REGULATOR

Model: AVR-REL-POWERUP500/1000-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 equipment.
- 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-POWERUP500-WL	500VA/300W	1 x schuko	Nature	Circuit Breaker (5A, 250V)
AVR-REL-POWERUP1000-WL	1000VA/600W	1 x schuko	Nature	Circuit Breaker (7A, 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	Single Digital Display
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	Under Voltage, Over Voltage, Overheat, Short Circuit.
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

- 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!*

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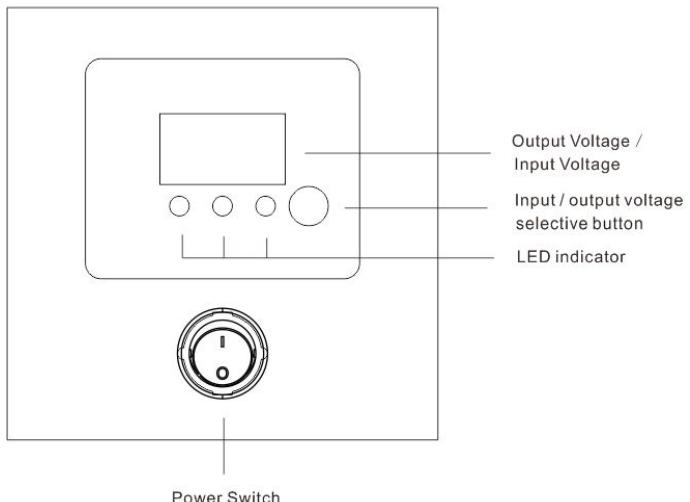


4. Introduction to the Regulator

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

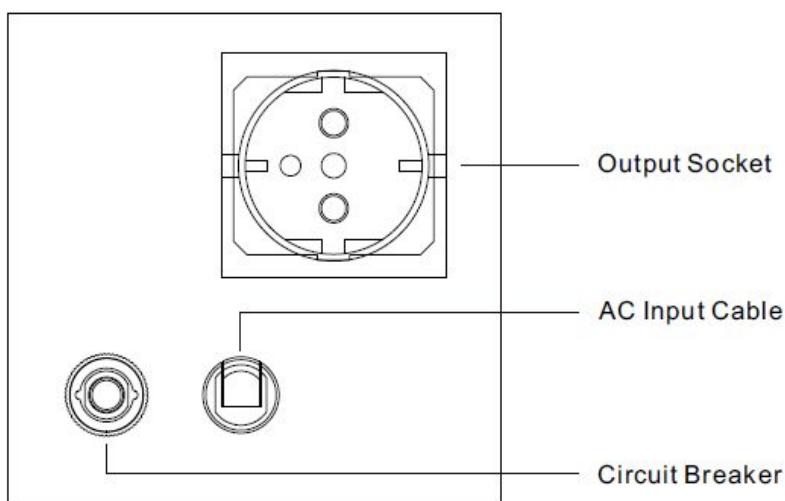
a. Front of the Regulator

500/1000VA model



b. Rear of the Regulator

500/1000VA model



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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 1000VA, 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 1000VA, just plug the AC mains cord to wall mains socket.

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 output voltage will show in the display after switch it on.
- By pressing the "Input/Output Voltage Selective Button", the input voltage will be indicated in the display and flash.
- Press the "Input/Output Voltage Selective Button" again to show the output voltage.

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

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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.

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 circuit breaker will trip off to cut out the 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..

6. Placement

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

a. Moving

- Cut off input; remove all wires connected to the AVR
- Do not move the AVR upside down
- 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.

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.

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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*,
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MANUAL DE UTILIZARE

REGULATOR AUTOMAT DE TENSUNE (AVR)
Model: AVR-REL-POWERUP500/1000-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 la 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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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. Pamantările 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 aruncați materiale straine de niciun fel (cum ar fi cleme, cuie etc...) in aparat.
- In caz de urgențe (deteriorari ale carcsei, 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.

