

# SERVOKON

RAKHE SAB CONTROL MEIN

***TRANSFORMING  
POWER TO PEOPLE***







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## ABOUT US

### OUR COMPANY OVERVIEW

#### Visionary Leadership and Legacy

Servokon Systems Limited was founded in 1990 by Mr. Haji Kamruddin and exemplifies visionary leadership and innovative thinking. The company carries a rich legacy spanning nearly 35 years and has emerged as India's largest power conditioning equipment and transformer Manufacturer and supplier. Led by Mr. Kamruddin and committed to excellence and trust, Servokon has always expanded to new horizons, traversing existing boundaries and establishing new industry standards.

#### India's No. 1 Servo Voltage Stabilizer Manufacturing Company

Through dedication to innovation and focus on offering customer-centric solutions, Servokon ascended a few years back to being India's No. 1 Servo Voltage Stabilizer manufacturing company, and has since then maintained its leadership position through relentless innovation, exceptional quality control, and a deep understanding of market needs. This achievement reflects the company's commitment to quality and firm focus on delivering customised and reliable solutions at reasonable prices, fulfilling the various needs of its clients.

#### Servokon's Prime Focus Segments with Product Range

Over time, Servokon Systems Limited has widened its manufacturing and supply range, and categorized its offerings into five major segments:

■ Power ■ Solar ■ Power Conditioning ■ Retail Network ■ Export

Servokon's broad Power Segment line-up encompasses Power Transformers, Distribution Transformers, Inverter Duty/Solar Transformers, Furnace Transformers, Hermetically Sealed Transformers, Compact Sub Stations (CSS), Packaged Sub Station (PSS), Isolation Transformers, Dry Type Transformers, Pad Mounted Transformers, HT-AVR, Transformer with Built in HT-AVR, Step Up & Step Down Transformers, Isolation & Ultra Isolation Transformers, HT Panels, LT Panels, VCB Panels, Control Panels, CT & PT Panels, Special Type Transformers among several other types of industrial transformers.

The company has a strong presence in the Renewable Energy domain, with strong focus on exploring new possibilities in the sector. Its offerings include Solar Power Generating Systems (SPGS), Solar Inverter, Solar Batteries, and Solar Panels. Servokon is also strongly emerging as a Solar System EPC Establisher.

The company has a strong presence, with offerings such as Solar Power Generating Systems (SPGS), Solar Inverter, Solar Batteries, and Solar Panels. Its extensive product range affords Servokon a sharp competitive edge, positioning the company as a one-stop solution provider, meeting the changing demands of customers.

The foundational segment of Servokon - the Power Conditioning Segment – is integral to the company's inception, and offers a complete range of products including, Servo Voltage Stabilizers, Rolling Contact Servo Stabilizer, Static Servo Stabilizers, Online UPS, Constant Voltage Transformer (CVT), Variable Auto Transformer (Variac) and other Customized Power Conditioning Products.

## VISION

To carve a distinct and impactful niche in the production and supply of robust power conditioning solutions such as High-capacity Transformers, Servo Stabilizers and various Electrical Products through an efficient network of channel partners in India and abroad. Besides, our Company is committed to facilitating the renewable energy goals of industries and economies through research-based and cost-effective solar power solutions.

## MISSION

To successfully analyze the present and future needs of national and international markets and meet their expectations with the most advanced, efficacious, and budget-friendly solutions. Moreover, to continuously add value to Servokon's products and services by leveraging innovations, incorporating skills, and adhering to professional ethics.



Let's bring Quality & Consistency together!

#SaifAliKhan

35  
YEARS OF TRUST



VIDEO LINK <https://www.youtube.com/watch?v=iVB78HO13Fo>



**Servokon | India's Leading Brand For Complete Power & Energy Solution**



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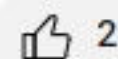


**Servokon Sirf Ek Naam Nahi Bharosa Hai 35 Salo Ka Jo apne Kiya hain Humpe Tabhi Toh Hum Hain**



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# OUR PRODUCT RANGE

## Power Segment

- Power Transformer
- Distribution Transformer
- Furnace Transformer
- Inverter Duty/Solar Transformer
- Hermetically Sealed Transformer
- Compact Sub Station (CSS)
- Packaged Sub Station (PSS)
- Dry Type Transformers
- Pad Mounted Transformers
- HT AVR
- Transformer with Built In HT AVR
- Step Up & Step Down Transformers
- Isolation & Ultra Isolation Transformers
- Neutral Transformers
- HT Panels
- LT Panels
- VCB Panels
- Control Panels
- CT & PT Panels
- Special Type Transformers

## Renewable Energy Segment

- Solar EPC Services
- Solar Power Generating Systems
- Solar Inverters
- Solar Batteries
- Solar Panels

## Power Conditioning Segment

- Servo Voltage Stabilizers
- Rolling Contact Servo Stabilizers
- Static Voltage Stabilizers
- Online UPS
- CVT
- Variable Auto Transformer (Variac)

## Retail Network Segment

- Automatic Voltage Stabilizers
- Water Heater/Geyser



# SERVOKON

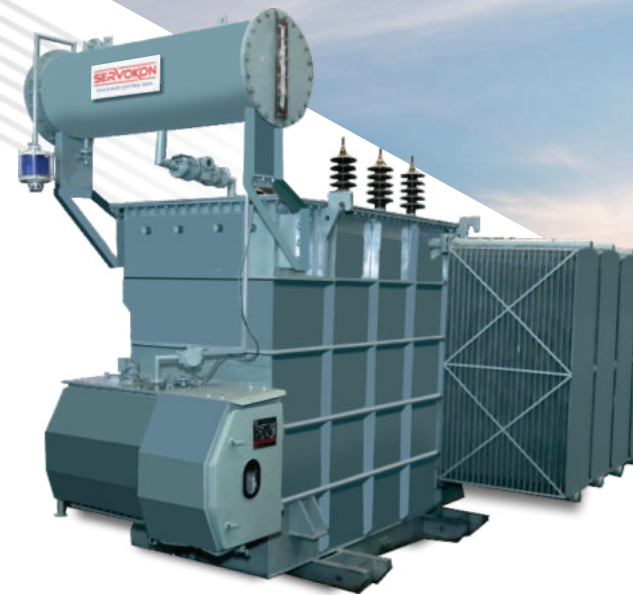
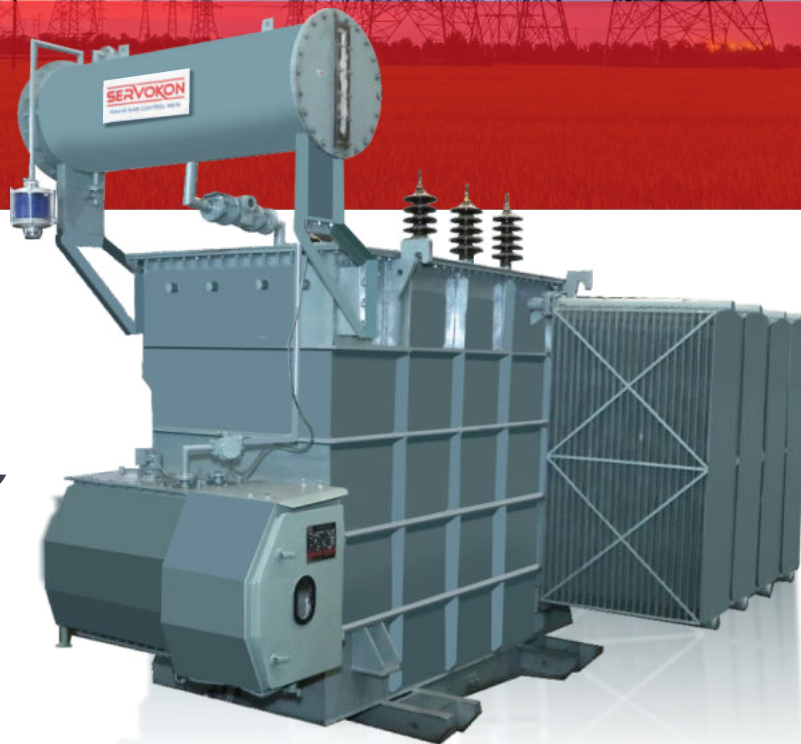
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## HIGH & LOW VOLTAGE TRANSFORMERS

Upto 50 MVA, Upto 66 KV Class

WWW.SERVOKON.COM



## TRANSFORMERS

Transformers are one of the primary components for the transmission and distribution of electrical energy. Their design results mainly from the range of application, the construction, the rated power and the voltage level. The scope of Transformer types start with Generator Transformers and ends with Distribution Transformers. The transformer can be Single Phase, Double Phase or Three Phase. We are manufacturing Highly efficient low loss star rated transformers in accordance with the latest Indian & International Standards.

### We are manufacturing wide range of TRANSFORMERS

- Power Transformers (OCTC & OLTC Type)
- Distribution Transformers (OCTC & OLTC Type)
- Hermetically Sealed Transformers
- Corrugated Tank Transformers
- Inverter Duty Transformers
- Compact Sub Station (CSS)
- Packaged Sub Station (PSS)
- Furnace Transformers
- Station Transformers
- Auto Transformers
- Auxiliary Transformers
- Booster Transformers
- Isolation Transformers
- Ultra-Isolation Transformers
- Generator Transformers
- Special Transformers (Customized)
- Dual Ratio or Multi Winding Transformers
- Transformer with Built in HT-AVR
- Pad Mounted Transformers
- Pole Mounted Transformers
- Ground (Plinth) Mounted Transformers
- Step Down Transformers
- Step Up Transformers
- Earthing Transformers
- Neutral Transformers
- Constant Voltage Transformers
- Variable Auto Transformers
- Cast Resin Dry Type Transformers (CRT)
- Vacuum Pressure Impregnated Dry Type Transformers (VPI)
- Trolley Mount Transformer

### Manufacturing Range

- Oil Immersed Type Transformers.
- Dry Type Transformers.
- Single Phase, Double Phase & Three Phase Type.
- Capacity from 25 KVA to 50 MVA.
- Voltage Class : 1.1kV, 2.2kV, 3.3kV, 6.6kV, 6.9kV, 11kV, 12.47kV, 13.2kV, 13.8kV, 15kV, 22kV, 25kV, 33kV, 34.5kV, 66kV, 69kV (Any Special Customised Class as per requirement)



## DESIGNING

We are following the relevant and updated Indian Standards namely Latest Amended IS:1180, IS:2026, IS:11171 along with various other applicable Indian Standards as well as International Standards namely IEC 60076 and various other applicable International Standards. We adhered to the Technical Guidelines of IS, ISO, CE, BIS, BEE, ECBC, CBIP, IEC, ANSI, REC, BSI, NES, ASTM, IEEE, EUD, DIN, NEMA, ITMA & IEEMA etc., our manufacturing unit have the up to dated and well-equipped advanced technical bench which is also calibrated as per NABL Guidelines.

## TANK

The construction of Tank can be Conventional Type and Corrugated Type as per the project's requirement. The Conventional Tanks consist of the Main Tank Body, Conservator, Cover and Presses Steel Type Radiators. The tanks are made from MS Steels Plates or Sheets with adequate Stiffeners. The Radiators of CRCA (Cold Rolled Close Annealed) can be mounded as Fixed Type or Detachable Type for the heat dissipation and cooling to keep low oil temperature inside the tank. The Corrugated Tanks are made from CRCA and MS Steels, it also knows as hermitically sealed type construction.



## WINDING

We are using the best quality wire and strips of Electrolytic Grade Copper and ECC Grade Aluminum conductors covered with inorganic thermally upgraded insulating material like Nomex, DPC, TPC, SE as per requirement of design. These insulations have best mechanical strength and can withstand the temperature upto 220 °C. The winding construction can be Cross Over, Hellical, Disc Type, and Continuous Disc Type. Radial Spacers, Axial Spaces, Cotton Tape, Sleeves, Press Board & Kraft Paper of Electrical Grade are generally used for insulation between Core & HV / LV Coils to provide additional cooling. The use of thermally upgraded insulating material is very important for conductors to allows the windings to withstand conditions of several thermal and mechanical stress.

## TESTING

The Transformers manufactured by us are tested for the quality & performance at our in-house Testing Lab. We perform all the recommended Routine Test, Type Test & Special Test as per, IS:1180, IS:2026, IEC:60076 or as applicable. We have also successfully conducted Type Test & Special Test at NABL's accredited Testing Labs like CPRI, ERDA, ERTD & NTH etc., we also offer the Third Party Inspection as per customer's requirement.

## CORE

The Cold Rolled Grain Oriented (CRGO) Silicon Steel is also knows as Core and the series of Core's Stacked Laminations are called Core Assembly. We use the high grade and low losses material of CRGO like M0, M3, M4, M5, 0.23 or as per IS:3024, BIS & PGCIL's norms, all the electrical characteristics of CRGO are strictly monitored by our design team for superior performance and lower electrical loss.

## TRANSFORMER OIL

The importance of Oil in a transformer is just like the blood in the human body. For the superior performance we use fresh mineral Oil of Electrical Grade (EHV) which is Tested and Filtered as per IS:335, IEC:60296, BSI:148 & ASTM:D-1473, D-1533 etc. to withstand the Dielectric and Acidic characteristics.



## LIST OF ACCESSORIES

A Transformer has some fittings & accessories depend on its capacity for trouble free operation. A list of Standard as well as Optional Fittings & Accessories as we offer with the Transformer:-

- Oil Conservator with Oil Filling Hole and Drain Plug.
- Rotary Type Off Circuit Tap Changer (OCTC) with Locking Arrangement & Tap Indication.
- Porcelain Type Bare Bushing for HV & for LV Termination.
- Name, Rating & Diagram Plate.
- Explosion Vent with Diaphragm.
- Thermometer Pockets.
- Dial Type Oil Level Indicator.
- Drain cum Bottom Filter Valve.
- Skid Type Base Channels.
- Cable Box for HV Side and for LV Side.
- Uni-Directional Flat Wheels.
- Bi-Directional Flat Wheels.
- Double Floated Buchholz Relay with Alarm & Trip Contacts.
- Magnetic Oil Level Gauge with Alarm Contact.
- Weather proof Marshalling Box with IP:55 Protections.
- Pressure Relief Valve with Alarm Contact.
- Neutral CT and Bushing CT.
- CT for WTI.
- Disconnecting Chamber with Cable Box.
- Uni-Directional Flanged Wheels.
- Industrial Exhaust Fans with Radiator for Force Cooling.
- Prismatic Oil Level Gauge with Minimum, Normal & Maximum Marking.
- Fixed Type or Detachable Type Pressed Steels Radiators for Natural Cooling.
- Winding Temperature Indicator with Alarm & Trip Contacts.
- Lifting Lugs.
- Monogram Plate.
- Earthing Terminals.
- Dehydrate Silica Gel Breather Assembly.
- Top cum Sampling Valve.
- Air Release Plug.
- Oil Sample Valves.
- Jacking Pads.
- Top Cover Lifting Eyes.
- Butterfly of Shut-Off Valves between the Radiators and Main Tank.
- First Filling of Fresh Mineral Oil as per IS:335.
- Oil Temperature Indicator with Alarm & Trip Contacts.
- On Load Tap Changer (OLTC).
- RTCC Panel for OLTC.
- AVR for OLTC.
- Oil Surge Relay with Alarm Contact for OLTC.
- Bi-Directional Flanged Wheels.
- Any additional or special accessories as per project's requirements.



## WHY SERVOKON ?

We, the "SERVOKON", a name of trust, are committed to do our part to set a benchmark in the wide range of Power Conditioning products by leveraging our superior expertise. We deliver the best economical solutions worldwide and we are proud to be the best, because our specialties are :

- Trust of 35 Years Working Experience.
- Transparent Behaviour.
- Well Known Indian Brand.
- Your Satisfaction is our Priority.
- Economical and Cost Effective Design.
- Affiliated with the up-to-dated Indian & International Standards.
- Best Durability and Heavy Duty Products.
- Low Electricity Consumption.
- Assurance of Superior Quality and Best Workmanship.
- Promise of Quick Services.
- High Efficiency and Energy Saving Technique.
- Our Products are successfully Type Tested at NABL Approved Testing Laboratories.

## APPROVALS

**OUR "SERVOKON" MAKE TRANSFORMERS ARE PROVEN AND APPROVED BY THE VARIOUS REPUTED SEB & PSU, SOME OF THE PRESTIGIOUS NAMES ARE FOLLOWING :**



## POWER TRANSFORMER

Servokon provides Power transformers up to 50 MVA Capacity and up to 66kV Primary/Secondary voltage with Both Off-Circuit Tap Changer (OCTC) as well as On-Load Tap Changer (OLTC) along with necessary accessories. Power Transformer are Oil immersed and has a life expectancy of around 30 years. We are manufacturing very cost-effective low energy consumption Power Transformers which also meets the State Electricity Board's requirement.

