

PPPSL-Servo Voltage Stabilizer



Optimum performance of any electrical or electronic equipment is highly dependent on the stability of the applied mains voltage. Wide deviations from the normal voltage, both on the higher side and lower side, can produce harmful effects.

PERPETUAL servo-controlled AC Voltage Stabilizers are exclusively designed to protect your costly equipment from harm caused by undesired voltage fluctuations.

PERPETUAL Servo Voltage Stabilizers are ideally suitable for computers and computer-based systems, medical diagnostic equipment, general laboratory equipment, high power communication systems, and any other application that requires a precise mains supply.

- Corrects voltage automatically and continuously.
- Induction motors operate at high efficiency when supplied with constant voltage.
- Protects costly equipment from the menace of high/low voltage, thus cutting down maintenance costs.
- Reduces production losses and improves overall plant efficiency.
- Increases productivity.
- Eligible for **100% depreciation** as per Income Tax Act.
- Reduces MDI (Maximum Demand Indicator) and saves power. Reduces electricity bills by approximately 15% (subject to input voltage variation, loading, and operating hours). Saves on diesel costs, as generators are not required to run during high/low voltage conditions.
- The average payback period for a Servo Controlled Voltage Stabilizer, due to its high energy-saving capability, is approximately 18 months. Fast correction rate with very high efficiency.

PERPETUAL POWER SERVICES PRIVATE LIMITED



- Operates over a wide input frequency range with **no waveform distortion**.
- Specially designed high-performance I.C.-based control circuit for ultra-high reliability.
- Auto/Manual operation facility.
- Over-voltage and under-voltage indicators.
- Output voltage adjustability provided on the panel.
- Unaffected by Load Power Factor.
- Plug-in type **glass-epoxy control cards** designed for easy online serviceability.
- All components are of reputed make, conforming to relevant IS/BS standards.
- Easy accessibility from all four sides.
- Stabilizers are subjected to routine and type tests as per latest ISO standards (ISO: 9815–94).

FIELD OF APPLICATION

- Information Technology and Call Centers
- Computer and Micro-Processor Controlled Equipment
- Sophisticated research instruments used in Scientific, Medical, Agricultural, Educational, and other Research Institutions
- Offset Printing Presses, Color Scanners, Processors, Phototypesetters, Photographic Equipment, Photo Copiers, and Packaging Industries
- Medical Equipment, X-Ray Machines, E.C.G. Machines/Monitors, MRI, CT Scans, etc.
- Defense Installations, LPTs, HPTs, Broadcasting and Telecommunications
- Lifts, Escalators, and Elevators
- Central Air-Conditioning Plants, Processing Plants
- Chemical Industries, Textile Industries
- CNC Machines, Laser Machines, and Moldings Machines, etc.
- Commercial Buildings and Complexes
- Complete Hospitals and Nursing Homes



TECHNICAL SPECIFICATIONS Capacity

- 1 KVA to 330 KVA (Single Phase)
- 3 KVA to 1000 KVA (Three Phase)

Input Voltage Range

- 150V-270V, 170V-270V (Single Phase)
- 260V-470V, 300V-470V (Three Phase)
- (Other ranges available on specific order)

Output Voltage

- 220V / 230V / 240V Single Phase (adjustable)
- 380V / 400V / 415V Three Phase (adjustable)

Regulation

±1% or better

Supply Frequency

- 47 Hz 53 Hz
- 100% continuous

Efficiency

Not specified (implied high)

Effect of Load Power Factor

Nil

Waveform Distortion

Nil

Rate of Correction

- Better than 36V/sec in air-cooled models
- Better than 20V/sec in oil-cooled models

Duty Cycle

Response Time

Not explicitly stated

Cooling

• Air/Oil as per requirement

Overload Capability

• Up to 200% momentarily

No Load Losses

• Less than 0.8% over entire range

Suitability

Suitable for 3-phase unbalanced/balanced supply & unbalanced/balanced load

Mounting

• On wheels

Earthing (Grounding)

· Earthing terminals provided