- a. Mediul controlat trebuie sa fie in concordanță cu cerintele din specificații.
- b. Nu instalati sau operati AVR-ul in sau langa apa.
- c. Nu plasati AVR-ul pe un carucior, stand sau masa instabila.
- d. Nu plasati AVR-ul direct la soare sau aproape de surse de caldura.
- e. 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:

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

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2. Specificatii

Nr. Model	Putere	Iesire	Mod racire	Protectie circuit
AVR-REL-POWERUP500-WL	500VA/300W	1 x schuko	Natural	Intrerupator resetabil (5A, 250V)
AVR-REL-POWERUP1000-WL	1000VA/600W	1 x schuko	Natural	Intrerupator resetabil (7A, 250V)

Tensiune de intrare AC	140V~260V
Frecventa de intrare	45Hz~65Hz
Tensiune de iesire AC	220V
Frecventa de iesire	Sincronizat cu reteaua
Precizie de iesire fara sarcina	±8%
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)
Nivel zgomot	≤56dB (capacitate maxima, distanta de 1 m)
Timp intarziere	6/180 secunde selectable
Protectie	Tensiune scazuta la iesire, Supratensiune, 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 bucată
Manual de utilizare	1 bucată
Certificat de garantie	1 bucată

B. Observare vizuala

- Controlati placă de nume pentru a verifica daca capacitatea este in concordanță cu modelul comandat.
- Asigurati-vă ca AVR-ul nu este avariat. 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!

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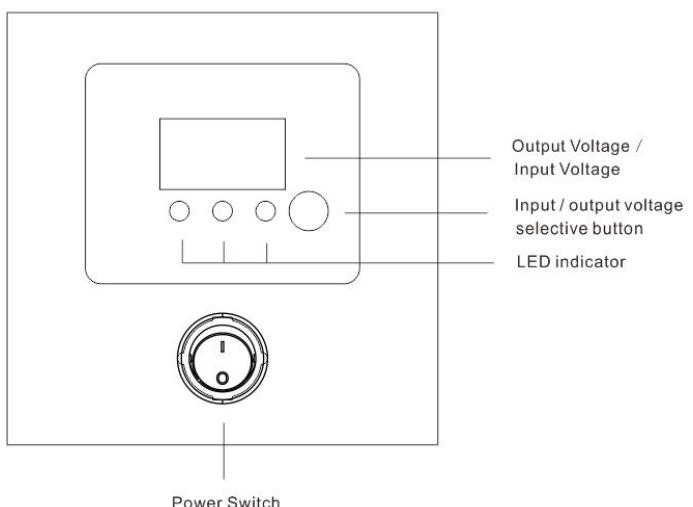


4. Introducere

Familiarizati-vă cu diferitele caracteristici și facilități prin studierea diagramelor de mai jos, pentru a obține beneficii maxime de la regulator.

a. Partea frontală a regulatorului

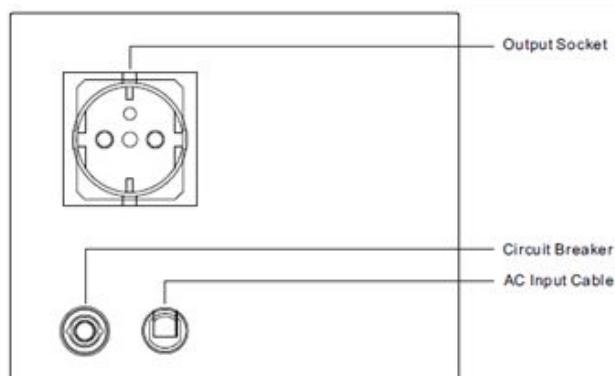
Pentru modelele 500/1000VA



Input / output voltage.....Tensiunea de intrare/ iesire
LED Indicator.....Indicatoare LED
IN-OUTput voltage selective buttonButon selectare afisaj tensiune intrare/ iesire
Power switch.....Intrerupator principal

b. Spatele regulatorului

Pentru modelele 500/1000VA



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

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5. Operarea AVR-ului

a. Conecțarea aparatelor electrice la regulator

- Asigurati-vă ca toate aparatelor sunt opriți și poziționați comutatorul de pe AVR în poziție "OFF" / "O"
- Pentru modele 500 VA – 1000 VA, conectați mufa de alimentare AC a apartului la soclul de ieșire de pe AVR, asigurându-vă că puterea totală necesară de pornire nu depășește puterea maximă a AVR-ului.