Power Transformers can also be embedded with Nitrogen Infused Fire Protection System (NIFPS) as per Customer Requirement.

Power transformers are generally used in transmission network for stepping up or down the voltage level for its transmission from one place to another to minimise the energy losses. It operates mainly during high or peak loads and has maximum efficiency at or near full load.

### Power Transformers are used in the Following Applications :

- Power Generation Station
- Sub Stations
- Electrical Transmission Systems
- Mining
- Hydro Power Projects
- Solar Projects
- Wind Power Projects
- Cement Plants
- Steel Plants
- Refineries
- Captive Power Projects
- EPC Projects

## RANGE We Offer

**Capacity :** From 1 MVA to 50 MVA.

**Voltage Class :** 1.1kV, 2.2kV, 3.3kV, 6.6kV, 6.9kV, 11kV, 12.47kV, 13.2kV, 13.8kV, 15kV, 22kV, 25kV, 33kV, 34.5kV, 66kV, 69kV (Any Special Customised Class as per requirement)

**Cooling :** ONAN, ONAF, OFAF, ONWF, OFWF

**Tap Changer :** OCTC, OLTC





## DISTRIBUTION TRANSFORMER

The Distribution Transformer provides the final voltage transformation in the electric power distribution system. Medium and large distribution transformers, installed in substations near to the consumer's side, receive high voltage electric power from the grid, step down its voltage to low voltage i.e. 433/250, 415/240, 400/230, 380/220 Volts and distribute electricity to consumers and lower voltage substations. This is considered one of the most important links in the power distribution network.

Servokon provides distribution transformers up to 10 MVA Capacity and up to 66kV Primary/Secondary voltage along with necessary accessories. Our Distribution Transformers are BIS Certified, Star rated, Energy efficient with Low Losses.

### Distribution Transformers are used in the Following Applications :

- Petro-Chemical Industries
- Pharmaceuticals Industries
- Textile Industries
- Plastic Industries
- Mining Industries
- Cement Industries
- Steel Industries
- Hydro Power Projects
- Solar Projects
- Wind Power Projects
- Refineries
- Construction Projects
- Automobile Industries
- Hospitals
- Hotels
- Shopping Malls
- High Rise Buildings
- Heavy Industries
- Manufacturing Industries
- Commercial & Residential Towers
- Generation & Transmission
- Oil & Gas Plants
- Tunnel Projects
- Highway Construction Projects

### RANGE We Offer

**Capacity :** From 25 KVA to 10 MVA.

**Voltage Class :** 1.1kV, 2.2kV, 3.3kV, 6.6kV, 6.9kV, 11kV, 12.47kV, 13.2kV, 13.8kV, 15kV, 22kV, 25kV, 33kV, 34.5kV, 66kV, 69kV (Any Special Customised Class as per requirement)

**Low Voltage Class :** 380 V, 400 V, 415 V, 433 V & 440 V (Any Special Customised Class as per requirement)

**Cooling :** ONAN

**Tap Charger :** OCTC, OLTC



## HERMETICALLY SEALED TRANSFORMER

This technology is also known as Corrugated Transformer. The function and operations of these Transformers are similar like other conventional type Transformers but the construction of main tank is done with Corrugated Fins and MS Steels to provide the adequate cooling surface to avoid heating during operation. Corrugated Fins increase the surface area and take care of dissipation of heat, the Corrugated Fins once welded become integral part of Transformer's Tank structure. The skills and the workmanship of highly experienced and qualified welders ensure that the finished Tank is leakage free, the reliability of Tank's design is proven by over pressure test.

Hermetically Shield Transformers do not have Conservators and Silicagel Breather, the Dielectric Insulating Fluid / Oil is completely sealed in the Transformer Tank and therefore is not in contact to the atmosphere. The design avoids the entry of natural air in the Transformer Tank which prevent the sludging and oxidation in the Dielectric Fluid / Oil. Since the Insulated Oil does not come in contact with external air, there is hardly any deterioration of Oil over a period of time and hence such Transformers are virtually maintenance free.

### Features :

- Limited Moisture in Oil.
- No Dehydrating Breather
- Limited Protection Devices Required
- Best working in Polluted Area
- Longer Life of the Transformer
- No need to Oil Filtration
- Compact Size
- Improve the reliability of the operation

### RANGE We Offer

**Capacity :** From 50 KVA to 5000 KVA.

**Voltage Class :** 1.1kV, 2.2kV, 3.3kV, 6.6kV, 6.9kV, 11kV, 12.47kV, 13.2kV, 13.8kV, 15kV, 22kV, 25kV, 33kV, 34.5kV, 66kV, 69kV (Any Special Customised Class as per requirement)

**Low Voltage :** 380 V, 400 V, 415 V, 433 V,

440 V & 600 V, 690 V (Any Special Customised Class as per requirement)

**Cooling :** ONAN





## INVERTER DUTY | SOLAR TRANSFORMER

**Inverter duty transformer is also called as Solar Transformer & Step-up Transformer.** These transformers are usually used in grid-tied photovoltaic solar power applications, to provide galvanic isolation, step-up the voltage and transfer energy back to the utility grid.

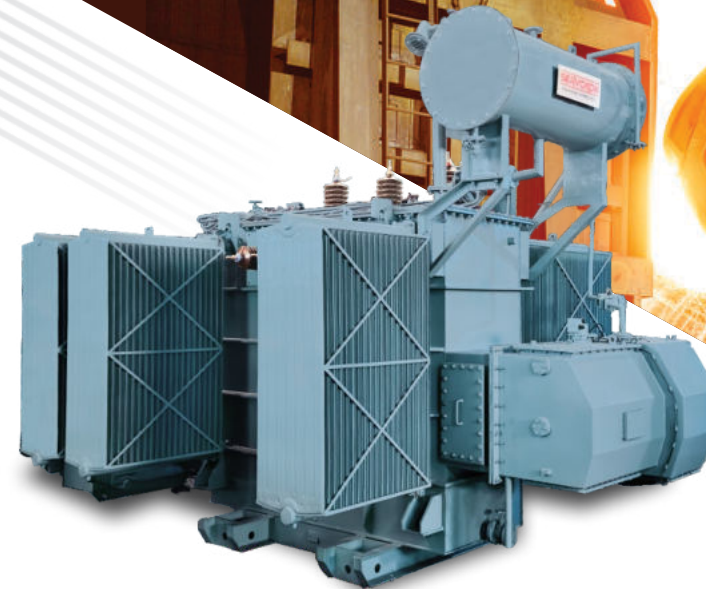
Most of the grid-tied photovoltaic solar power plants include a inverter duty transformer in their voltage/power transfer cycle. The photovoltaic modules consists of photovoltaic cells which absorbs the photons emitted by incident sun rays thereby generating flow of electrons.

The current generated is usually direct current (DC). This direct current is then provided as an input to an inverter which converts the DC to an alternating current (AC). However the voltage generated by this inverter is in few kilo volts (kV) which cannot be transferred to the power grid for further distribution and usage. The power grid mostly taps voltages in the range of 11kV, 22 kV, 33 kV. This is where the inverter duty transformer plays a major role in stepping up the voltage to the required level.

Servokon offers a wide range of Three Phase Transformers for Photovoltaic power solutions with multiple windings (3, 4, 5 etc.) on primary side of the transformer enables to connect multiple inverters to the grid with minimum number of transformers specifically designed to fulfil customer requirements and conform to various national and international standards.

### RANGE We Offer

**Capacity :** From 100 KVA to 20 MVA  
**High Voltage :** 11 kV to 33 kV (Any Special Customised Class as per requirement)  
**Low Voltage :** 380 V, 400 V, 415 V, 433 V, 440 V & 600 V, 800 V (Any Special Customised Class as per requirement)  
**Cooling :** ONAN  
**Tap Changer :** OCTC, OLTC



## FURNACE TRANSFORMER

Induction Furnace has coil constructed from heavy copper tubing. It is designed and tuned to the inverter circuit which applies a medium frequency (generally 500 Hz or 1000 Hz) voltage to the Induction coil. The magnetic field produced by the induction coil induces eddy currents in the charge and heats it. Medium frequency is necessary to enhance the rate of heat generation.

The inverter circuit requires for its operation a D.C. Voltage which is obtained by converting available three phase A.C. Voltage. Transformers which are used for transforming available three phase A.C. voltage to required voltage for converter circuit of the Induction Furnace are referred to as Induction Furnace Transformers. Thus they are essentially Rectifier/ Converter Duty Transformers.

These transformers must be designed to resist the high levels of electrical, thermal and mechanical stress to which they are subject during utilisation.

The furnace transformer thus has special features to handle such high currents as compared to conventional transformers. The electric arc furnace has 3 electrodes connected to the secondary terminals of the furnace transformers. The secondary terminals of the transformers are subject to frequent short circuits during the melting process through the charge and arc. Hence the furnace transformer needs to be specially designed to withstand the frequent short circuits.

### These Transformers are specially designed for :

- Electrotherm Furnace
- Inductotherm Induction Furnace
- Submerge Arc Furnace
- Electric Arc Furnace
- Ladle Refining Furnace applications.

### RANGE We Offer

**Capacity :** From 250 KVA to 30 MVA.  
**Voltage Class :** 433 V, 3.3 kV, 6.6 kV, 11 kV, 22 kV, 33 kV (Any Special Customised Class as per requirement).  
**Low Voltage Class :** 400 V, 440V, 500V, 575V, 750V, 800V 1000V (Any Special Customised Class as per requirement).  
**Cooling :** ONAN, ONAF, OFAF, ONWF, OFWF.  
**Tap Changer :** OCTC & OLTC





## COMPACT SUB STATION (CSS)

**The Compact Sub Station (CSS) also known as Packaged Sub Station (PSS).**

The Compact Sub Station (CSS) is a compact enclosure consisting of MV switchgear, a transformer, LV switchboard along with interconnections and auxiliary equipment to transform energy from medium to low voltage system located in three separate compartments which are segregated from each other by means of partitions in order to ensure personnel safety. Accessibility to operate or maintain the equipment is through lockable doors provided for each compartment to maximise security. Assembly of the complete substation is factory ready to minimise site installation time and cost. All equipment is of high quality and tested as a complete unit.

**Medium Voltage Switchgear :** The MV Switchgear compartment is Equiped with Compact Ring Main Unit (RMU) & Vacuum Circuit Breaker (VCB).

**Transformer :** The dry and oil type transformer can be installed inside the transformer compartment, the transformer rating for the oil type transformer is up to 2500 KVA. The transformer compartment design provide smooth air flow and natural cooling in order to meet the temperature rise requirement as per standard.

**LV Switchboard :** The LV Switchboard compartment contains Low Voltage distribution board which is fed from the secondary side of transformer. The LV Switchboard can be designed as per customer. Different types of switching devices, Breaker (ACB or MCCB) or fuse switches can be accommodate inside the Panel.

### Features :

- High level of safety for equipment and personnel
- No access to live parts
- Engineered footprint to meet the required clearance standards
- Can be lifted with the transformer installed
- Access to the MV & LV compartment provided through a double door arrangement.



MV  
Switchgear

Transformer  
Compartment

LV  
Switchboard

## RANGE We Offer

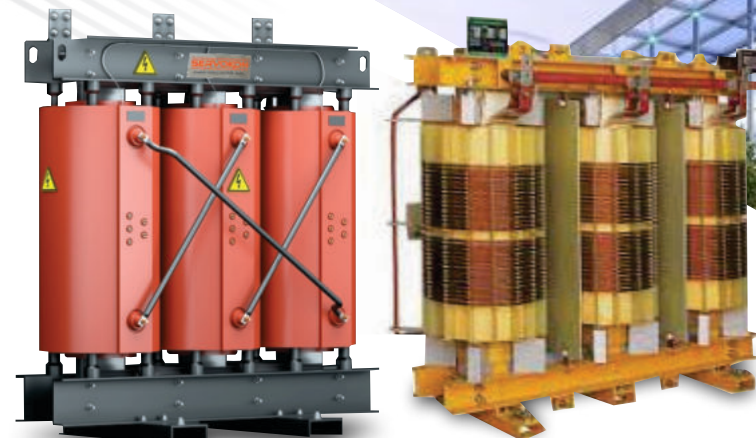
**Capacity :** 100 KVA to 2500 KVA

**Voltage Class :** 11kV, 22kV & 33kV (Any Special Customised Class as per requirement).

**Low Voltage :** 380 V, 400 V, 415 V, 433 V & 440 V (Any Special Customised Class as per requirement)

**Cooling :** AN, ONAN

**Tap Change :** OCTC, OLTC



## DRY TYPE TRANSFORMER

**Cast Resin :** Cast Resin dry type transformer is a transformer that does not use liquid as insulation for its winding or core. Instead the windings and core are kept within a sealed cast epoxy resin.

**VPI :** A vacuum pressure impregnated dry type transformer has an iron core, vacuum pressure resin impregnated high voltage windings and low voltage windings. The low voltage winding is constructed with conductors.

### Dry Type of transformer has some featured advantages ::

#### Health & safety

- Hardly inflammable, self extinguishing
- Highly moisture-proof
- No pollution to the environment
- Extremely low content of burnable material
- No content of any halogen, silicones, nitrogen in the insulation
- Free from all restrictions that apply oil type transformers

#### Flexibility & Cost Saving

- Minimum maintenance is required
- No liquids used ; no risk for leakage
- Repair Possibilities (at site)
- Installation close to the center of major consumers
- Reduce cable costs, transmission losses and installation costs

#### Health & safety

- Cooling is the most efficient ( up to 40% )
- Low partial discharge, therefore, high life expectancy.
- Excellent insulation level, short circuit and lightning Impulse
- Ability to handle greater short time overloads rather than oil type

## RANGE We Offer

**Capacity :** From 100 KVA to 4 MVA

**Voltage Class :** 1.1kV, 2.2kV, 3.3kV, 6.6kV, 6.9kV, 11kV, 12.47kV, 13.2kV

13.8kV, 15kV, 22kV, 25kV, 33kV, 34.5kV (Any Special Customised Class as per requirement)

**Low Voltage :** 380 V, 400 V, 415 V, 433 V, 440 V & 600 V (Any Special Customised Class as per requirement).

**Cooling :** AN, ANAF

**Tap Change :** OCTC & OLTC





## PAD MOUNTED TRANSFORMER

Servokon offers a complete line of liquid-filled Three Phase Pad-Mounted distribution transformers that meet applicable ANSI®/IEEE® standards specially designed for European & US Market.

With high voltages up to 34.5 kV and ratings up to 5,000 kVA (ONAN), Servokon compartmental-type Three Phase Pad-Mounted Commercial Transformers are designed for outdoor installation on a concrete pad and provide underground power distribution to commercial, industrial and institutional loads. High-grade materials, combined with sophisticated engineering design systems, are key elements of a transformer that will deliver years of highly reliable service.

