SINGLE-PHASE ELECTRONIC VOLTAGE STABILIZER

SEM 01-03







DANGER



- Contacting with live parts may result in serious wounds and even death.
- These devices operate at mains voltage. Under no circumstances should be powered up while protection covers are not in place.



WARNING



- Electrical connections should only be performed by professional electricians.
- Electrical safety precautions should be taken before any set up, maintenance or measurement operation.
- Do not use your device without protective ground connection.



CAUTION



- Read this manual carefully before using your device and save it for later reference.
- Follow the directions in this manual to ensure a longer working life for your device.
- Be sure that working conditions are met with the regulations described in this manual.
- Do not load your device more than the device rated power written on the device nameplate.
- Be sure that ventilation holes are clean and open.
- Do not perform any operation which you are unsure about.





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1 - SAFETY

1.1 This manual contains important instructions for E.SEM series AVR/Voltage Stabilizer that should be followed during installation and maintenance.

IMPORTANT NOTICES

- 1. Read instructions carefully before operating the AVR.
- **2.** All warnings in the manual should be adhered to.
- **3.** All operating instructions should be followed.
- **4.** The unit should be supplied by a grounded outlet. Do not operate the unit without ground source.
- **5.** Power cord of the AVR should be routed carefully so that they are not to be walked on.
- **6.** Please save this manual.
- **7.** Please save or recycle the packaging materials.

WARNING

- Do not insert any object or water into ventilation holes or other openings.
- To reduce the risk of fire or electric shock, install in temperature and humidity controlled indoor area free of conductive contaminants.
- Do not remove the cover without authorized personnel.
- Avoid rodent animals nearby the AVR.
- Avoid any flammable objects and objects which can be badly influenced by heat, to be around the AVR.
- To reduce the risk of fire, replace fuses with the same type and rating when necessary.
- Check outlook of the AVR once per month.
- Check switch and cables of the AVR once per month.
- Check paint once per year.

CAUTION

- Only qualified personnel should repair or service your AVR.
- Risk of electric shock: do not remove cover. No user serviceable parts inside, refer servicing to qualified service personnel.
- The output may be energized when the unit is not connected to a mains supply.
- Risk of electric shock. Hazardous live parts inside this unit are energized when the input AC power is connected.

2 - INSTALLATION

- Before starting installation, make sure the Main Switch is "OFF".
- Plug in the grounded outlet to the Line. (keep your hands dry during this process).
- Let there be a ground line to avoid all sort electrical leakages.
- Plug in the grounded outlet of the load(apparel) to the output outlet of your AVR.
- Switch on your AVR by simply turning the main switch "ON".
- The AVR will give a sound signal.
- On digital voltmeter display, first Input voltage will appear.
- Then AVR Temperature and Output voltage will be displayed.
- During this process, the cooling fan will automatically function and turn off for testing.
- The AVR will give two signal sound and start to operate.
- Please check if the displayed Output Voltage is amongst 225V 235V.
- If displayed output voltage value is out of this range, please contact with authorized service in your country.

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3 - AVR SPECIFICATIONS AND BASIC INFORMATION

The AVR you purchased is a Line conditioner uniquely designed for small home appliances like Satellite TV, Music centre, Combi water boilers. Your AVR is protected against High/Low Voltage, Over burden, Over current Short circuit. Under such circumstances, the AVR will protect its mechanism and won't give output. When the conditions return to normal, it will give the output.