b. Conecțarea regulatorului la rețeaua de tensiune

- Pentru modele 500 VA – 1000 VA, pur și simplu conectați cablul de alimentare la tensiunea de rețea.

c. Pornirea / oprirea regulatorului

Pornirea regulatorului

- Plasați comutatorul de pornire / oprire în poziția "ON" / "1", LED-ul galben se va lumina și va palpa. În același timp afisajul 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.
- Afisajul digital va arăta tensiunea de ieșire furnizată pentru aparatelor conectate la regulator.
- Porniți fiecare aparat unul câte unul.

In cazul problemelor de curent:

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

d. Afisarea tensiunii de intrare și ieșire

- Dupa pornire afisajul digital va indica tensiunea de ieșire.
- Apasati butonului de selectare afisare tensiune intrare/ ieșire (I/O), afisajul digital va palpa și va indica tensiunea de intrare.
- Pentru revenire apasati din nou butonul de selectare afisare Input/ Output

e. LED

- Cand LED-ul verde este aprins, indica faptul ca AVR-ul este pornit, ca tensiunea de intrare și ieșire sunt normale și AVR-ul funcționează.
- Cand LED-ul galben este aprins și palpare, indica faptul ca AVR-ul este în stare de întârziere, iar ieșirea va fi întârziată.
- Cand LED-ul roșu este aprins și palpare, indica faptul ca regulatorul este în stare de protecție.

f. Operare cu mod de întârziere

- Acest model dispune de funcție de decalaj pentru a proteja aparatelor, mai ales acele apărate care au compresor (ca de exemplu aparat de aer condiționat, frigider, motor, pompă, etc) care nu trebuie să fie pornite imediat după ce sunt opriți.
- Timpul de întârziere este de obicei setat la 6/180 secunde selectabile. **Alegeți "delay" sau "underlay" înainte de pornirea AVR-ului.**
- Apasati butonul "delay" (mod de întârziere) , apoi alegeți întârzierea, timpul de întârziere va fi 180 de secunde. Dupa pornirea AVR-ului, se va astepta 180 secunde, după care AVR-ul va începe funcționarea. Apasati 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 apărate cu compresor, va sugeram să selectați "delay" înainte de pornirea AVR-ului.

- Dupa pornirea AVR-ului pe ecran se va afisa timpul de intarziere. Cand timpul de intarziere s-a scurs, LED-ul de delay se va stinge si afisajul va indica tensiunea AC de ieșire.

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

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- Acest model este echipat cu circuit integrat de protectie automata
- Acest circuit unic si specializat este regandit pentru a taia automat tensiunea de intrare atunci cand aceasta este deasupra la raza de tensiune de intrare, furnizand protectie totala si cuprinzatoare pentru regulator si aparatele conectate.
- Cand tensiunea de intrare revine la normal sau mai scazut, IAPC-ul va porni automat regulatorul si va restaura curentul la fiecare aparat conectat.

h. Protectie la supraincalzire

- Acest AVR este echipat cu un circuit unic de protectie la temperatura, dezvoltat pentru a proteja transformatorul, extinzand astfel viata regulatorului.
- Daca temperatura interna va depasi limitele superioare, tensiunea de iesire se va taia/ opri automat , iar pe ecran va aparea "C". In aceasi timp se va aprinde LED-ul rosu
- Cand temperatura interioara va reveni la limitele normale, tensiunea de iesire se va restaura. Dupa timpul de intarziere, afisajul va indica tensiunea de iesire.

i.Protectie la tensiune ridicata de iesire

- Acest AVR dispune de un circuit pentru protectie in cazul tensiunii de iesire ridicata.
- Acest circuit special si unic a fost dezvoltat pentru a proteja aparatele conectate ori de cate ori tensiunea de iesire este mai mare decat cea normala.
- Daca tensiunea de iesire este mai mare decat limita normala, alimentatorul de curent de iesire se va deconecta automat si pe ecran va aparea "H". In acelasi timp LED-ul rosu va palpai.
- De indata ce puterea interna va reveni la normal, AVR-ul va furniza tensiunea de iesirea potrivita.