### Features :

- 60 Hz operation.
- 65°C average winding rise.
- Radial & loop feed arrangements.
- Dead and live front type of HV terminals.
- Plug-in type HV bushing
- HV BIL 45 – 150 kV (Dead Front) 200 kV (Live Front).
- LV BIL 30 – 60 kV.
- Three-point latching of low-voltage door.
- High-voltage door, which can be opened only after the low-voltage door is opened.
- Rigid steel partition.
- Transformer tank welded from cover to base.
- Permanent nameplate.
- One-inch drain valve and sampler
- Automatic pressure-relief valve
- Tap changer with (2) 2.5% full capacity taps above and below nominal.
- Painted olive-green color or as per Customer requirement.
- Designed, manufactured and tested in accordance with the latest ANSI/IEEE standards

### RANGE We Offer

**Capacity :** From 100 KVA to 5000 KVA.  
**Voltage Class :** 12.47 kV, 13.2kV, 13.8kV, 34.5kV (Any Special Customised Class as per requirement).  
**Low Voltage :** 380 V, 400 V, 415 V, 433 V, 440 V, 600 V & 690 V (Any Special Customised Class as per requirement).  
**Cooling :** ONAN



## HT-AVR & TRANSFORMER WITH BUILT-IN AVR

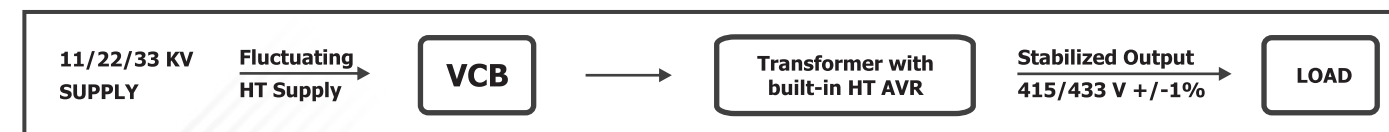
### HT AVR (High Tension Automatic Regulator) Upto 5000 KVA

Servokon offers precision engineered state-of-art HT Servo Stabilizer (HT AVR), as the name suggests this AVR operates "on load", continually and directly on the HT line giving stabilized HT voltage output. The fluctuating HT voltage from grid supply is initially controlled by the HT AVR with accuracy of +/-1% and then fed to the transformer resulting in constant LT output within +/-1% accuracy. This can be understood better by the schematic diagram shown below:



### Transformer with Built-in AVR

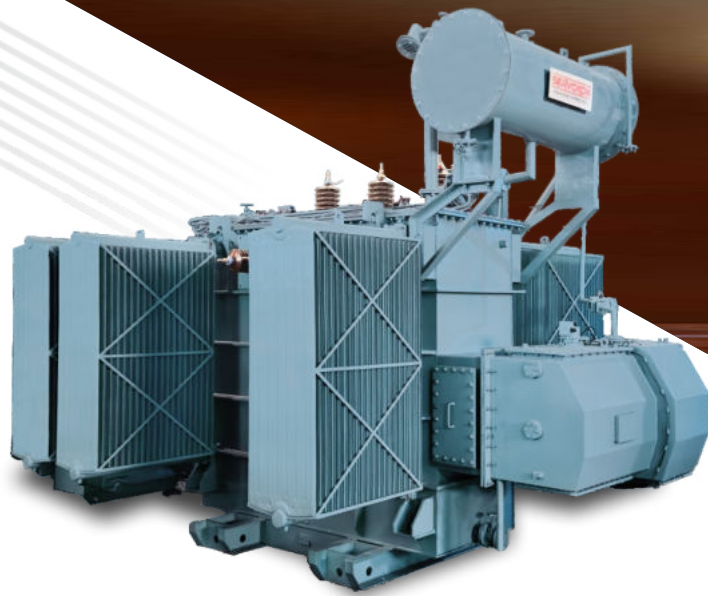
Servokon offers precision innovative state-of-art Transformer with built-in AVR, which is combination of HT AVR and a standard distribution transformer. The fluctuating HT voltage from Grid supply is initially controlled by the HT AVR with accuracy of +/-1% and then fed to the transformer which transforms in into its standard ratio to LT voltage. Subsequently, stabilized HT voltage will result in stabilized LT voltage with an accuracy of +/-1%. Basically input will be 11/33kv and the output will be LT voltage with +/-1% can be obtained through a single product. This can be understood better through the following schematic diagram given below:



### RANGE We Offer

**Capacity :** From 100 KVA to 10MVA.  
**Voltage Class :** 6.6kV, 11kV, 22kV, 33kV (Any Special Customised Class as per requirement).  
**Cooling :** ONAN





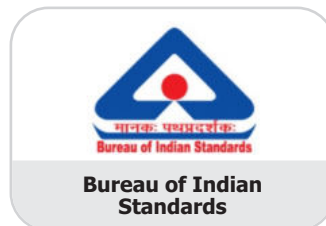
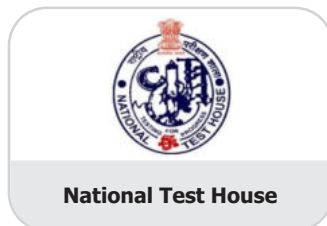
## TYPE TESTED TRANSFORMERS

Our Transformers are certified through BIS for ISI marking.

Our Transformers are successfully tested at NABL's Approved Testing Lab (like: CPRI, ERDA, ERTO, NTH)

The Range of our "SERVOKON" make" Type Tested Transformers":

- 16 MVA Power Transformer
- 5 MVA Power Transformer
- 1600 KVA Distribution Transformer
- 1250 KVA Distribution Transformer
- 1000 KVA Distribution Transformer
- 400 KVA Distribution Transformer
- 250 KVA Distribution Transformer
- 200 KVA Distribution Transformer
- 63 KVA Distribution Transformer
- 1500 KVA HT Automatic Voltage Stabilizer (AVR)



We have successfully performed various Third Party Inspection through the best and reputed Inspection & Testing Agencies as following :





# SOME TEST REPORTS

## CENTRAL POWER RESEARCH INSTITUTE (Member of STL)



### TEST REPORT

Test Report No : 2014/STN-1/263 Dated : 23 JUN 2014

Name and Address of the Customer : M/s Servokon Systems Ltd.,  
C-13, Radhu Palace Road, Laxmi Nagar,  
Delhi-110 092, (India)

Name and Address of the Manufacturer : M/s Servokon Systems Ltd.,  
C-13, Radhu Palace Road, Laxmi Nagar,  
Delhi-110 092, (India)

Particulars of Sample(s) Tested : 1500kVA, 11/9.5kV Transformer

Condition of sample(s) on receipt : New

Type : Outdoor

Designation : Transformer for HTAVR

Serial Number(s) : 2014 / 04 / 0235

Number of Sample(s) Tested : One

Date(s) of Test(s) : 26<sup>th</sup> & 27<sup>th</sup> May, 2014

CPRI sample code number(s) : STDSST114S0254

Sealing of the sample, if any : Nil

Particulars of test(s) conducted : Short circuit dynamic withstand test.

Test(s) in accordance with : As per Clause 4.2 of IS: 2026 (Part-5), 2011.

Standard/specification : Nil

Sampling Plan : Nil

Customer's Requirement : Nil

Deviations, if any : Nil

Name of the witnessing persons : Mr. Santarpal Singh

Customer's Representatives : None

Other than Customer's Representatives : None

Test subcontracted with and address of the laboratory : None

Documents constituting this report (in words)

No. of Sheet(s) : Eight

No. of Oscillogram(s) : Nine

No. of Graph(s) : Nil

No. of Photograph(s) : Two

No. of Test Circuit Diagram(s) : One

No. of drawing(s) : Three

(Yugal Agrawal)  
TEST ENGINEER



(M.K. Wadhvani)  
JOINT DIRECTOR

SWITCHGEAR TESTING & DEVELOPMENT STATION  
GOVINDPURA, BHOPAL - 462 023, INDIA  
Phone: +91(0) 755 2586682 Fax: +91 (0) 755 2587774

Sheet 1 of 8



भारत सरकार  
Government Of India  
राष्ट्रीय परीक्षण शाला (उ०क्षे०)  
National Test House (NR)  
कमला नेहरु नगर, गाजियाबाद-201002  
KAMLA NEHRU NAGAR, GHAZIABAD-201002



परीक्षण प्रमाण पत्र  
TEST CERTIFICATE  
Number of Copies issued Single  
परीक्षण प्रमाण पत्र सं जारी होने की तिथि कोड नं पृष्ठ पृष्ठों की संख्या  
Test Certificate No Date of Issue Code No Page No of Pages  
NTH(NR)/EL(HV)/2021/0031 25/05/2021 1621502509414 1 2

जिसे जारी करना है  
Issued To

SERVOKON SYSTEMS LIMITED

पता  
Address

Servokon House, C-13, Radhu Palace Road, Laxmi Nagar,  
DELHI - 110 092.

ग्राहक का सन्दर्भ सं एवं दिनांक  
Customer's Ref. No.

NIL

Date: 20/05/2021

पंजिका सं एवं दिनांक  
Register No & Date

0031/NTH(NR)/EL(HV)/20/05/2021

परीक्षण सामग्री का विवरण  
Description of Test Item

11 /0.415 KV ,1250 KVA Distribution Transformer

परीक्षण सामग्री का पहचान  
Identification of Test Item

Make :-SERVOKON SYSTEMS LIMITED, GHAZIABAD  
Sl. No. 2021/05/17/62

नमूना का विनिर्दिष्टि (यदि हों)  
Product Specification (If any)

As Per IS 1180 (Part -1):2014 with latest Amendment

नमूना प्राप्ति की तिथि  
Date of Receipt of the Test Item

20/05/2021

कार्य सम्पादन की तिथि  
Date(s) of Performance of Tests

From: 20/05/2021 To: 20/05/2021

व्यावहृत प्रणाली का पहचान  
Method(s) used for Test

As Per Specification

नमूना प्रक्रिया जहाँ प्रासंगिक हों  
Sampling Procedure where relevant

Not Applicable

Tested By

Nilesh Kumar Bhoumik

SO Electrical

Doc. No. : NTH (NR)/GZB-5

Checked By

Ritu Raj Srivastava

Scientist- B (Electrical)

Approved By

Yogesh Singh

Scientist- C (Electrical)

35841



# SOME TEST REPORTS



## Electrical Research & Testing organisation<sup>TM</sup>

(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. Of India)  
Plot No. 747, Manjusa Village, B/H Gurukrupa Farm, Savli-Vadodara Road, Tal.: Savli, Dist.: Vadodara.  
Pin Code : 391775, Gujarat, India.  
Telephone : 02667-264007, +91 89860 09021  
Email : erto@erto.in / sr.patel@erto.in  
Web : http://www.erto.in



### TEST REPORT

Report No	: ERTO/TRP/1920/0506
ULR No.	: TC622919000000741F
Date of Issue	: 05/08/2019
Total number of pages	: 25
Customer's name	: SERVOKON SYSTEMS LIMITED
Address	: AN-6, UPSIDC, M.G. Road, Industrial Area, Phase-III, Dasna, Ghaziabad, UP-201003.
Customer's reference & date	: Letter, dated 11/07/2019
Test specification	
-Standard	: As per IS 1180 (Part 1):2014 with all amendments
-Test procedure	: As per IS 1180 (Part 1):2014 with all amendments
-Non-standard test method	: N/A
ERTO sample ID no.	: ERTO-0410
Test performed at	: ERTO lab
Name of test sample	: 400 kVA, Distribution Transformer
Make	: SERVOKON SYSTEMS LIMITED
Rating	: 400 kVA
Technical specification of test sample	: As per page 2.
Test performed	: As per page 5.
Any other details specified by customer: ---	
Date of receipt of test sample	: 23/07/2019
Condition on Receipt	: Good
Date(s) of performance of test(s)	: 25/07/2019 to 31/07/2019
List of Enclosures	
-Test sample photo	: As per page 3.
-Rating plate photo	: As per page 4.
-Drawings (As submitted by customer)	: 1) SSL/400/NP/02 2) SSL/400/OGA/01
Remarks	
	1) The sample conforms to the requirements of above mentioned standard for the test nos. 2, 5, 6 & 8 to 14. 2) The observations of the test nos. 1, 3, 4 & 7 are as per page 6 to 9.
Prepared By	Checked By (Yash J. Shah)
Approved By (S.R.Patel) (Technical Director)	
Notes:	
	1. This report relates only to the particular sample tested. 2. Only the tests asked by the customer have been carried out. 3. This report cannot be reproduced in part under any circumstances. 4. Publication of this report requires prior permission in writing from Technical Director, ERTO. 5. In case of any dispute, ERTO will be the exclusive jurisdiction & shall be construed as where the cause has arisen. Caution: ERTO is not responsible for the authenticity of photocopied or reproduced test reports. ERTO provides support to customers for verification of the authenticity of test reports issued by ERTO.

TE-A 018560

FORMAT NO.: FF-01, REV NO./DATE:01/11-02-2017

Page 1 of 25



## केन्द्रीय विद्युत अनुसंधान संस्थान

(भारत सरकार की सोसाइटी, विद्युत मंत्रालय)  
क्षेत्रीय परीक्षण प्रयोगशाला  
3-ए, इंस्टीटयुशनल एरिया, सेक्टर-62, नोएडा-201309 (उ०प्र०)  
**CENTRAL POWER RESEARCH INSTITUTE**  
(A Government of India Society, Ministry of Power)  
**REGIONAL TESTING LABORATORY**  
3-A, Institutional Area, Sector - 62, Noida - 201309 (U.P.)  
वेबसाइट / Website : http://cpri.res.in

संदर्भ क्रमांक : सीपीआरआई/आरटीएल/एचवी/2022-23/ 3577 दिनांक (Date) : 02.11.2023

सेवा में/To,

M/s. Servokon Systems Limited  
AN 6, UPSIDC, Phase 3<sup>rd</sup>, M G Road Industrial Area  
Dasna Hapur-24501, Uttar Pradesh

विषय (Sub):परीक्षण प्रमाणपत्र (Test Report): CPRINOAHV23T0546 Dt.: 31.10.2023

महोदय/Dear sir,

हमारी प्रयोगशाला में आपके सैंपल पर दिनांक 27.10.2023 को संचालित परीक्षण के संबंध में मलखित दस्तावेज संलग्न है।

Please find attached the following documents in respect of the test(s) conducted on your sample on 27.10.2023 at our laboratory.

रिपोर्ट में यदि असंगतिया हो तो इस रिपोर्ट के जारी होने की तारीख से 45 दिन के अंदर लिखित रूप में हमारे ध्यान में लाई जाय ताकि आवश्यक संशोधन किया जा सके और इसके लिए रिपोर्ट की सभी मूल प्रतिया लौटाई जाय। कृपया नोट करें कि इस तारीख के बाद प्राप्त अनुरोधों पर कोई कार्यवाही नहीं की जायेगी।

Any discrepancies in the test report must be brought to our notice in writing within 45 days of the date of issue of this test report for effecting necessary corrections for which all the original copies of the test report must be returned. Please note that request received beyond this date will not be entertained.

दस्तावेजों की प्राप्ति की पावती भेजे।

Please acknowledge receipt of the documents.

सधन्यवाद, Thanking you,

संलग्न : उपरोक्त  
Encl : As above

भवदीय (Yours sincerely)

ईकाई- प्रमुख  
Unit-Head

स्वहित एवं राष्ट्रहित में ऊर्जा बचाएँ  
ऊर्जा जीवन है उसका संरक्षण करें।

SAVE ENERGY FOR BENEFIT OF SELF AND NATION  
ENERGY IS LIFE CONSERVE IT



CENTRAL POWER RESEARCH INSTITUTE		ULR No. :
		TC51812305TCT0142F
=====		
DOC No.	: CPRI BPLSTNC23T0142	GOVINDPURA, BHOPAL, Bhopal, Madhya Pradesh,
Telephone	: +91 9448141980	India - 462023
FAX	: 080236012	
E-Mail	: <u>stds@cpri.in</u>	
BO Code	: None	
Test REPORT AS PER : IS 1180 : Part 1 (2014)		
QR Code/Barcode : 10000252313		
REPORT NO : 10065059/2023/SS/2_1		DATE : 28 Apr, 2023
PART A. PARTICULARS OF SAMPLE SUBMITTED		
a) Customer Name & Address	:	SERVOKON SYSYEMS LIMITED AN-6, UPSIDC, PHASE-III, MG ROAD, INDUSTRIAL , AREA, NEAR DASNA, GHAZIABAD-201302 (U.P), UTTAR PRADESH, GHAZIABAD, UTTAR PRADESH, INDIA - 201302
b) Nature of sample	:	SS
c) Grade/Variety/Type/Class Size etc	:	500 KVA 11/0.433KV CRGO NON SEALED TYPE COPPER WOUND OIL IMMERSED TYPE WITH OCTC ACCORDING TO IS 1180:2014 (PART-1) WITH LATEST AMEDENDMENT
d) Declare values, if any	:	1050000
e) Batch No. & Date of Manufacture	:	03-23/
f) Quantity	:	01
g) Date of Receipt	:	23 Mar, 2023
h) BIS Seal	:	Verified by Sample Cell
i) IO's Signature	:	Verified by Sample Cell
j) Any other Information / Expiry Date, If any	: -/10 Mar, 2028	
k) Date of Commencement of Testing	:	28 Apr, 2023
l) Date of Completion of Testing	:	28 Apr, 2023
m) Section Code	:	23E2938
n) Section Report No.	:	23E2938_1
o) Report Type	:	New
p) Reference Report No.	:	
q) Remarks	:	
=====		
Mrs. Leena H. Roy OIC SAMPLE CELL (Authorized Signatory) <small>Authorized on: 28 Apr, 2023 17:49 PM</small>		
1.		
This is a Computer Generated Report.		

# Electrical Research & Testing organisation<sup>TM</sup>

(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. Of India)

Plot No. 747, Manjusr Village, B/H Gurukrupa Farm, Savli-Vadodara Road, Ta.: Savli, Dist.: Vadodara.

Pin Code : 391775. Gujarat, India.

