Safety Cautions:

Thank you for choosing Enersafe!

Before use, please read the manual carefully to ensure life safety, protect the equipment, and the connected equipment.

Warning mark ⚠ is used in the manual with details below:

⚠ Danger!

1. High voltage within the voltage stabilizer! Technical staff of our company or the authorized technical staff is not permitted to disassemble or maintain the products; otherwise, electric shock may incur! Such operation may invalidate the warranty.
2. Before the voltage stabilizer is used for the following loads, please discuss with the dealer, and special considerations and designs are must be taken into account for its application, setting, management, and maintenance:
   - Medical instruments directly related to patients' life;
   - Lift and other equipment possibly endangering life safety;
   - Equipment similar to the above.
3. Before connecting or related operations, please cut off the power supply; otherwise, it may cause electric shock or product damage.

4. After the voltage stabilizer is connected to power, do not open the enclosure and touch any electrified parts.
5. A circuit breaker is required at the input terminal of the product to ensure safety.

⚠ Warning:

1. Only eligible technicians are permitted to install, operate, and maintain the voltage stabilizer;
2. In the process of wiring, please wire strictly in accordance with wiring marks and this manual. Do not connect the input and output terminal reversely; do not connect the neutral wire and phase wire reversely.
3. The load shall be connected based on rated capacity of the voltage stabilizer. The power capacity should be reserved for long-term continuous operation, impact load or non-linearity load, or greater harmonics.
4. The voltage stabilizer is only applicable to environment accepted by the Manual. If and when the voltage stabilizer is used in the environment not accepted, it may cause fire, electricity leakage and other accidents. (Any safety issues in connection herewith shall not be covered by our Company).

5. In case of fire, please use dry powder fire extinguisher. Electricity shock may occur.

⚠ Cautions:

1. Please read the manual when installing, operating, and maintaining the product;
2. Irrelevant staff is not permitted to operate the product;
3. Do not place any objects on the top of the voltage stabilizer, and entry of conductive objects into the fan hole, ventilation hole, and enclosure door cover is not permitted. Otherwise, it may cause fault, electric shock, and even fire. (Any safety issues arising herefrom shall not be covered by the Company).
4. Sufficient ventilation space is required around and at the top of the voltage stabilizer for maintenance.
5. The voltage stabilizer must be grounded in installation; do not disassemble or transformer the voltage stabilizer without permission; otherwise, it may cause fault, electric shock, and even fire. (Any safety issues arising herefrom shall not be covered by the Company).



I. Introduction

This voltage stabilizer is able to output defined voltage under given voltage range.

II. Features

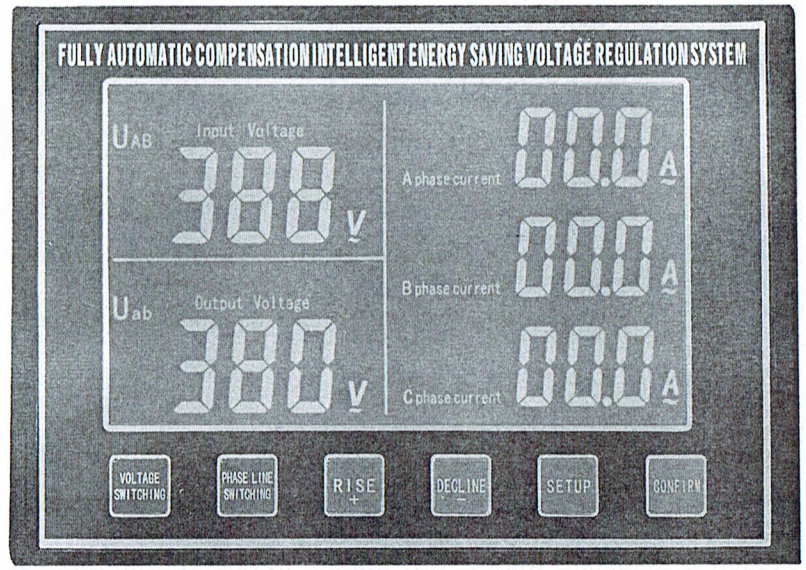
1. Wide input range

When the mains voltage falls within 277V-433V, it is able to output voltage 380V±3%.

2. Full protection features

Over-voltage, under-voltage, and over-current protection features are activated.

3. Screen display and button operation



Notes to operation (refer to the above Figure).