j. Protectie la tensiune scazuta de iesire

- Daca tensiunea de iesire este mai mica decat limita normala, alimentatorul de curent de iesire se va deconecta automat si pe ecran va aparea "L". In acelasi timp LED-ul rosu va palpai
- De indata ce puterea interna va reveni la normal, AVR-ul va furniza iesirea potrivita.

k. Protectie la scurt circuit.

In cazul unui scurt-circuit sau al unei suprasarcini, INTRERUPATORUL (cu functie integrata de siguranta automata resetabila) se va declansa si va intrerupe alimentarea cu electricitate.

- Verificati daca RAT este supraincarcat, daca este, atunci deconectati cativa consumatori.
- Verificati daca aparatele au scurt-circuit, daca da, atunci deconectati aparatele.

6. Plasare

Pentru siguranta si performanta mai ridicata precum si o durata de viata mai mare, va rugam sa transportati si plasati AVR-ul in conformitate cu cele de mai jos:

a. Transportarea

- a. Indepartati toate cablurile conectate la AVR
- b. Nu transportati AVR cu capul in jos
- c. Manuire fara mila este interzisa.

b. Mediu

Nu-l depozitati pe suporturi instabile , tineti departe de surse excesive de vibratie.

Nu plasati AVR-ul direct la soare sau in mediu cu umiditate excesiva.

Tineti-l departe de foc, surse de caldura.

Tineti AVR-ul intr-un spatiu bine ventilat. Lasati cel putin 10 cm distant dintre AVR si pereti pentru a permite fluxul de aer adevarat.

Temperatura de operare: -10°C~40°C

Umiditate de operare: 0~90% (Fara-condensare)

Tineti-l departe de gaz sau lichid coroziv.

MANUAL DE UTILIZARE

REGULATOR AUTOMAT DE TENSUNE (AVR)
Model: AVR-REL-POWERUP500/1000-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 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-vla 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 , tratarea 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, www.vitacom.ro



HASZNALATI UTASITAS

ARAM FESZULTSEG SZABALYZO (AVR)
Kod: AVR-REL-POWERUP500/1000-WL



Kerjuk olvassa el figyelmesen ezt a hasznalati utasitast!

Koszonjuk hogy ezt a WELL automata feszultseg stabilizatort (AVR-t) valasztotta. Ennek segitsegevel tokeletesen meg tudja ovni a rakapcsolt keszuleket.

Ez egy utmutato az AVR felszerelesere es hasznalatara. Megtalalja benne a fontos biztonsagi utasitasokat amik segitsegul 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, figyelmezeteteseket es mas otleteket ajani.

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HASZNALATI UTASITAS

ARAM FESZULTSEG SZABALYZO (AVR)
Kod: AVR-REL-POWERUP500/1000-WL



1. Fontos biztonsagi intezkedes

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

- A keszulek karosodasanak elkerulese erdekeben, ajanlott hogy sajat csomagolasaban szallitsa.
- Gyors homerseklet ingadozas eseteben mint peldaul hidegrol normalis homersekletre valo atteres, para keletkezhet az AVR belsejben. Nagyon fontos hogy az AVR inditaskor szaraz legyen. Ezert varjon legalabb 2 orat a beinditas elott.
- Mikor a termek szaraz, olvassa el a tablazatban szereplo kornyezetre vonatkozo eloirasokat, mielott raktarne 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 nelkuli csatlakozassal vagy nem megfelelo csatlakozassal veszelyt jelenthet a felhasznalo egeszsegere illetve karosodhat a keszulek rovidzarlat kovetkezeteiben.
Az AVR felszerelese egy nem megfelelo atmeroju kabellel veszelyt jelenthet a felhasznalo egeszsegere es a termekre.