Telephone : 02667-264007, +91 88660 09021

Email : erto@erto.in / sr.patel@erto.in

Web : http://www.erto.in

Quality Assurance Laboratory

## TEST REPORT

Report No	: ERTO/TRP/1819/0104
Date of issue	: 14/07/2018
Total number of pages	: 19
Customer's name	: SERVOKON SYSTEMS LIMITED
Address	: AN-6, UPSIDC, M.G. Road, Industrial Area, Phase-III, Ghaziabad (U.P.)
Customer's reference & date	: Letter, dated 19/06/2018
Test specification	
-Standard	: As per IS 1180 (Part 1):2014
-Test procedure	: As per IS 1180 (Part 1):2014 with amendment no. 1 & 2, IS 2026 (Part 1): 2011, IS 2026 (Part 3):2009
-Non-standard test method	: N/A
ERTO sample ID no.	: ERTO-0191
Test performed at	: ERTO lab
Name of test sample	: 1000 kVA, Distribution Transformer
Make	: SERVOKON SYSTEMS LIMITED
Rating	: 1000 kVA
Technical specification of test sample	: As per page 2 of 19.
Test performed	: As per page 5 of 19.
Any other details specified by customer:	---
Date of receipt of test sample	: 03/07/2018
Condition on Receipt	: Good
Date(s) of performance of test(s)	: 05/07/2018 to 11/07/2018
List of Enclosures	
-Test sample photo	: As per page 3 of 19.
-Rating plate photo	: As per page 4 of 19.
-Drawings (As submitted by customer)	: 1) SSL/1000/NP/02 2) SSL/1000/OGA/01
Remarks	
1) The sample conforms to the requirements of above mentioned standard for the test nos. 2, 5, 6 & 8 to 14. 2) The observations of the test nos. 1, 3, 4 & 7 are as per page 6 of 19 to page 9 of 19.	
Prepared By	Checked By (S.B.Diwan)
Approved By (S.R.Patel) (Technical Director)	
Notes: 1. This report relates only to the particular sample tested. 2. Only the tests asked by the customer have been carried out. 3. This report cannot be reproduced in part under any circumstances. 4. Publication of this report requires prior permission in writing from Technical Director, ERTO. 5. In case of any dispute, ERTO will be the exclusive jurisdiction & shall be construed as where the cause has arisen. Caution: ERTO is not responsible for the authenticity of photocopied or reproduced test reports. ERTO provides support to customers for verification of the authenticity of test reports issued by ERTO.	

TE-A 002900

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## NATIONAL RESEARCH & TECHNOLOGY CONSORTIUM

(An Autonomous Organisation set up by the State Council for Science & Technology, Govt. of HP)

### Centre for Analysis, Calibration and Testing

Deptt. of industries complex, Sector-1, Parwanoo – 173 220 (HP)

Phone/Fax.: 01792-233675. Email : [nrtcpwn@gmail.com](mailto:nrtcpwn@gmail.com), [www.nrtc.hp.gov.in](http://www.nrtc.hp.gov.in)

F/C-ACT/31

## TEST REPORT

Job No. 2324-438

Report No.: TR-2324-438 (1)

Despatch No. : NRTC/C-ACT/EIT/2024\_ 001

Date of Issue : 06/02/2024

### Test Report of Automatic Voltage Stabilizer

#### Address of Customer

M/s Servokon Systems Ltd.  
AN-6, UPSIDC MG Road Industrial Area  
Phase -III, Dasna Ghaziabad ( U.P.)

#### PART A. Particulars of Sample Submitted:

\*a) Nature of Sample : Automatic Voltage Stabilizer  
\*b) Type/ Class : 10 kVA  
\*c) Brand Name : Servokon  
d) Declared value : ---  
\*e) Batch No. & date of manufacture : N.A.  
f) Quantity : One  
g) Mode of packing/Condition of Test Sample : Packed in Corrugated Box/ Satisfactory  
h) Date of receipt/booked on : 20-01-2024  
i) BIS seal : N.A.  
j) IO's signature : N.A.  
\*k) Other information (if any) : Input Voltage Range:- 90V – 270V AC  
: Input Current:-111.11A to 37.03A  
: Output Voltage Range:- 220 ±10%V  
: Output Current:- 45.45A  
l) Date of Start of Testing : 23/01/2024  
m) Date of Completion of Testing : 24/01/2024

Tested by  
Vivek Sharma  
(Jr.Technical Officer)

Reviewed by  
Dr. Kiran Gupta  
(Principal Scientific Officer)

Approved by  
Dr. Kiran Gupta  
(Principal Scientific Officer)

Principal Scientific Officer Page 1 of 5  
National Research & Technology Consortium  
Sector-1, Parwanoo - 173220 (HP)

## NATIONAL RESEARCH & TECHNOLOGY CONSORTIUM

(An Autonomous Organisation set up by the State Council for Science & Technology, Govt. of HP)

### Centre for Analysis, Calibration and Testing

Deptt. of industries complex, Sector-1, Parwanoo – 173 220 (HP)

Phone/Fax: 01792-233675, Email : [nrtcown@gmail.com](mailto:nrtcown@gmail.com), [www.nrtc.hp.gov.in](http://www.nrtc.hp.gov.in)

F/C-ACT/31

## TEST REPORT

Job No. 2324-438

Report No.: TR-2324-438 (3)

Despatch No. : NRTC/C-ACT/EIT/2024\_003

Date of Issue : 19/02/2024


### Test Report of Isolated Transformer

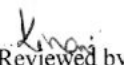
#### Address of Customer


M/s Servokon Systems Ltd.  
AN-6, UPSIDC MG Road Industrial Area  
Phase -III, Dasna Ghaziabad ( U.P.)

#### PART A. Particulars of Sample Submitted:

*a) Nature of Sample	: Isolated Transformer
*b) Type/ Class	: 500 kVA, 3 Phase
*c) Brand Name	: Servokon
d) Declared value	: ---
*e) Batch No. & date of manufacture	: N.A.
f) Quantity	: One
g) Mode of packing/Condition of Test Sample	: Packed in Corrugated Box/ Satisfactory
h) Date of receipt/booked on	: 20-01-2024
i) BIS seal	: N.A.
j) IO's signature	: N.A.
*k) Other information (if any)	: Input Voltage ; 415V AC : Output Voltage; 415V AC : Input/ Output Current; 695.62A : Sr. No. SSL/2024/01/22/6060
l) Date of Start of Testing	: 23/01/2024
m) Date of Completion of Testing	: 24/01/2024

  
Tested by  
Vivek Sharma  
(Jr.Technical Officer)


  
Reviewed by  
Dr. Kiran Gupta  
(Principal Scientific Officer)

  
Approved by  
Dr. Kiran Gupta  
(Principal Scientific Officer)

Principal Scientific Officer  
National Research & Technology Consortium  
Sector-I, Parwanoo - 173220 (HP)  
Page 1 of 5



SOME TEST REPORTS



**NATIONAL RESEARCH & TECHNOLOGY CONSORTIUM**  
(An Autonomous Organisation set up by the State Council for Science & Technology, Govt. of HP)  
**Centre for Analysis, Calibration and Testing**  
Deptt. of industries complex, Sector-1, Parwanoo – 173 220 (HP)  
Phone/Fax.: 01792-233675, Email : [nrtcpwn@gmail.com](mailto:nrtcpwn@gmail.com), [www.nrtc.hp.gov.in](http://www.nrtc.hp.gov.in)

FIG-ACT/31

**TEST REPORT**

Job No. 2324-438  
Report No.: TR-2324-438 (2)

Despatch No. : NRTC/C-ACT/EIT/2024\_002  
Date of Issue : 07/02/2024

**Test Report of Servo Voltage Stabilizer**

Address of Customer

M/s Servokon Systems Ltd.  
AN-6, UPSIDC MG Road Industrial Area  
Phase -III, Dasna Ghaziabad ( U.P.)

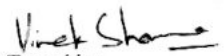
**PART A. Particulars of Sample Submitted:**

\*a) Nature of Sample  
\*b) Type/ Class  
\*c) Brand Name  
d) Declared value  
\*e) Batch No. & date of manufacture  
f) Quantity  
g) Mode of packing/Condition of Test Sample  
h) Date of receipt/booked on  
i) BIS seal  
j) IO's signature  
\*k) Other information (if any)

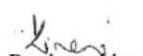
: Servo Voltage Stabilizer  
: 3x 500 kVA, 3 Phase  
: Servokon  
: ---  
: N.A.  
: One  
: Packed in Corrugated Box/ Satisfactory  
: 20-01-2024  
: N.A.  
: N.A  
: Input Voltage Range; 340V – 460V AC  
: Output Current; 2165.12A  
: OR/DG-SSL-002, Sr. No. 2024/1/22/6059

l) Date of Start of Testing  
m) Date of Completion of Testing

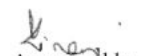
: 23/01/2024  
: 24/01/2024



Tested by  
Vivek Sharma  
(Jr.Technical Officer)





Reviewed by  
Dr. Kiran Gupta  
(Principal Scientific Officer)




Approved by  
Dr. Kiran Gupta  
(Principal Scientific Officer)

Principal Scientific Officer  
National Research & Technology Consortium  
Sector-1, Parwanoo - 173220 (HP)

Page 1 of 5



**ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION**  
(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India)  
ERDA Road, Makarpura Industrial Estate, Vadodra-390 010, India.  
EPABX : +91 (0265) 2642942, 2642964, 2642377, 3043128 / 29 / 30 / 31 / 33  
Fax : +91 (0265) 2638382  
E-mail : [erda@erda.org](mailto:erda@erda.org)  
Web : <http://www.erda.org>


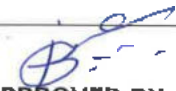


Certificate No. : TC-5389

**TEST REPORT**

ULR- TC538922000019660F

SHEET 1 OF 22


<b>NAME &amp; ADDRESS OF CUSTOMER</b> Servokon Systems Limited AN-6, UPSIDC, M.G. Road, Industrial Area, Phase-III, Dasna, Ghaziabad-201302, Uttar Pradesh, India.	<b>REPORT NO.:</b> RP-2223-012664 <b>DATE OF ISSUE:</b> 19/07/2022	
	<b>CUSTOMER REF. NO.</b>	<b>DATED</b>
	Letter	23/06/2022
	<b>DATE OF SAMPLE RECEIPT</b>	<b>DATE OF TESTING</b>
<b>SAMPLE DESCRIPTION</b>  <b>250 kVA Distribution Transformer (NON SEALED TYPE)</b>  11000/433 Volts,  13.12/333.35 Amp.,  Vector Group: Dyn-11,  <b>ENERGY EFFICIENCY LEVEL : 2</b>  Further details as per sheet No. 2 OF 22.	25/06/2022	
	06.07.2022 to 12.07.2022	
	<b>SAMPLE IDENTIFICATION</b>  <b>SAMPLE CODE.:</b> 10065059/2022/SS/2  <b>QR CODE NO.:</b> 100000252310  <b>ENCODED NO.:</b> 22E6578  <b>SERIAL NO.:</b> SSL/2022/06/03/115  <b>ERDA SAMPLE CODE NO.:</b> ERDA-00471116  <b>DRAWING NO:</b> 1) SSL/250/NP/3 2) SSL/250/OGA/01  <b>YEAR OF MFG.:</b> 2022	
	<b>TEST DETAILS</b> As per sheet 3 OF 22.	
<b>TEST SPECIFICATIONS</b> As per sheet 3 OF 22.		
<b>REMARKS:</b> On respective sheets from 4 OF 22 to 21 OF 22. Photographs of test sample – As per sheet 22 OF 22.		
<b>PREPARED BY</b> 		<b>APPROVED BY</b> 

Note:

- This report relates only to the particular sample received for testing in good condition at ERDA.
- This report cannot be reproduced in part under any circumstances.
- Publication of this report requires prior permission in writing from Director, ERDA.
- Only the tests asked for by the customer have been carried out.
- Particulars of manufacturer/supplier, given in this report are based on information supplied by the customer, along with the test request/sample. ERDA does not assume any responsibility for the correctness of the information for above mentioned sample under test (SUT). ERDA will not be responsible for any changes in SUT made after the test. This test report is given as per instrument status while testing.
- In case of any dispute, Vadodra will be the exclusive jurisdiction & shall be construed as where the cause has arisen.

Caution: ERDA is not responsible for the authenticity of photocopied or reproduced test reports.  
ERDA provides support to customers for verification of the authenticity of test reports issued by ERDA.

TC 3181769



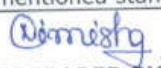



# SOME TEST REPORTS

## TEST REPORT

TC538919000005994F



SHEET NO. : 1 OF 15

<b>NAME &amp; ADDRESS OF CUSTOMER</b>		<b>TEST REPORT NO. :</b> RP-1819-045522	
<b>M/s. Servokon Systems Limited</b>		<b>DATE :</b> 21/02/2019	
AN-6, UPSIDC, M.G. Road, Industrial Area, Phase-III, Ghaziabad, U.P. - 245301		<b>CUSTOMER REF. NO. :</b> NIL	
		<b>DATED :</b> 22/12/2018	
		<b>DATE OF SAMPLE RECEIPT</b>	<b>DATE OF TESTING</b>
		25/01/2019	21/02/2019
<b>SAMPLE DESCRIPTION</b>		<b>SAMPLE IDENTIFICATION</b>	
<b>DISTRIBUTION TRANSFORMER</b>		SR. NO. : SSL/63/01	
<b>NON-SEALED TYPE</b>		YEAR OF MFG. : 2018	
ENERGY EFFICIENCY LEVEL : 2		MFG. BY : M/s. Servokon Systems Limited	
RATING : 63 kVA		ERDA SAMPLE CODE No.: ERDA-00299972	
RATED VOLTS : 11000/433 V			
RATED CURRENT : 3.31/84.0 A			
NO. OF PHASE : 03			
TYPE OF COOLING : ONAN			
FREQUENCY : 50 Hz			
% IMPEDANCE : 4.5%			
VECTOR GROUP : Dyn 11			
B.I.L. : H. V. : 28 kVrms / 95 kVp			
L.V. : 3 kVrms /----			
<b>TEST DETAIL :</b>		<b>TEST SPECIFICATION :</b>	
Lightning Impulse Test with Chopped on the Tail on all the three phases of HV Terminals at 95 kVp.		As per IS:1180 (Part-I)-2014, Cl.No. 21.3.a Amendment No.1 & 2 and Test voltage was specified by the customer. (Test Procedure was followed as per IS : 2026-(Part-III)-2009, Cl. No. 14)	
<b>ENCLOSURE :</b>			
DRG. NO.: 1) SSL/63/OGA/01 REV. 0 2) SSL/63/NP/03			
<b>TEST WITNESSED BY : ----</b>			
<b>REMARKS :</b> From the observation of enclosed oscillographic records, it is concluded that the transformer <b>conforms</b> to the requirements of the above mentioned standard with respect to the test carried out.			
<b>PREPARED BY</b>		<b>APPROVED BY</b>	
			
<b>NOTE :</b> 1. This report relates only to the particular sample received in good condition for testing at ERDA Vadodara. 2. This report cannot be reproduced in part under any circumstances. 3. Publication of this report requires prior permission in writing from Director, ERDA. 4. Only the tests asked for by the customer have been carried out. 5. In case of any dispute, Vadodara will be the exclusive jurisdiction & shall be construed as where the cause has arisen			
<b>Caution:</b> ERDA is not responsible for the authenticity of photocopied or reproduced test reports. ERDA provides support to customers for verification of the authenticity of test reports issued by ERDA.			