A. Voltage switching: press the button to display input phase $U_{AB}$, phase $U_{BC}$, Phase $U_{CA}$, output phase $U_{AB}$, phase $U_{BC}$, and Phase $U_{CA}$ phase line voltage, or input phase $U_A$, phase $U_B$, and phase $U_C$, or output phase $U_A$, phase $U_B$, and phase $U_C$ voltage. Such display shall be done with B. Phase Line Switching.

B. Phase line switching: press the button to display line voltage or phase voltage in cycles.

C. Rise "+": composite key for parameter setting.

D. Decline "-": composite key for parameter setting.

E. Set up: composite key for setting.

F. Confirm: confirmation key.

Usage of setup key: press the SETUP key: F-1 to set over-voltage value, F-2 to set under-voltage value, F-3 to set current transformer (such as 100 refers to the current transformer 100A), and F-4 to set current. After the above setting is finished, press Confirm to confirm.

4. Delay starting

A short delay is enabled, during the delay period, the stabilizing section is adjusting without any output, to ensure that there is no high-voltage impact on the equipment.





5. High-quality output voltage: stable stabilizing process, without transient power shortage and additional waveform distortion.

III. Main technical indexes

| | Value |
|---|---|
| 1. Input voltage | 277-433V |
| 2. Output voltage | Phase voltage 220V±3% |
| 3. Rated frequency | 50/60Hz |
| 4. Output power | 10KVA-30KVA |
| 5. OV protection | 250V±5V (phase voltage) |
| 6. UV protection | 183V±5V (phase voltage) |
| 7. Insulation resistance | >2MΩ |
| 8. Insulation voltage | 1500VAC |
| 9. Response time | ±10% variation <1S |
| 10. Operation environment | Relative humidity≤95%, -10℃-+45℃, without severe vibration, dust, corrosiveness, flammability, explosive gas, and well ventilation. |
| 11.Waveform distortion | No additional waveform distortion |

⚠ Cautions:

As for load with instantaneous impact current (such as motor), non-linearity load, and scenarios with harmonic components in grid, the voltage stabilizer capacity shall be increased.

⚠ Cautions:

1. If you have any other technical requirements, please negotiate with our company.
2. No further information will be advised in case of change of the technical specifications.

IV. Notes to operation

1. This series of power supply can be selected based on actual power of the equipment used. As for air-conditioner, refrigerator, and other products with motor, the capacity shall be 1.5-2 times of the standard power, and other heating products shall be 1.2-1.5 times of the standard power. If local voltage is lower, the rate shall be increased.
2. In case of phase failure, over-voltage, under-voltage and other protection of the three-phase voltage stabilizer, it will cut off output to protect the load.
3. When the protection feature is activated, the protection





indicator lights are on. After the fault disappears, the output will be recovered. If the voltage stabilizer is always under protection, please check whether it is under defined scope or if there is any phase failure.

4. In case of any spark between the carbon brush and the transformer, please grind the transformer surface with grinding paper to level the carbon brush to eliminate the spark. (Notes: such an operation shall be carried out with power cutoff).
5. In case of power grid fault, please switch off the voltage stabilizer and the connected load.
6. Loads of phases should be balanced as much as possible.

V. Maintenance

1. When this series of power supply is used, please install the voltage stabilizer at a dry and ventilated place (do not install in toilet, kitchen and other wet places). Do not block the heat radiation holes on the enclosure, and prevent entry of water and other foreign articles to ensure safety and reliability.
2. The voltage stabilizer shall be placed horizontally, and inclined or vertical placement is not allowed.

3. Product maintenance (*power supply cutoff) shall be subject to environment.

(1) Thoroughly clean components of the stabilizer, keep clear of dust, especially exposure of the carbon brush and the contacted transformer, and wipe off with gasoline and cotton cloth when necessary.

(2) Replace the seriously worn carbon brush;

(3) Timely repair or replace in case of any fault or damaged parts;

(4) Prepare maintenance records. (Any safety issues from missing of the maintenance shall not be covered by the Company).

4. The voltage stabilizer must be grounded reliably. The Company is not liable for any electric shock by failure grounding.

5. Installation, wiring, maintenance and other electricity work shall be finished by electrician to avoid electric shocks in the process.

6. Do not cover the power supply with plastic cover etc. to prevent heat radiation.





# Warranty Card

End user: _____

Phone No.: _____

Contact: _____

Mailing address: _____

Fax No.: _____

Serial No.: _____

Model: _____

Which kind of equipment to be connected:

_____