Model	E.SEM01	E.SEM02	E.SEM03
POWER (VA)	1.000	2.000	3.500
Power factor	0,8		
INPUT			
Input voltage	135-260 V		
Input frequency	47 65 Hz		
Protection	Fuse	Magnetothermic	
Current (A)	4	10	16
OUTPUT			
Output voltage	230Vac RMS ±5%		
Overload capacity	10" at 150% of the nominal load		
Adjustment speed	500 Volt/sec		
Output frequency	47 65 Hz		
Output protection	Short circuit, overload, high voltage (245V)		
TECHNOLOGY			
Туре	Electronically controlled minirelay		
GENERAL			
Cooling	Smart fan system (internal temperature 60°C – off at 55°C)		
Thermal protection	Internal temperature 100°C (automatic reinstatement a 95°C)		
Output/input voltage display	Digital voltmeter		
Harmonic distortion	-		
Efficiency	> 96%		
Manual by-pass	(optional) Manual rotary switch control		
Degree of protection	IP20		
ENVIRONMENT			
Operating temperatures	-10°C / +50°C		
Storage temperatures	-25°C / +60°C		
Relative humidity	<90% DIN (40040)		
Maximum altitude	1000m		
Noise level	<50 dB at 1m		
Dimension (WxDxH) cm	17x9x30	17x9x30 30x21x37	
Weight (kg)	4	12	14

Dimensions and weights are indicative only and can be changed at any time without notice

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WARRANTY

Dear Customer.

Thank you for purchasing a NAICON product. We hope that you be satisfied.

If the product fails in warranty period, please contact your dealer or call +39 02 950031 or go to www.naicon.com/elsist. Before contacting your dealer or authorized service network, we recommend that you read the operating and maintenance manual carefully.

With this warranty, NAICON warrants the product to be free from defective in materials or workmanship for 2 years, as of the original delivery date.

If there are material or manufacturing defects during the warranty period, NAICON affiliates, Authorized Service Centers or authorized resellers located in the UE region will repair or (at NAICON discretion) replace the defective product or components under the terms and conditions below, without any charge for labor or spare parts costs. NAICON reserves the right (in its sole discretion) to replace the components of defective products or low cost products with assembled parts or new or refurbished products.

Conditions.

- 1. This warranty will be valid only if the defective product is returned together with the sales invoice.
 - NAICON reserves the right to refuse warranty service in the absence of such documents or if the information contained therein is incomplete or illegible.
- 2. This warranty does not cover the costs and / or any damages and / or defects resulting from any modifications or adjustments made to the product, without prior written permission from NAICON, in order to adapt the product to local technical or safety standards in countries other than those for which the product was originally designed and manufactured.
- 3. This warranty will be void if the model or serial number indicated on the product has been modified, deleted, removed or otherwise illegible.
- 4. Are excluded from the warranty:
 - Periodic maintenance and repair or replacement of parts subject to normal wear and tear.
 - Any modification or modification to the product, without prior written permission from NAICON to enhance performance than those described in the User and Maintenance Manual
 - All costs of technical staff support and any transport from the customer's address to Assistance Center and vice versa as well as all the risks involved.
 - Damages due to:
 - a) Improper use, including but not limited to: (a) the use of the product for any purpose other than the intended use or failure to observe the NAICON instructions for correct use and maintenance of the product, (b) installation or use of the product not complying with the Technical or Safety standards in the country in which it is used.
 - b) Repairs by unauthorized personnel or by the Customer himself.
 - c) Accidental events, lightning, floods, fires, incorrect ventilation or other causes not attributable to NAICON.
 - d) Defects of the equipment or equipment to which the product was connected.
- 5. This warranty does not affect the buyer's rights established by applicable national laws nor the Customer's rights to the reseller arising out of the sales contract.

Unless authorized by the manufacturer, reproduction of any part of this manual is prohibited. Our equipment, built with the utmost care and with selected components, is controlled by NAICON Quality Services. However, if you notice any anomalies, please inform us by calling +39 02-950031 specifying serial number and model of the device, which are printed on the identification plate at the rear side of the AVR. NAICON Assistance Service is also available to collect requests, comments, suggestions, if any.

In case of failure:

Contact our Customer Service Center at +39 02 95 0031, and verify the AVR malfunction.

If the products returned to NAICON were OPERATING or if they were delivered without our permission or for out-of-warranty products, they will be returned to the customer by charging a cost that will depend on the country where will be shipped.