TC 2728345

## TEST REPORT

SHEET 1 OF 30

<b>NAME &amp; ADDRESS OF CUSTOMER</b>		<b>REPORT NO.:</b> RP-1718-052509	
<b>Bureau of Indian Standards,</b>		<b>DATE:</b> 23.01.2018	
<b>Ghaziabad Branch Office,</b>		<b>CUSTOMER REF. NO.:</b>	
<b>Savitri Complex, 116 GT Road,</b>		<b>DATED:</b>	
<b>Ghaziabad - 201001.</b>		BIS Test request	
		21.12.2017	
		<b>DATE OF SAMPLE RECEIPT:</b>	<b>DATE OF TESTING:</b>
		11.01.2018	16.01.2018 to 22.01.2018
<b>SAMPLE DESCRIPTION</b>		<b>SAMPLE IDENTIFICATION</b>	
<b>200 kVA Distribution Transformer</b>		<b>BIS SAMPLE CODE NO.:</b>	
<b>(NON SEALED TYPE)</b>		GZBO/PR/20171220/AS/1	
11000/433 Volts,		<b>SERIAL No.:</b> SSL/2017/09/197	
10.50/266.67 Amp.,		<b>YEAR OF MFG.:</b> 2017	
Oil filled, 4 Taps,			
Vector Group: Dyn-11,			
<b>ENERGY EFFICIENCY LEVEL: 2</b>		<b>ERDA SAMPLE CODE NO.:</b>	
Further details as per sheet No. 3 of 30		ERDA-00236111	
<b>TEST DETAILS</b>		<b>TEST SPECIFICATIONS</b>	
As per sheet 4 OF 30.		As per sheet 4 OF 30.	
<b>ENCLOSURE:</b> 1) As per sheet 2 OF 30. 2) Photograph nos. ERDA-00236111/01 & 02			
<b>NOTE:</b> Seal details - Coded & signed on sample with marker pen, coded & signed on white paper tag and sealed with red wax seal.			
<b>REMARKS:</b> On respective sheets from 5 OF 30 to 30 OF 30.			
<b>PREPARED BY</b>		<b>APPROVED BY</b>	
			
<b>NOTE:</b> 1. This report relates only to the particular sample received for testing in good condition at ERDA. 2. This report cannot be reproduced in part under any circumstances. 3. Publication of this report requires prior permission in writing from Director, ERDA. 4. Only test asked for by customer have been carried out. 5. In case of any dispute, Vadodara will be the exclusive jurisdiction & shall be construed as where the cause has arisen.			
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TC 2352587



# SERVOKON

RAKHE SAB CONTROL MEIN



**INDIA'S NO. 1**  
**SERVO VOLTAGE**  
**STABILIZER**

**Upto 5000 KVA**

[WWW.SERVOKON.COM](http://WWW.SERVOKON.COM)



## SERVO VOLTAGE STABILIZER

The Servo Voltage Stabilizer (Voltage Corrector or Voltage Regulator) is an electrical and electronic product specially designed to control the fluctuations or stabilize the output voltage to prevent the electrical appliances and electrical equipment from breakdown due to voltage fluctuations on the input side. The Servo Voltage Stabilizer usually works on Low Voltage Lines (LT).

### Why Servo Voltage Stabilizer is Required?

We are all part of the Hi-tech world; everything is automated with sophisticated sensors and robotic technologies. Automation plays an important role in every field, whether it is business, industry, telecommunications, printing, manufacturing, software, hospitals, homes, infrastructures, intelligence agencies, CNC machines, data science and many other diversified Industries.

Voltage fluctuations are a common phenomenon worldwide, especially in developing and underdeveloped countries. Voltage manifests itself in various ways, namely as low voltage or voltage drop, as high voltage or over Voltage, and as unbalanced voltage. The duration of these phenomena depends on the cause and is not easily predictable. Normally, the input voltage is low during the day and relatively high during the night hours, resulting in frequent power outages and consequently affecting production and overall costs.

In industry, due to the high load on equipment, unusual voltage fluctuations occur, which are one of the main causes of power outages or damage to expensive equipment. We cannot prevent the input voltage fluctuations, but we can install a SERVOKON make Servo Voltage Stabilizer to prevent the fluctuations. Subsequent use of the Servo Voltage Stabilizer saves energy and reduces MDI.

### Manufacturing Range

- Oil Cooled & Air Cooled Type Servo Voltage Stabilizer
- Single Phase, Double Phase & Three Phase Type.
- Indoor Type and Outdoor Type Servo Voltage Stabilizers
- **Capacity :** From 1 KVA to 5000 KVA (Any Special Customised Capacity as per requirement)
- **Voltage Range :** From 50 Volts to 550 Volts (Any Special Customised Voltage Range as per requirement)



## WHY SERVOKON ?

There are many Servo Voltage Stabilizer manufacturers in the market, but we are the best because our specialties are:

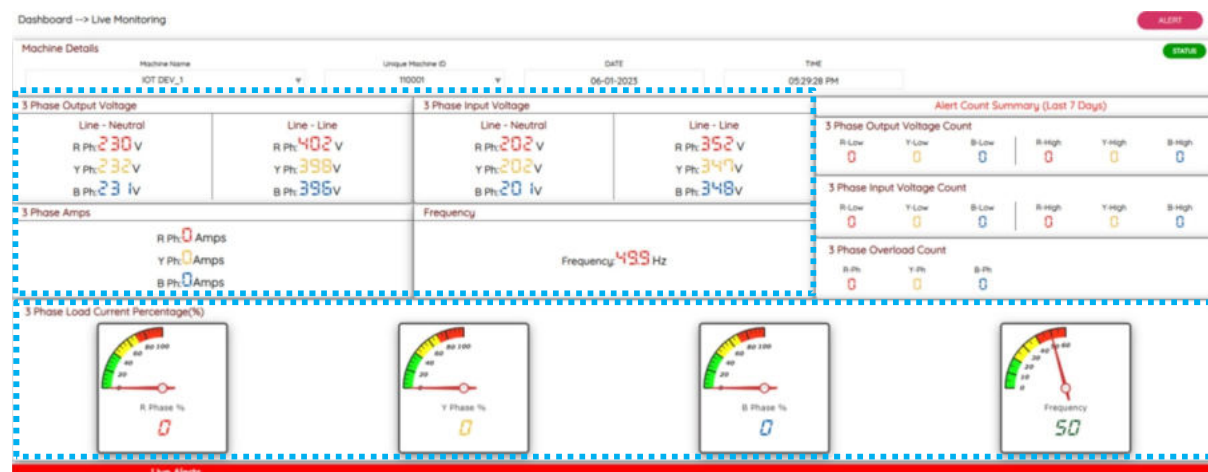
- India's No. 1 Servo Voltage Stabilizer Manufacturing Company.
- India's 1st Company to stabilize the voltage from minimum 50 Volts.
- India's Only Company to manufacture the widest range of Stabilizers from 0.5 KVA to 5000 KVA.
- Fastest Production Capacity with Earliest Delivery in the Servo Industry.
- Ready to Dispatch Stock upto 300 KVA.
- Guarantee of Superior Quality and Best Workmanship.
- Very Economical and Cost-Efficient Construction.
- Best Durability and Heavy-Duty Products.
- Highly Efficient with Energy Saving Technology.
- Up to dated Indian & International Standard.
- Tested at NABL Approved Testing Laboratories.
- Power Packed with Latest ADMS & EDL Technologies.



## ADMS TECHNOLOGY

The Introduction of the IoT (Internet of Things) has created a platform for the world to showcase interactions between high-tech machines - from connected cars and smart cities to weather monitoring systems and smart homes. The IoT revolution is changing the way people interact with machines. That's why we have introduced our latest Advanced Data Monitoring System technology, also known as ADMS technology in our Servo Voltage Stabilizers.

The Advanced Data Monitoring System (ADMS Technology) is integrated into our intelligent microprocessor control card in the servo voltage stabilizer and provides real-time data about the operation of the servo voltage stabilizer via the customer web server page. It provides the information such as input voltage, output voltage, operating load, frequency, and any errors or warnings that occur during the operation of the servo voltage stabilizer. The collected data is stored in the cloud and can be used for voltage or fault analysis.



## EDL TECHNOLOGY

Imagine you are supposed to sit in a room with a notepad and a pen and write down something like the temperature every 30 minutes. That sounds boring and endless, and it's also very error-prone. For scenarios like this, you need a device that captures and stores all the data with the parameters set. We have introduced Error Data Logger (EDL Technology), which is mainly used to systematically observe and record errors and faults in the operation of servo voltage stabilizers. EDL technology is integrated into all of our microprocessor control cards, which store fault data in real time to improve stabilizer performance and operation

## DESIGNING

The SERVOKON make Digital Servo Voltage Stabilizers are designed to provide a constant output voltage with an accuracy of  $\pm 1\%$  even on regular and highly fluctuation on the Input Voltage side. We use an Intelligent microprocessor control card, which is the brain of the Servo Voltage Stabilizer. The control board detects the input voltage fluctuations and sends a correction command to the Servo Motor, which rotates the carbon brushes either clockwise or counter clockwise on the electrolytically Wound Copper Regulators (Variacs or Dimmers) to obtain a stable Output Voltage. The imported and high-quality graphite carbon we use in our Servo Voltage Stabilizer ensures Excellent Performance.

### List of Fittings & Accessories :

- Oil Level Gauge / Indicator.
- Earthing Terminals.
- Name, Rating & Diagram Plate.
- Uni-Directional Flat Wheels.
- Pressed Steel Radiators for ONAN Cooling.
- Oil Filling Hole.
- Lifting Lugs.
- Monogram Plate.
- Cable Box.
- First Filling of Transformer Oil as per IS:335.

### Optional Features & Protections :

- High Voltage Cut Off
- Over Load Cut Off
- Single Phase Preventer
- Phase Sequence Corrector
- Change Over or By Pass Provision
- Phase Reversal Cut Off
- Low Voltage Cut Off
- Short Circuit Protection
- Earth Fault Protection
- Surge & Spike Protection



## TESTING

The servo voltage stabilizers we manufacture are tested for quality and performance at our in-house test lab. We perform all recommended Routine Test, Type Test and Special Tests in accordance with IS:9815, IS:2026, IS:1180 & relevant Indian & International Standards as applicable. We have also successfully conducted Type Test and Special Test at NABL's accredited Testing Labs and also offer Third Party Inspections (TPI).

## APPLICATIONS :

- Air Conditioners Plants
  - Medical Equipments
  - Offset Printing Presses
  - CNC Machines
  - Escalators And Elevators
  - Industrial And Lighting Equipments
  - Shopping Malls And Commercial Complexes
  - Homes And Offices, Telecommunications Systems
  - Advanced Laboratory Equipments
  - Defence Equipments
  - Engines
  - Cement Plants
  - Hotels
  - Industries
  - Research And Development Facilities
  - Data Centres
  - Distilleries And Beverages
  - Tea Plantations
  - Metrological Equipments
  - Food Processing Equipments
  - Cold Storage, Rubber Industries
  - Rice Mills
  - Sugar Mills
  - RO Plants





## SERVO VOLTAGE STABILIZER (THREE PHASE)

Servo Voltage Stabilizers detect the unexpected voltage fluctuations of the power supply and reduce or increase the voltage levels with the help of Servo Motors (an important component of servo stabilizers), and then provide a stabilized, high output voltage to the end devices.

To ensure better cooling of the Servo Voltage Stabilizers, natural air or transformer oil (IS:335) is used. Oil cooled Servo Voltage Stabilizers and Air-cooled Servo Voltage Stabilizers are the best solution for industry to avoid voltage fluctuation.

### TECHNICAL SPECIFICATIONS

Standard	Confirms to latest IS:9815, IS:2026 & relevant International Standard or as applicable				
Capacity	10 KVA to 5000 KVA (Any Special Customised Capacity as per Customer Requirement)				
Correction Method	Stepless Correction by SERVOKON make Copper Wound Variac (Dimmer)				
Control Module	Microprocessor based Control Card with EDL Technology & ADMS Technology (Optional)				
Classification	100% Unbalanced / Balanced Supply & 100% Unbalanced / Balanced Loads				
No. Of Phases	Three Phase				
Frequency	50 / 60 Hz $\pm$ 5%				
Mode of Control	Automatic / Manual				
Load Variation	Admitted from 0 to 100%				
Type of Installation	Indoor / Outdoor (As per customer requirement)				
Cooling	Oil Natural Air Natural (ONAN) or Air Natural (AN)				
Type of Oil	Transformer Oil as per IS:335				
Output Voltage	380/400/415 V ( $\pm$ 1%) Phase to Phase 220/230/240 V ( $\pm$ 1%) Phase to Neutral (Any Special Customised Output Voltage as per Customer Requirement)				
Input Voltage (Phase to Phase)*	150V-460V	250V-460V	280V-460V	300V-460V	340V-460V
Input Voltage (Phase to Neutral)*	90V-270V	140V-270V	160V-270V	170V-270V	200V-270V
	*[Any Special Customised Range as per Customer Requirement]				
Duty Cycle/Life	Continuous 24 Hrs				
Response Time	Less than 20 milliseconds				
Correction Rate	10-60 V/Sec				
Operating Temperature	-15°C to +50°C				
Waveform Distortion	Nil (Negligible)				
Efficiency	More than 96% (Approx.) or As per Indian Standards & International Standards as applicable				
Mounting Arrangement	On Unidirectional Wheels				



## SERVO VOLTAGE STABILIZER (SINGLE PHASE)

Some of the common household appliances we use like Televisions, Refrigerators, Air Conditioner, Dishwashers, Washing Machines, Blenders, Grinders, Computers and Speaker Systems etc. In the past time the individual stabilizers were used for each appliance to secure it from power fluctuation. You have one stabilizer for the Refrigerator, another on for AC and another one for the other appliances. Suppose you do not have one for your Computer or TV ? Your devices are then at risk.

Today we are in the age of modern technology. Single Phase Servo Voltage Stabilizers provide all-around protection for all your home's appliances. So that you can use a single customized Servo Voltage Stabilizer to provide stable output Voltage in your Apartment, Flat or Individual House.

### TECHNICAL SPECIFICATIONS

Standard	Confirms to latest IS:9815, IS:2026 & relevant International Standard or as applicable			
Capacity	1 KVA to 300 KVA (Any Special Customised Capacity as per Customer Requirement)			
Correction Method	Stepless Correction by SERVOKON make Copper Wound Variac (Dimmer)			
Control Module	Microprocessor based Control Card with EDL Technology			
Classification	100% Unbalanced Supply & 100% Unbalanced Loads			
No. Of Phases	Single Phase			
Frequency	50 / 60 Hz $\pm$ 5%			
Mode of Control	Automatic / Manual			
Load Variation	Admitted from 0 to 100%			
Type of Installation	Indoor / Outdoor (As per customer requirement)			
Cooling	Oil Natural Air Natural (ONAN) or Air Natural (AN)			
Type of Oil	Transformer Oil as per IS:335			
Output Voltage	220/230/240 V ( $\pm$ 1%) Phase to Neutral			
Input Voltage*	70V-270V	90V-270V	140V-270V	160V-270V
	*[Any Special Customised Range as per Customer Requirement]			
Duty Cycle/Life	Continuous 24 Hrs			
Response Time	Less than 20 milliseconds			
Correction Rate	10-60 V/Sec			
Operating Temperature	-15°C to +50°C			
Waveform Distortion	Nil (Negligible)			
Efficiency	More than 96% (Approx.) or As per Indian Standards & International Standards as applicable			
Mounting Arrangement	On Unidirectional Wheels			



# SERVOKON

RAKHE SAB CONTROL MEIN



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**ROLLING CONTACT**  
**SERVO STABILIZER**

**Upto 5000 KVA**

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### Manufacturing Range

- Oil Cooled Rolling Contact / Linear Type Servo Voltage Stabilizer
- Three Phase Rolling Contact / Linear Type Servo Voltage Stabilizer
- Indoor and Outdoor Type
- **Capacity :** 10 KVA to 5000 KVA (Any Special Customised Capacity as per requirement)
- **Voltage Range :** From 150 Volts to 550 Volts (Any Special Customised Voltage Range as per requirement)



## WHY SERVOKON ?

There are many Servo Voltage Stabilizer manufacturers in the market, but we are the best because our specialties are:

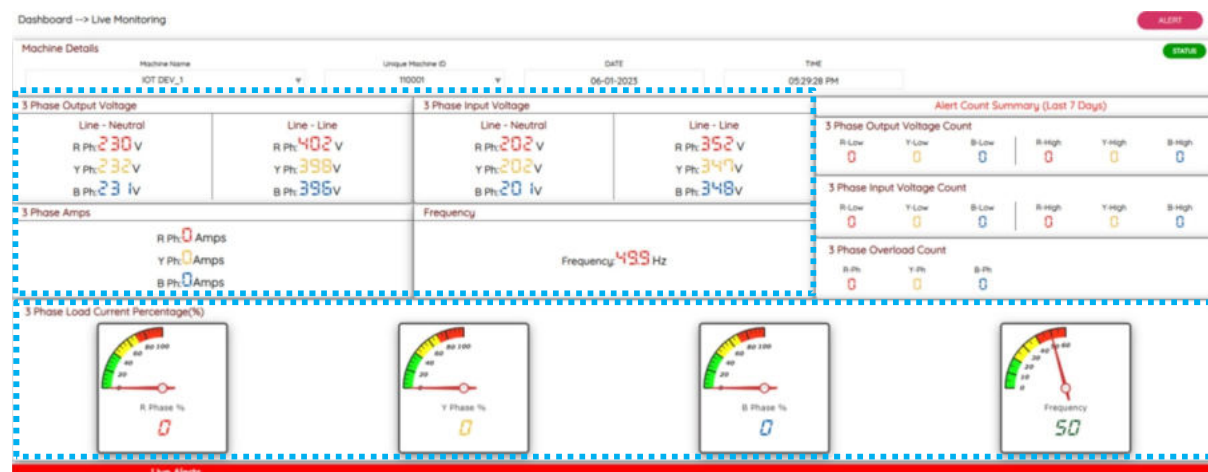
- India's No. 1 Servo Voltage Stabilizer Manufacturing Company.
- India's 1st Company to stabilize the voltage from minimum 50 Volts.
- India's Only Company to manufacture the widest range of Stabilizers from 0.5 KVA to 5000 KVA.
- Fastest Production Capacity with Earliest Delivery in the Servo Industry.
- Ready to Dispatch Stock upto 300 KVA.
- Guarantee of Superior Quality and Best Workmanship.
- Very Economical and Cost-Efficient Construction.
- Best Durability and Heavy-Duty Products.
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The Advanced Data Monitoring System (ADMS Technology) is integrated into our intelligent microprocessor control card in the servo voltage stabilizer and provides real-time data about the operation of the servo voltage stabilizer via the customer web server page. It provides the information such as input voltage, output voltage, operating load, frequency, and any errors or warnings that occur during the operation of the servo voltage stabilizer. The collected data is stored in the cloud and can be used for voltage or fault analysis.