- Helyezze az osszes kabelt 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 bekezdéseket.
- Ne dobjon semmifele idegen targyat (csipesz, szeg, stb) a keszulekbe.
- Surgosseg eseteben (vaz karosodasa, elso pano, illetve foveztek karosodasa, folyadekkal valo locsolas, idegen test a keszulekbe valo esese) allitsa le az AVR-t, csatlakoztassa le a dugasz 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 szemely javithatja. Barmilyen a felhasznalo alltal megprobalt szetszedes vagy javitas veszelyes lehet.

A felszerelest ellenorzott kornyezetben vegezze.

- a. Az ellenorzott kornyezetnek meg kell feleinie 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 kabeljeit olyan helyre ahol nehez targy hatasara megkarosodhat.



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



Specialis elovigyazatossagok:

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)
Kod: AVR-REL-POWERUP500/1000-WL



2. Specifikacio

Model	Kapacitas	Kimenet	Hutes	Biztositek
AVR-REL-POWERUP500-WL	500VA/300W	1 x schuko	Termesztes	Visszaallithato kapcsolo (5A, 250V)
AVR-REL-POWERUP1000-WL	1000VA/600W	1 x schuko	Termesztes	Visszaallithato kapcsolo (7A, 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	Digitalis
Teljesítmény faktor	0.6
Hatekonysag	>0.95
Mukodesi homereklet	-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.
Tanusitvany	CE (EMC+LVD)
IP osztaly	IP20
Erintesvedelmi osztaly	I

Megjegyzes:

Fenntartjuk a jogot hogy a specifikaciokat megvaltoztassuk illetve kulonbozo modellekkel kivonjuk forgalombol, elsodleges informalis nelkul.

3. Installacio elott

Mindenik AVR 100 %-an volt tesztelve szallitas elott. Kicsomagolas utan ellenorizze ha az AVR nem-e karosodott a szallitas soran, 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 nevlemezen feltuntetett 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 megjavitani az AVR-t!*

HASZNALATI UTASITAS

ARAM FESZULTSEG SZABALYZO (AVR)
Kod: AVR-REL-POWERUP500/1000-WL

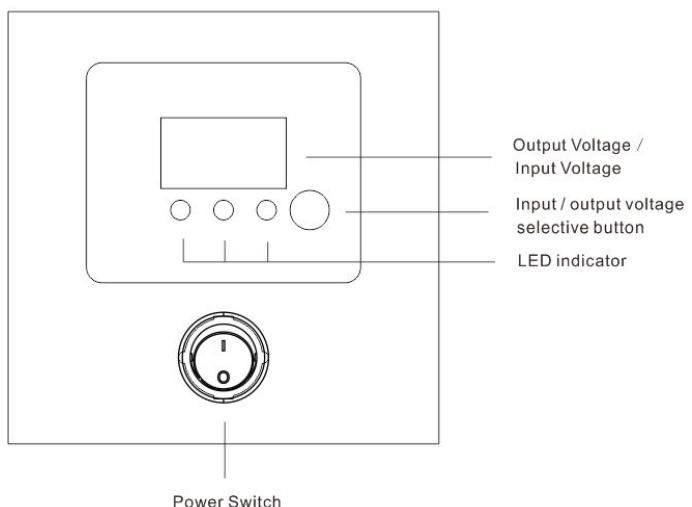


4. Bevezetes

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

a. Az aramszabalyzo elso resze

500/1000VA modellekhez



Output/ Input voltage.....Kimeneti/ Bementi feszultseg

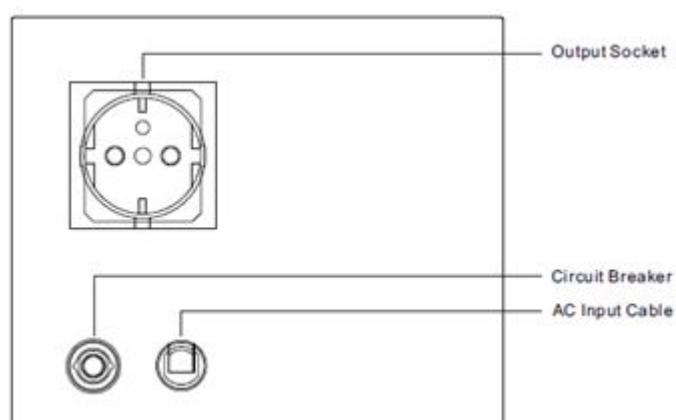
LED Indicator.....LED indikator

IN/OUTput voltage selective button.. Ki/ Bemeneti aramfeszultseg kijelzes kivalaszto gomb