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Imagine you are supposed to sit in a room with a notepad and a pen and write down something like the temperature every 30 minutes. That sounds boring and endless, and it's also very error-prone. For scenarios like this, you need a device that captures and stores all the data with the parameters set. We have introduced Error Data Logger (EDL Technology), which is mainly used to systematically observe and record errors and faults in the operation of servo voltage stabilizers. EDL technology is integrated into all of our microprocessor control cards, which store fault data in real time to improve stabilizer performance and operation

## DESIGNING

The SERVOKON make Digital Servo Voltage Stabilizers are designed to provide a constant output voltage with an accuracy of  $\pm 1\%$  even on regular and highly fluctuation on the Input Voltage side. We use an Intelligent microprocessor control card, which is the brain of the Servo Voltage Stabilizer. The control board detects the input voltage fluctuations and sends a correction command to the Servo Motor, which rotates the carbon brushes either clockwise or counter clockwise on the electrolytically Wound Copper Regulators (Variacs or Dimmers) to obtain a stable Output Voltage. The imported and high-quality graphite carbon we use in our Servo Voltage Stabilizer ensures Excellent Performance.

## List of Fittings & Accessories :

- Oil Level Gauge / Indicator.
- Earthing Terminals.
- Name, Rating & Diagram Plate.
- Uni-Directional Flat Wheels.
- Pressed Steel Radiators for ONAN Cooling.
- Oil Filling Hole.
- Lifting Lugs.
- Monogram Plate.
- Cable Box.
- First Filling of Transformer Oil as per IS:335.

## Optional Features & Protections :

- High Voltage Cut Off
- Over Load Cut Off
- Single Phase Preventer
- Phase Sequence Corrector
- Change Over or By Pass Provision
- Phase Reversal Cut Off
- Low Voltage Cut Off
- Short Circuit Protection
- Earth Fault Protection
- Surge & Spike Protection

## TESTING

The servo voltage stabilizers we manufacture are tested for quality and performance at our in-house test lab. We perform all recommended Routine Test, Type Test and Special Tests in accordance with IS:9815, IS:2026, IS:1180 & relevant Indian & International Standards as applicable. We have also successfully conducted Type Test and Special Test at NABL's accredited Testing Labs and also offer Third Party Inspections (TPI).

## APPLICATIONS :

- Air Conditioners Plants
  - Medical Equipment
  - Offset Printing Presses
  - CNC Machines
  - Escalators And Elevators
  - Industrial And Lighting Equipment
  - Shopping Malls And Commercial Complexes
  - Homes And Offices, Telecommunications Systems
  - Advanced Laboratory Equipment
  - Defence Equipment
  - Engines
  - Cement Plants
  - Hotels
  - Industries
  - Research And Development Facilities
  - Data Centres
  - Distilleries And Beverages
  - Tea Plantations
  - Metrological Equipment
  - Food Processing Equipment
  - Cold Storage, Rubber Industries
  - Rice Mills
  - Sugar Mills
  - RO Plants





## ROLLING CONTACT / LINEAR TYPE **SERVO VOLTAGE STABILIZER**

Rolling Contact / Linear Type Servo Voltage Stabilizers detects the unexpected voltage fluctuations of the power supply and reduce or increase the voltage levels with the help of Servo Motors (an important component of servo stabilizers), and then provide a stabilized, high output voltage to the end devices.

To ensure better cooling of the Servo Voltage Stabilizers, Transformer Oil as per IS:335 is used. Oil cooled Servo Voltage Stabilizers are the best solution for industry to avoid voltage fluctuation.

### TECHNICAL SPECIFICATIONS

Standard	Confirms to latest IS:9815, IS:2026, IS:1180 & relevant International Standard or As Applicable				
Capacity	10 KVA to 5000 KVA (Any Special Customised Capacity as per Customer Requirement)				
Correction Method	Rolling Contact / Linear Type On-load Voltage Regulator with Stepless Regulation				
Control Module	Microprocessor based Control Card with EDL Technology & ADMS Technology (Optional)				
Classification	100% Unbalanced / Balanced Supply & 100% Unbalanced / Balanced Loads				
No. Of Phases	Three Phase				
Frequency	50 / 60 Hz $\pm$ 5%				
Mode of Control	Automatic / Manual/ Mechanical				
Load Variation	Admitted from 0 to 100%				
Type of Installation	Indoor / Outdoor (As per customer requirement)				
Cooling	Oil Natural Air Natural (ONAN)				
Type of Oil	Transformer Oil as per IS:335				
Output Voltage	380/400/415 V ( $\pm$ 1%) Phase to Phase 220/230/240 V ( $\pm$ 1%) Phase to Neutral (Any Special Customised Output Voltage as per Customer Requirement)				
Input Voltage (Phase to Phase)*	150V-460V	280V-460V	300V-460V	340V-460V	360V-460V
Input Voltage (Phase to Neutral)*	90V-270V	160V-270V	170V-270V	200V-270V	210V-270V
	*(Any Special Customised Range as per Customer Requirement)				
Duty Cycle/Life	Continuous 24 Hrs				
Response Time	Less than 20 milliseconds				
Correction Rate	5-15 V/Sec				
Operating Temperature	-15°C to +50°C				
Waveform Distortion	Nil (Negligible)				
Efficiency	As per Indian Standards & International Standards as applicable				
Mounting Arrangement	On Unidirectional Wheels				

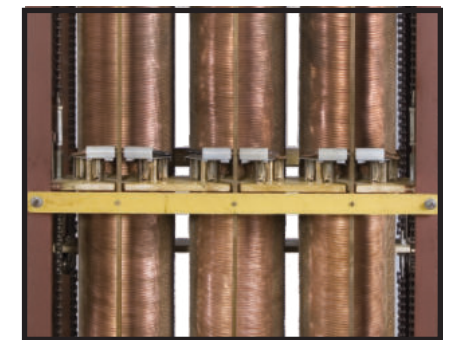


## Rolling Contact / Linear Type Servo Voltage Regulator

Rolling Contact / Linear Type Voltage Regulator have been specifically designed for a variety of heavy-duty industrial applications. They have become established worldwide as a control method wherever stepless regulation of voltage is required under On-load Conditions. These regulators are wound with heavy copper strips and are suitable for 100% continuous operation. They have an economic life of 15-20 years at full load and require little maintenance throughout their service life.



**Regulator with Buck & Boost Transformer**



**Inner view of Regulator with Carbon Roller Assembly**



**Graphite Carbon Roller**

Servokon's Rolling Contact / Linear Type Voltage Stabilizer is manufactured in accordance with IS:9815, IS:2026, IS:1180 or As Applicable and consists of the following major components housed in the same stabilizer tank :

- Rolling Contact / Linear Type (+/-) Voltage Regulator with Carbon Assembly.
- Double wound Step-Down/Step-Up Transformer.
- Control Panel with Intelligent microprocessor control card with EDL technology & ADMS technology (optional).



# SERVOKON

RAKHE SAB CONTROL MEIN



**HT & LT  
ELECTRICAL PANELS**

[WWW.SERVOKON.COM](http://WWW.SERVOKON.COM)



## MEDIUM VOLTAGE VACUUM CIRCUIT BREAKER PANELS (VCB)

Servokon is a leading manufacturer and supplier of VCB panels in India. Our range includes state-of-the-art switchgear for 11 and 33 kV with cutting-edge technologies in VCB up to 1500 MVA fault levels. "We have developed our expertise to offer an exclusive range of HT switchboards to our valued customers. Manufactured with a combination of High Quality raw materials and latest techniques, we have developed a range of products that are of high quality. We timely deliver the ordered consignments within the stipulated time frame and work towards achieving maximum customer satisfaction.

Vacuum Circuit-breakers have a complete range of accessories to satisfy all installation requirements. The operating mechanism has a standardised range of accessories and spare parts that are easy to identify and order. The accessories are conveniently installed from the front of the circuit-breaker. Electrical connection is carried out with plug-socket connectors. Usage, maintenance and servicing of the unit are simple and require little use of resources.

The VCB are used in power distribution for control and protection of cables, overhead lines, transformer and distribution substations, motors, transformers, generators and capacitor banks.



## RANGE We Offer

**VCB Panels Range Rated Voltage :** 3.3/6.6/11/ 33 KV  
**Rated Current :** 630/800/1250/ 1600  
**Amp Short Ckt Current -** 20/26.3/ 40  
**KA Application :** Indoor / Outdoor Bus Bar- Aluminium / Copper Type : Extensible / Non Extensible





## HT PANELS

HT Panel is similar to LT Panel except it is used with High Tension Line prior to any Transformer. We manufacture following type of HT Panels :-

### Ring Main Unit

A ring main unit (RMU) is a factory assembled, metal enclosed set of switchgear used at the load connection points of a ring type distribution network. It includes in one unit two switches that connect both sides of the load to the main conductors and a fusible switch or circuit breaker that tee-off to feed a distribution transformer medium voltage to low voltage (MV to LV).

We offer complete range of RMU Units manufactured by ABB / Schneider with different Isolator + VCB Combinations as required by the Client.



### Control Relay Panel

We manufacture Control & Relay Panels (CRPS) used for the protection of electrical networks ranging from 11kV to 66 kV. Our product range for both indoor and outdoor panels includes. Feeder protection panel for both incoming and outgoing lines Transformer panel covering both HV and LV side protection.

We have expertise in using electromechanical, analog and digital relays in our panels. We integrate relays from popular manufacturers like ABB, Areva, Siemens, GE, SEL. Etc. The panels of varying sizes based on the requirement are designed.



## LT PANELS

LT Panel is an electrical distribution board that receives power from generator or transformer and distributes the same to various electronic devices and distribution board. Our LT panels are designed to work with low electricity consumption that makes them cost effective. We manufacture following type of LT Panels :-

### Power Control Center (PCC)

We offer PCC Panel with a current carrying capacity up to 6300 Amp. We have short circuit type test Certificate of 65 KA / 1sec from CPRI. Our PCC Panel integrated with all necessary protections to ensure that it meets all safety standards prevailing in the industry. As a special feature we provide energy management system through which you can have one month record of energy data of all feeders.



### Automatic Power Factor Correction Panel (APFC)

We offer APEC Panel controlled through Thyristor cards or contactor based depends on nature of Load. To overcome harmonic effects we use detuned reactors. We supply the panels with APP/MPP Heavy duty capacitor banks as per characteristics of electrical loads. This panel is of great use to minimize loss and wastage of energy and heavy penalties by electricity boards.



## CT & PT PANELS

**A current Transformer (CT)** constitutes the principle measuring device for protection and metering purpose in any power system. The Class of accuracy for metering CT's are 0.1, 0.2, 0.5s, 0.5 & 1.0 and in case of protection CT's, it is 5P20 & 10P10.

- Indoor cast resin CT's for switch gears upto 33Kv
- Outdoor Oil Immersed CT's upto 33Kv
- Bus Duct CT's upto 33Kv

**A Potential Transformer (PT)** plays a key role in Electrically Isolating the instrument and relays from the high voltage side and for Transferring voltage from higher values to proportional lower values upto 63.5V, 100V, 110V or as per standard equipment. The Class of accuracy of metering PT are 0.1, 0.2, 0.5, 1.0 and protection is 3P.

- Indoor cast resin & Oil Cooled PT's
- Outdoor Oil Cooled type PT's





# SERVOKON

RAKHE SAB CONTROL MEIN



**ONLINE  
UPS**

**Upto 800 KVA**



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## ONLINE TRANSFORMERLESS UPS ZENITH SERIES

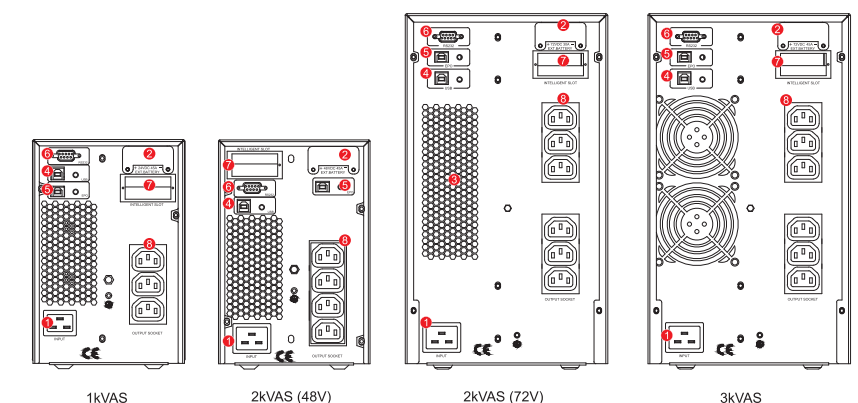
1 KVA ~ 3 KVA ( 1:1 PHASE 0.9 PF )

### Features

- High frequency on-line double conversion technology
- DSP (Digital signal processors) control technology
- Active power factor correction (APFC), Ensure input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110 V ~ 300 Vac) and frequency range (40 ~ 70 Hz)
- Auto sensing frequency
- 50/60 Hz frequency conversion
- Cold start
- Built-in Isolation Transformer (Optional)
- Intelligent fan speed control
- Quick and stable charging, 90% capacity restored in 4h (standard model UPS)
- Advanced battery management (ABM)
- Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode and frequency conversion mode
- Multi-platform communications: RS232 (standard), USB/RS485 / SNMP / dry contacts (optional)
- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, EPO function, and 12 A charger (2/3 kVA only)

### Rear Panel

- AC input socket
- Battery connector (Optional)
- Fan
- USB (Optional)
- EPO (Optional)
- RS232
- Intelligent slot (Optional)
- Output sockets







## ONLINE TRANSFORMERLESS UPS ZENITH SERIES

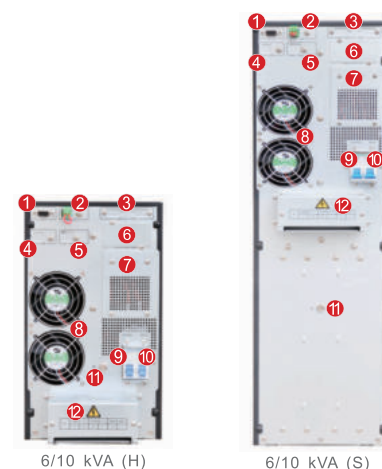
6 KVA ~ 10 KVA [ 1:1 PHASE 1.0 PF ]

### Features

- Unity Power Factor "KVA = KW"
- High frequency on-line double conversion technology
- DSP (Digital signal processors) control technology
- Active power factor correction (APFC), Ensure input power factor up to 0.99
- High Efficiency 95% (Up to 98% in ECO mode)
- Advanced Digital Parallel Technology
- Wide input voltage range (110 V ~ 290 Vac) and frequency range (40 ~ 70 Hz)
- Auto sensing frequency 50/60 Hz
- Dual-input design supporting independent bypass
- Flexible battery configuration (settable 16-20 Nos batteries)
- High charging current available (Max. 12 A)
- Cold start
- Charging voltage and current configured by demands
- Equipped with self-aging function
- Fan speed varies intelligently with temperature, reducing noise and extending its service life
- Equipped with self-aging function
- Multi Function LCD + LED + Key operation Friendly Human Machine Interface
- Advanced multi-platform communications: RS232, USB, RS485, SNMP and dry contacts communication interfaces
- Effective software and hardware protection function, robust self-diagnostic function, and abundant event log for check
- Built-in Isolation Transformer (Optional)

### REAL PANEL

- RS232
- EPO
- Parallel Port (optional)
- USB (optional)
- Temperature Detection (optional)
- Intelligent Slot
- Breaker or outlets ect.
- Fans
- Bypass Breaker
- Input Breaker
- GND
- Terminals and Cover



## ONLINE TRANSFORMER - BASED UPS ASTRO SERIES

10 KVA ~ 120 KVA [ 3:3 PHASE 0.9 PF ]

ASTRO series UPS is a Smart 3 phase in 3 phase out uninterruptible power supply, it adopts double transform high frequency SPWM and high-performance digital signal processor precision design, meets all high reliability requirements of UPS and integrates reliability, safety, maintainability of a new generation low frequency UPS.

### Features

- Online double-conversion with full DSP control
- IGBT inverter with output isolation transformer
- 100% unbalance load capability
- Output power factor 0.9
- Generator compatible
- Auto-restart
- Green mode function ensure optimize efficiency to save energy
- Touch screen display, friendly human & machine interface
- Intelligent self-diagnosing function, all kinds of failure protection
- More then 10000 events and history recode
- High MTBF (> 200,000 h) & Low MTTR (< 0.4 h)
- (EPO) Emergency Power Off function
- Versatile Communication RS232,RS485,dry contacts communication port
- Optional SNMP & dry contract
- Optional N+X redundancy parallel up to 6 units



# SERVOKON

RAKHE SAB CONTROL MEIN



**INDIA'S WIDEST RANGE OF  
AUTOMATIC VOLTAGE  
STABILIZERS**

**Upto 15 KVA**

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## Stabilizers For COMPLETE HOUSEHOLD

### CMS SERIES (Constant Mainline Stabilizer)



Models: CMS 5 & CMS 10

First time in India, Servokon introduces a revolutionary **"Next Generation of Mainline Voltage Stabilizer"**. It provides constant output voltage to your home appliances along with many special features.

#### FEATURES

- Constant Output Of 200V +/- 1% accuracy
- Latest Microprocessor Based Circuit
- Wide Input Range of 90V-300V
- High Cut & Low Cut Off Protection
- 100% Copper Wound
- Relay Free Operation
- Noise Free, Smooth Operation
- Warranty - 1 year

### MAINLINE SERIES

Servokon's Mainline Stabilizer series offers a variety of options in this segment also. Our mainline stabilizers are smartly & technically designed for both home & office environment having different loads. Our general Household Model Capacity starts from 3 KVA Load to 10 KVA load adequate for all home appliances including 1 Air conditioner.

#### FEATURES

- Latest Microprocessor Based Circuit
- High Cut & Low Cut Off Protection
- Inbuilt Double MCB's
- Thermal Overload Protection
- Inbuilt By-Pass Feature
- Inbuilt Time Delay Relay (TDR)
- Power Saving Technology
- Warranty - 2 years



Models : SKM 310, SKM 513, SKM 510  
SKM 590 XP, SKM 52P, SKM 1010  
SKM 1090 XP, SKM 102P



## Stabilizers For AIR CONDITIONERS

### AIR CONDITIONERS (1.5 TON)



Models : SK 417, SK 416, SK 415, SK 413  
SK 410, SK 480, SK 42P

Voltage Power Supply is unpredictable in most parts of India. Sudden voltage fluctuations beyond the ideal range can cause damage to your Air Conditioner. Servokon's Air Conditioner Series Will provide your Air Conditioner an optimum output voltage along with many more special features.

Servokon has the widest range of Air Conditioner Stabilizers ranging from as low as 80V input to 170V input providing a stabilised output to your Air Conditioner.

#### FEATURES

- Latest Microprocessor Based Circuit
- High Cut & Low Cut Off Protection
- Thermal Overload Protection
- Widest & Genuine Working Range
- Inbuilt Time Delay Relay (TDR)
- Warranty - 3 years

### AIR CONDITIONERS (2 TON)

Servokon has the widest range of Air Conditioner Stabilizers ranging from as low as 80V input to 170V input providing a stabilised output to your Air Conditioner.

#### FEATURES

- Latest Microprocessor Based Circuit
- High Cut & Low Cut Off Protection
- Thermal Overload Protection
- Widest & Genuine Working Range
- Inbuilt Time Delay Relay (TDR)
- Warranty - 3 years



Models : SK 517, SK 516, SK 515, SK 513  
SK 510, SK 580, SK 52P

## Stabilizers For HOME APPLIANCES

### SERIES FOR REFRIGERATOR



Models : SKR 0513, SKR 0590  
SKR 113, SKR 190

A frequent and sudden re-starting of your Refrigerator during inconsistent voltage supply can cause damage to its compressor. Servokon's Refrigerator Stabilizer has an Advanced Time Delay System that will protect the compressor by intelligently delaying the voltage supply to the compressor as well as stabilising the voltage fluctuations.

#### FEATURES

- Latest Microprocessor Based Circuit
- High Cut & Low Cut Off Protection
- Thermal Overload Protection
- Widest & Genuine Working Range
- Inbuilt Time Delay Relay (TDR)
- Power Saving Technology
- Warranty - 2 years

### SERIES FOR (WASHING MACHINE & MICROWAVE OVEN)

Microwave Oven & Washing Machines are the most commonly used home appliances in the cities in the current era. Varying input voltage can cause damage to its sensitive user interface affecting the usage of the appliance. Servokon has designed an intelligent Stabilizer specifically for Microwave Ovens & Washing Machines which will protect their components from sudden voltage fluctuations.

#### FEATURES

- Latest Microprocessor Based Circuit
- High Cut & Low Cut Off Protection
- Thermal Overload Protection
- Inbuilt Time Delay Relay (TDR)
- Power Saving Technology
- Warranty - 2 years



Models : SKW 213, SKW 290



# SERVOKON

RAKHE SAB CONTROL MEIN



**CVT**  
**CONSTANT VOLTAGE**  
**TRANSFORMER**

**Upto 10 KVA**



[WWW.SERVOKON.COM](http://WWW.SERVOKON.COM)



## CVT CONSTANT VOLTAGE TRANSFORMER

Servokon CVTs are produced using state-of-the-art ferror resonant technology. The product is Highly Economical & Reliable. It gives you Instantaneous Voltage regulation, no transient, no spikes, sinewave output, noiseless operation and high isolation between output & Input. Recommended for Petrol Pump, Wheel balancing Machines, Dental Chairs, Medical Equipments, Control Panels, EPBAX Machines, CCTV etc.

### FEATURES

- Minimum Maintenance
- Instantaneous Short Circuit & Overload Protection
- No Semiconductor or Moving parts used.
- Short term overload Capacity
- Surge Suppression & Spike Protection
- Instant Correction Speed



### TECHNICAL SPECIFICATIONS

Capacity	100 VA to 10 KVA [(Any Special Customised Capacity as per Customer Requirement)]
Input Voltage	180V-260V & 160V-260V (Any Special Customised Range as per Customer Requirement)
Output Voltage	220/230/240 V (+/- 1%) Phase to Neutral
Frequency	50 / 60 Hz ± 5%
Load Variation	Admitted from 0 to 100%
Operating Temperature	-15°C to +50°C
Response Time	10-20 milliseconds
Waveform Distortion	Nil (Negligible)
Correction Rate	Instantaneous
Cooling	Air Natural (AN)
Winding	100% Copper



# SERVOKON

RAKHE SAB CONTROL MEIN



**SOLAR  
HYBRID PCU**

**Upto 10 KVA**

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## Pure Sine Wave **SOLAR HYBRID PCU** 1100 VA, 12V

### NOVA 1400

- Related AC power 1100 VA 12V
- Operating voltage 100-290V
- Maximum supported panel power from 12V up to 1000Wp
- Charge Controller Rating - 50A/12V, with 98% efficiency for fast charging
- Intelligent overload sensing circuitry with auto retries facility
- Changeover Time Ma x : <30ms (in Normal Mode) & <6ms (in UPS Mode)
- Support dual mode of working, UPS Mode (180-260VAC) & Normal Mode (100-290VAC)
- Ma x charging current 5A to 18A (User Programmable)
- Programmable thermal protection : cooling fan which operates as needed
- High power new generation MOSFET cable to handle high in-rush/surge current
- Double stage MOSFET over current protection by measuring Rds ON
- Highest efficiency at lower cost
- Pure Sine Wave Output with low Total Harmonic Distortion (THD)
- Solar PV reverse voltage protection
- Electronic Over Current Charging Protection
- Reverse Current Flow Protection from Battery to Solar Panel Generally during night
- Designed for continuous reliable and robust operation
- Different Battery selection mode to enhance the battery life

### Specifications

Model	Nova 1400
Capacity (VA)	1100 VA
Nominal Battery Voltage (Vdc)	12V
Charge Controller Type	PWM
Charge Controller Rating	50 Amp/12V
Maximum PV Power	900 Wp
Input Voltage Range (Min-Max) (Voc)	17V-25V
Battery Boost Voltage (Adjustable)	14.4V (Default Setting)
Battery Low Cut (Adjustable)	10.4V (Default Setting)
Grid Charging Current (Adjustable)	15 Amp. (Default Setting)
Solar Charging Current (Adjustable)	30 Amp. (Default Setting)
Supported Battery Types	Flat, Tubular
Discharging Current	70 Amp.
Display Type	LCD
Dimensions (L*W*H) CM	37*35*21
Net Weight	12 Kg apx.





## Pure Sine Wave SOLAR HYBRID PCU 1450 VA, 12V & 24V

### NOVA 1750

- Related AC power 1450 VA 12V, 1450 VA 24V
- Operating voltage 100-290V
- Maximum supported panel power from 24V up to 2000Wp
- Charge Controller Rating - 50A/24V, with 98% efficiency for fast charging
- Intelligent overload sensing circuitry with auto retries facility
- Changeover Time Ma x : <30ms (in Normal Mode) & <6ms (in UPS Mode)
- Support dual mode of working, UPS Mode (180-260VAC) & Normal Mode (100-290VAC)
- Ma x charging current 5A to 18A (User Programmable)
- Programmable thermal protection : cooling fan which operates as needed
- High power new generation MOSFET cable to handle high in-rush/surge current
- Double stage MOSFET over current protection by measuring Rds ON
- Highest efficiency at lower cost
- Pure Sine Wave Output with low Total Harmonic Distortion (THD)
- Solar PV reverse voltage protection
- Electronic Over Current Charging Protection
- Reverse Current Flow Protection from Battery to Solar Panel Generally during night
- Designed for continuous reliable and robust operation
- Different Battery selection mode to enhance the battery life

### Specifications

Model	Nova 1750 12V / Nova 1750 24V
Capacity (VA)	1450 VA
Nominal Battery Voltage (Vdc)	12/24V
Charge Controller Type	PWM
Charge Controller Rating	50 Amp/12V
Maximum PV Power	1800 Wp
Input Voltage Range (Min-Max) (Voc)	31V-45V
Battery Boost Voltage (Adjustable)	28.8V (Default Setting)
Battery Low Cut (Adjustable)	20.8V (Default Setting)
Grid Charging Current (Adjustable)	15 Amp. (Default Setting)
Solar Charging Current (Adjustable)	30 Amp. (Default Setting)
Supported Battery Types	Flat, Tubular
Discharging Current	50 Amp.
Display Type	LCD
Dimensions (L*W*H) CM	42*39*24.5
Net Weight	16.5 Kg apx.



## Pure Sine Wave SOLAR HYBRID PCU 2100 VA-3000 VA, 24V

### SUPER NOVA SERIES

- Related AC power 2100 VA - 3000 VA, 24V
- Operating voltage 100-290V
- Maximum supported panel power from 24V up to 2000Wp
- Charge Controller Rating - 50A/24V, with 98% efficiency for fast charging
- Intelligent overload sensing circuitry with auto retries facility
- Changeover Time Ma x : <30ms (in Normal Mode) & <6ms (in UPS Mode)
- Support dual mode of working, UPS Mode (180-260VAC) & Normal Mode (100-290VAC)
- Max charging current 5A to 18A (User Programmable)
- Programmable thermal protection : cooling fan which operates as needed
- High power new generation MOSFET cable to handle high in-rush/surge current
- Double stage MOSFET over current protection by measuring Rds ON
- Highest efficiency at lower cost
- Pure Sine Wave Output with low Total Harmonic Distortion (THD)
- Solar PV reverse voltage protection
- Electronic Over Current Charging Protection
- Reverse Current Flow Protection from Battery to Solar Panel Generally during night
- Designed for continuous reliable and robust operation
- Different Battery selection mode to enhance the battery life.

### Specifications

Model	Super Nova 2500	Super Nova 3500
Capacity (VA)	2100 VA	3000 VA
Nominal Battery Voltage (Vdc)	24V	
Charge Controller Type	PWM	
Charge Controller Rating	50 Amp/12V	
Maximum PV Power	1800 Wp	
Input Voltage Range (Min-Max) (Voc)	31V-45V	
Battery Boost Voltage (Adjustable)	28.8V (Default Setting)	
Battery Low Cut (Adjustable)	20.8V (Default Setting)	
Grid Charging Current (Adjustable)	15 Amp. (Default Setting)	
Solar Charging Current (Adjustable)	30 Amp. (Default Setting)	
Supported Battery Types	Flat, Tubular	
Discharging Current	70 Amp.	100 Amp.
Display Type	LCD	
Dimensions (L*W*H) CM	42*39*24.5	
Net Weight	18 Kg apx.	23Kg apx.





Pure Sine Wave  
**SOLAR HYBRID PCU 3 KVA, 24V**

**SUPER NOVA SERIES**

- Related AC power 3 KVA, 24V
- Operating voltage 100-290V
- Maximum supported panel power from 24V up to 3600Wp
- Charge Controller Rating - 70A/48V-50A/96V with 98% efficiency for fast charging
- Intelligent overload sensing circuitry with auto retries facility
- Changeover Time Ma x : <30ms (in Normal Mode) & <6ms (in UPS Mode)
- Support dual mode of working, UPS Mode (180-260VAC) & Normal Mode (100-290VAC)
- Ma x charging current 5A to 18A (User Programmable)
- Programmable thermal protection : cooling fan which operates as needed
- High power new generation MOSFET cable to handle high in-rush/surge current
- Double stage MOSFET over current protection by measuring Rds ON
- Highest efficiency at lower cost
- Pure Sine Wave Output with low Total Harmonic Distortion (THD)
- Solar PV reverse voltage protection
- Electronic Over Current Charging Protection
- Reverse Current Flow Protection from Battery to Solar Panel Generally during night
- Designed for continuous reliable and robust operation
- Different Battery selection mode to enhance the battery life

**Specifications**

Model	Super Nova 4000
Capacity (VA)	3 KVA
Nominal Battery Voltage (Vdc)	24V
Charge Controller Type	PWM
Charge Controller Rating	50 Amp/48V
Maximum PV Power	3600 Wp
Input Voltage Range (Min-Max) (Voc)	70V-90V
Battery Boost Voltage (Adjustable)	26.6V (Default Setting)
Battery Low Cut (Adjustable)	41.6V (Default Setting)
Grid Charging Current (Adjustable)	15 Amp. (Default Setting)
Solar Charging Current (Adjustable)	30 Amp. (Default Setting)
Supported Battery Types	Flat, Tubular, VRLA (SMF)
Discharging Current	50 Amp.
Display Type	LCD
Dimensions (L*W*H) CM	510*390*630
Net Weight	46.5 Kg apx.



Pure Sine Wave  
**SOLAR HYBRID PCU 5 KVA 48V/96V**

**SUPER NOVA & COSMO SERIES**

- Related AC power 5200VA 48V/96V
- Operating voltage 100-290V
- Maximum supported panel power from 48V/96V up to 5000Wp
- Charge Controller Rating - 70A/48V-50A/96V with 98% efficiency for fast charging
- Intelligent overload sensing circuitry with auto retries facility
- Changeover Time Ma x : <30ms (in Normal Mode) & <6ms (in UPS Mode)
- Support dual mode of working, UPS Mode (180-260VAC) & Normal Mode (100-290VAC)
- Ma x charging current 5A to 18A (User Programmable)
- Programmable thermal protection : cooling fan which operates as needed
- High power new generation MOSFET cable to handle high in-rush/surge current
- Double stage MOSFET over current protection by measuring Rds ON
- Highest efficiency at lower cost
- Pure Sine Wave Output with low Total Harmonic Distortion (THD)
- Solar PV reverse voltage protection
- Electronic Over Current Charging Protection
- Reverse Current Flow Protection from Battery to Solar Panel Generally during night
- Designed for continuous reliable and robust operation
- Different Battery selection mode to enhance the battery life

**Specifications**

Model	Super Nova 6500	Cosmo 6500
Capacity (VA)	5 KVA	
Nominal Battery Voltage (Vdc)	48V	96V
Charge Controller Type	PWM	
Charge Controller Rating	70 Amp/48V	50AMP/96V
Maximum PV Power	5000 Wp	
Input Voltage Range (Min-Max) (Voc)	70V-90V	130V-150V
Battery Boost Voltage (Adjustable)	57.6V (Default Setting)	115V (Default Setting)
Battery Low Cut (Adjustable)	41.6V (Default Setting)	83.2V (Default Setting)
Grid Charging Current (Adjustable)	15 Amp. (Default Setting)	
Solar Charging Current (Adjustable)	30 Amp. (Default Setting)	
Supported Battery Types	Flat, Tubular, VRLA (SMF)	
Discharging Current	100 Amp.	50 Amp.
Display Type	LCD	
Dimensions (L*W*H) CM	510*390*630	
Net Weight	46.5 Kg apx..	45.8 Kg apx.