Power switchHalozati kapcsolo

b. A aramszabalyzo hata

500/1000/VA modellekhez



Output socket..... Kimeneteli csatlakozaljzat

Circuit breaker.... Visszaallithato kapcsolo

AC Input cable.....AC tapkabel bemenet

HASZNALATI UTASITAS

ARAM FESZULTSEG SZABALYZO (AVR)
Kod: AVR-REL-POWERUP500/1000-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 – 1000 VA modelleknel, csatlakoztassa a keszulek AC dugaszat az AVR-n levo kimeneti csatlakozoaljzatba, 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 – 1000 VA modelleknel, egyszeruen csatlakoztassa az aramkabelt a halozati feszultseghez.

c. A stabilizator ki / be kapcsolasa

A stabilizator bekapcsolása

- Allitsa a ki / be kapcsolot az "ON"/ "1" 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 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 feszultseg.
- Nyomja meg az Input/Output (I/O) Ki/ Bemeneti aramfeszultseg kijelzes kivalaszto gombot, a kijelzon a bemeneti feszultseg fog megjelenni, ugyanakkor a kijelzo vibrál.
- Nyomja meg ujbol az Input/Output szelektiv gombot, a kijelzon a kimeneti feszultseg fog megjelenni.

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 kesleltetés szerint fog beindulni.
- Amikor a piros LED aktiv es pislog, jelzi hogy a stabilizator vedelmi modban van.

f. Kesleltetés

- Ez a model kesleltetes funkcioval rendelkezik, megvedve ezalltal azokat a keszulekeket is amelyeknek kompresszorral mukodnek (peldaul legkondicinalo keszulek, hutoszekreny, motor, pompa, stb) amelyeket nem szabad egybol ujraindítani 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 kesleltetést, az 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 kimeneti AC feszultseg fog megjelenni.

HASZNALATI UTASITAS

ARAM FESZULTSEG SZABALYZO (AVR)
Kod: AVR-REL-POWERUP500/1000-WL



g. Automata integrált aramkor vedelem (IAPC = Integrated Automatic Protection Circuit)

- Ez a model automata integrált aramkor vedelemmel rendelkezik
- Ez az egyedi es specializált aramkor automatikusan leállítja a bemeneteli feszultseget ha ez az AVR bemeneti feszultsegétől nagyobb, ezáltal teljes vedelemet nyújtva így a stabilizatornak es a raktárcsönt készülékeknek.
- Ha a bemeneteli feszultseg helyreáll vagy csökken, az IAPC automatikusan beindítja a stabilizátort es visszatérít minden készülékbe az aramat.

h. Homerseklet elleni vedelem

- Ez az AVR egy egyedi homerseklet szabalyzó aramkorrel van felszerelve, ami a transzformatort vedi, meghosszabítva ezáltal az AVR működési elettartamát.
- Ha a belső homerseklet eléri, vagy meghalad egy bizonyos felső határt a kimenet automatikusan meg fog szakadni es a kijelzőn a "C" jelénik meg. Ekozben kigyalog a piros LED.
- Amikor a homerseklet visszaáll a normalis keretek közé, a kimeneti feszultseg újból beindul. A kesleltetési idő lejárta után a kijelzőn megjelenik a kimeneti feszultseg.

i. Magas kimeneti feszultseg elleni vedelem

- Ez az AVR egy egyedi magas kimeneti feszultseg elleni aramkorrel van felszerelve
- Ezáltal a készülékek védelemre vannak akkor is ha a kimeneti feszultseg nagyobb mint a normalis.
- Ha a kimeneti feszultseg nagyobb mint a normalis, a kimeneti áramellátás automatikusan le fog állni es a kijelzőn megjelenik a "H". Ekozben a piros LED elkezd pislogni.
- Amikor a feszultseg ismét normalis lesz, az AVR kimeneti feszultseget fog biztosítani.

j. Alacsony kimeneti feszultseg elleni vedelem

- Ha a kimeneti feszultseg kisebb mint a normalis, a kimeneti áram automatikusan le fog állni es a kijelzőn megjelenik a "L". Ekozben a piros LED elkezd pislogni
- Amikor a feszultseg ismét normalis lesz, az AVR kimeneti feszultseget fog biztosítani.

k. Rövidzárlat elleni vedelem.

Rövidzárlat vagy túlterhelés esetén a biztosíték funkcióval ellátott visszaállítható 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.

6. Elhelyezés

Biztonságosabb használat es magasabb teljesítmény, valamint hosszabb elettartam érdekében, kerjük szállítása es helyezze az AVR-t az alábbiak figyelembe veteleivel.

a. Szállítás

- Csatlakoztassa le az AVR-t a halozatrol, távolítsa el minden kábelt az AVR-ról
- Ne szállítsa/ tarolja, használja az AVR-t fejjel lefelé tartva,
- Ugyeljen a kezelesre, durva kezelesmod tilos..

b. Környezet

Tartsa tavol ingatag alapoktól illetve tulzott vibráló forrásoktól.

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

Tartsa tavol a tuztól, hőforrásoktól.

Tartsa az AVR-t egy jól szellőzött területen. Hagyjon legalább 10 cm-t az AVR es a fal között, biztosítva ezáltal a levegőszűrést.

Működési homerek: -10°C~40°C

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

Tartsa tavol korozív gázaktól vagy folyadékaktól.

HASZNALATI UTASITAS

ARAM FESZULTSEG SZABALYZO (AVR)
Kod: AVR-REL-POWERUP500/1000-WL



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

7. Karbantartas

Az AVR-t elvileg nem igényel különösebb karbantartást. A rendszeres karbantartás azonban meghosszabbítja az élettartamat. Kovesse az alábbi lepéseket:

Rendszeres ellenorzes

Kapcsolja ki teljesen az AVR-t.

Használjon pamut torlot és mosószt a vás és a ventilációs lyukak tisztítására.

Ellenorizze le mindenik terminalt, cserélje ki a meghibásodottat/ serülteket egy ugyanolyan ujjal.

Rendkívuli ellenorzes

Ha probléma jelentkezik vagy az AVR rendellenesen működik, kerjük merje meg a paramétereiket és erteszítsé a forgalmazót.

Dorgás vagy villámlás vagy esős időszakban, ajanljuk hogy végezzen rendkívuli ellenorzetet a karosodás elkerülésére erdekeben.

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

8. Egyebek

Ez az AVR szigorú standardok és minőségi rendszer alapján volt megtervezve általános alkalmazásra ajánlott, de ha nem ennek megfelelő céljal használja veszélyes lehet a személyek éltere. Nem alkalmas az alábbi (de nem csak) környezetben használható szerkezetekkel együtt működni:

- Forgalmi rendszer
- Orvosi celokra használt keszulekek
- Nuklearis erőrendszer
- Legi közlekedés és repülőgép
- Biztonsági rendszerek
- Más speciális felhasználás

Ekologikus informaciok:

A használt elektromos és elektronikus keszulekek speciális hulladék kategóriába tartoznak, begyűjtésük, tarolasuk és újrafeldolgozásuk fontos, ezáltal elkerülhetjük az üvegház hatását okozó gázok vagy nehézfémek által okozott környezeti szennyezést, melyek artalmasak az emberi egészségre és testi egészségre.

Ez okbal kifolyalag kerjük a használt elektromos és elektronikus keszuleket, 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 keszulek amely a hulladék lerakóhoz, a földre, vagy a víz partjára kerül szennyezi a környezetet!

Az elkulonított gyűjtést igénylo, hulladékka valt elektromos, elektronikus berendezés jelolese:

Forgalmazo:

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