## Pure Sine Wave SOLAR HYBRID PCU 7.5-10 KVA, 96V/120V

### COSMO SERIES

- Related AC power 7.5-10 KVA 96V/120V
- Operating voltage 100-290V
- Maximum supported panel power from 96V/120V up to 8000Wp
- Charge Controller Rating - 70A/96V-50A/120V with 98% efficiency for fast charging
- Intelligent overload sensing circuitry with auto retries facility
- Changeover Time Max : <30ms (in Normal Mode) & <6ms (in UPS Mode)
- Support dual mode of working, UPS Mode (180-260VAC) & Normal Mode (100-290VAC)
- Max charging current 5A to 18A (User Programmable)
- Programmable thermal protection : cooling fan which operates as needed
- High power new generation MOSFET cable to handle high in-rush/surge current
- Double stage MOSFET over current protection by measuring Rds ON
- Highest efficiency at lower cost
- Pure Sine Wave Output with low Total Harmonic Distortion (THD)
- Solar PV reverse voltage protection
- Electronic Over Current Charging Protection
- Reverse Current Flow Protection from Battery to Solar Panel Generally during night
- Designed for continuous reliable and robust operation
- Different Battery selection mode to enhance the battery life

### Specifications

Model	Cosmo 10k	Cosmo 12.5k
Capacity (VA)	7.5 KVA	10 KVA
Nominal Battery Voltage (Vdc)	96V	120V
Charge Controller Type	PWM	
Charge Controller Rating	70 Amp/96V	70AMP/120V
Maximum PV Power	7500 Wp	10000 Wp
Rated Output Power (KVA)	7.5 KVA	10 KVA
Input Voltage Range (Min-Max) (Voc)	130V-150V	180V-210V
Battery Boost Voltage (Adjustable)	115V (Default Setting)	114V (Default Setting)
Battery Low Cut (Adjustable)	83.2V (Default Setting)	104V (Default Setting)
Grid Charging Current (Adjustable)	15 Amp. (Default Setting)	
Solar Charging Current (Adjustable)	30 Amp. (Default Setting)	
Supported Battery Types	Flat, Tubular, VRLA (SMF)	
Discharging Current	70 Amp.	50 Amp.
Output Current	27 Amp.	35 Amp.
Display Type	LCD	
Dimensions (L*W*H) CM	510*390*630	
Net Weight	59 Kg apx.	69 Kg apx.



## Pure Sine Wave SOLAR HYBRID PCU 3 KVA to 10 KVA

### COMET & COMET PRO+ SERIES

- Multi Channel Interleaved MPPT Technology with Tracking ficiency 99.5%
- More Efficient and High Reliable
- Smar t Solar Selection for ma x. utilization of Solar Power
- Remote Monitoring & Controlling of the Solar PCU through WiFi/LAN/GPRS (optional)
- Models - 2.5 KVA 24V, 4 KVA 48V, 5 KVA 48V, 5 KVA 96V, 7.5 KVA 96V, 10 KVA 120V

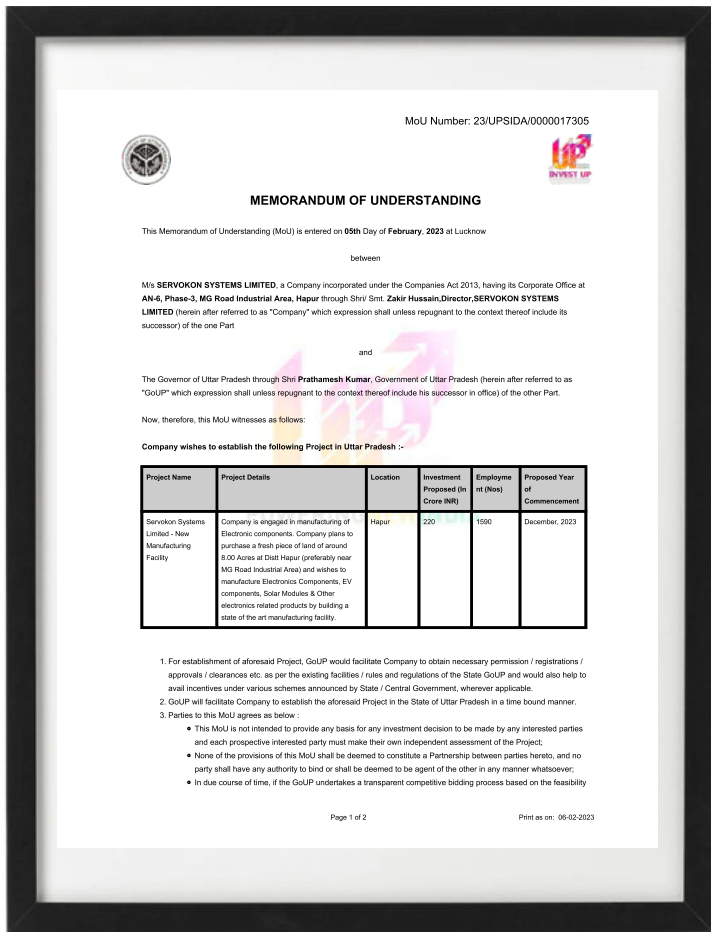
### Specifications

Mains AC Lower Voltage Limit	100 ± 5 VAC
Mains AC Lower Recovery Volt.	110 ± 5 VAC
Mains AC Higher Voltage Limit	280 ± 5 VAC
Mains AC Higher Recovery Volt.	270 ± 5 VAC
Bat tery Low Cut-of f Voltage (set table)	10.6 ± 0.2 V (per battery by default)
Mains O/P Frequency	Same as output
UPS O/P Frequency	50 ± 1.0 Hz
Charge Controller Type	MPPT Based
Input Current per Chennel (max. Imp)	As per model
Solar Bat tery Low Cut Voltage (adjustable)	11.5V Default
PV Reverse Polarity Protection	Available
Reverse Current flow to PV Protection	Available
Trickle Charging Current Limit	0.5 ± 0.3 A
Boost Voltage (set table)	14.4 ± 0.1 V (per battery by default)
Float Voltage	13.6 ± 0.2 V (per battery)
Overload	100 + 3% (with auto reset function)
Short Circuit Protection	> 300% Load (with manual reset function)

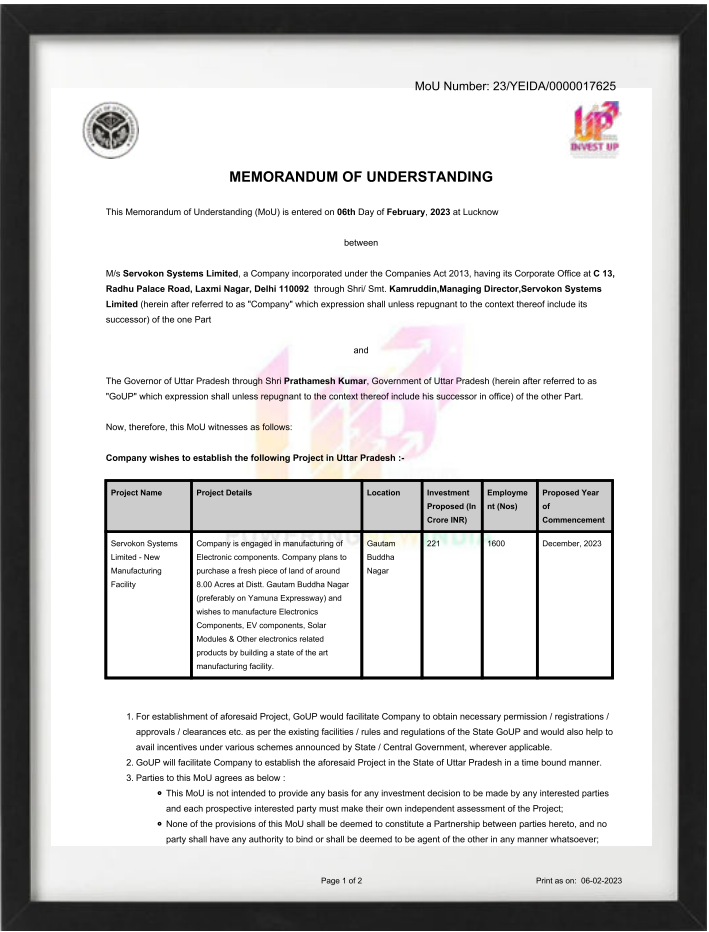


# EXPANSION PLAN

450+ Crores MOU signed with Uttar Pradesh Government  
at  for New Manufacturing Plants at  
**Hapur & Jewar**



MOU for Hapur

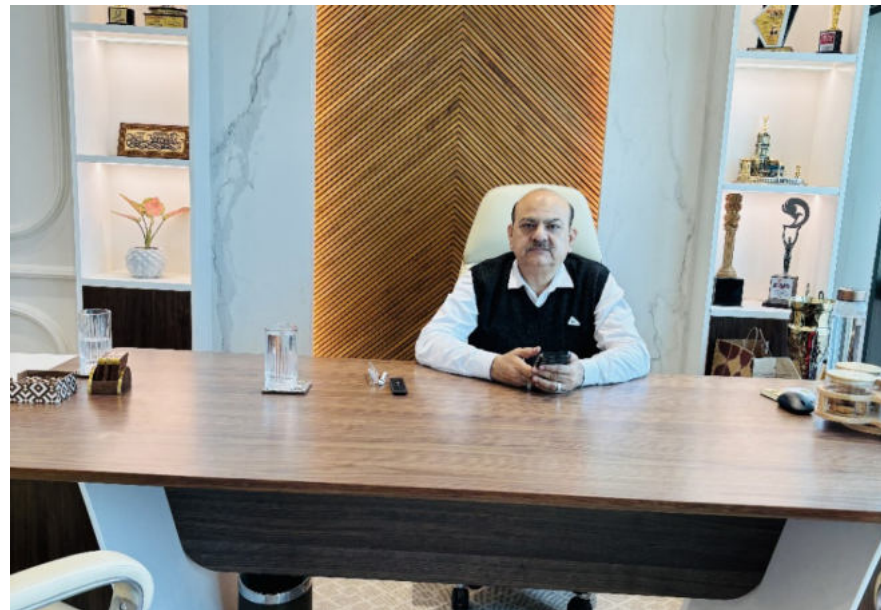


MOU for Jewar





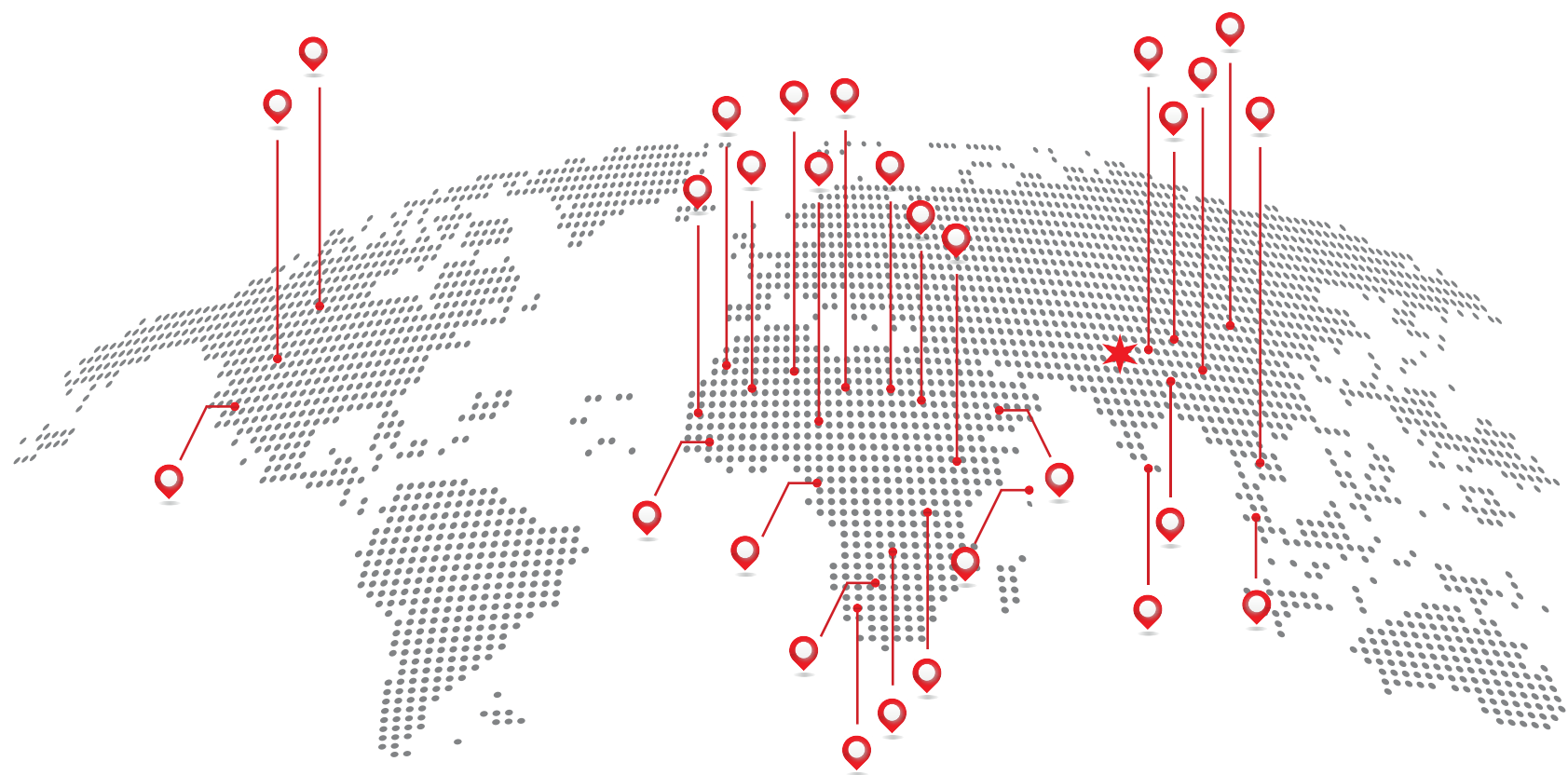
WE ARE HERE NOW!



**18000+ Sq. ft. Corporate Office at  
26th Floor, Iconic CORENTHUM, Sec-62, Noida**



# COMPANY PRESENCE



## 3-TIER DISTRIBUTION NETWORK

<b>400+</b> Distributors	<b>6000+</b> Dealers	<b>600+</b> Team Members
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## INDIA NETWORK

HO : Noida	Works : Ghaziabad	<b>18+</b> States Operations
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## EXPORTING IN 40+ COUNTRIES





## Our Prestigious GOVERNMENT CLIENTS



## Our Prestigious PRIVATE CLIENTS







RAKHE SAB CONTROL MEIN



#### POWER SEGMENT

Power Transformer, Distribution Transformer, Furnace Transformer, Inverter Duty/Solar Transformer, Hermetically Sealed Transformer, Compact Sub Station (CSS), Packaged Sub Station (PSS), Dry Type Transformers, Pad Mounted Transformers, HT AVR, Transformer with Built in HT AVR, Step up & Step Down Transformers, Isolation & Ultra Isolation Transformers, Neutral Transformers, HT Panels, LT Panels, VCB Panels, Control Panels, CT & PT Panels, Special Type Transformers

#### RENEWABLE ENERGY SEGMENT

Solar UPC Services, Solar Power Generating Systems, Solar Inverters, Solar Batteries, Solar Panels

#### POWER CONDITIONING SEGMENT

Servo Voltage Stabilizers, Rolling Contact Servo Stabilizers, Static Voltage Stabilizers, Online UPS, CVT, Variable Auto Transformer (Variac)

#### RETAIL NETWORK SEGMENT

Automatic Voltage Stabilizers, Water Heater/Geyser



### SERVOKON SYSTEMS LIMITED

- 📍 **HO** - Noida | **Works** : Ghaziabad  
**Regional Offices** : Delhi | Kanpur | Srinagar | Ghaziabad | Patna | Ranchi | Chandigarh  
Guwahati | Hyderabad | Vizag
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