

OM'S



Energy Saver Equipment



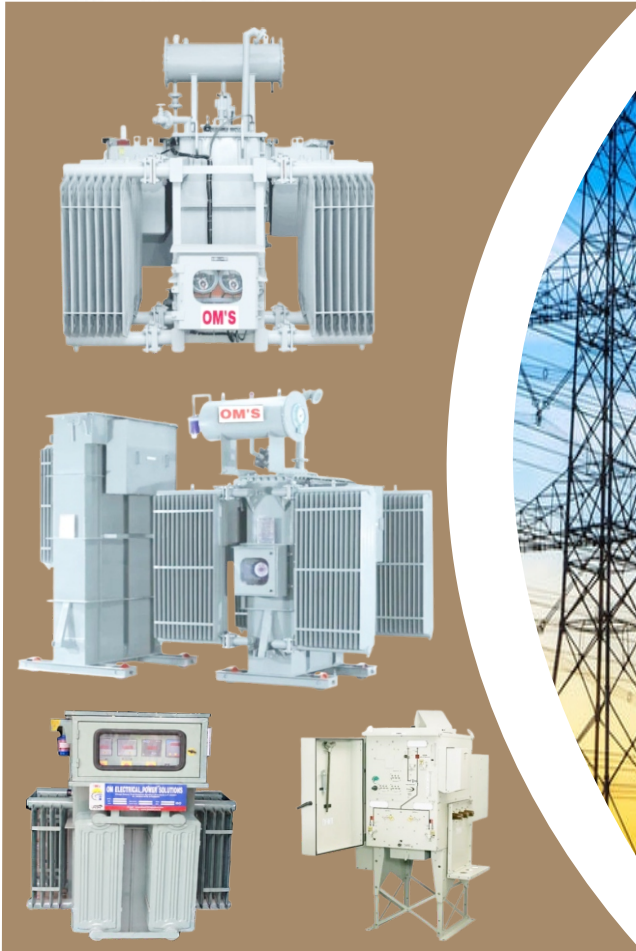
OM ELECTRICAL POWER SOLUTIONS

A Complete Electrical Solution...

ISO 9001:2015 Certified Company

Power Saver & Energy Efficient Equipment

COMPANY BROCHURE



OUR PRODUCTS

- Transformer
- Servo Stabilizers (LT AVR)
- Electroplating Rectifier Equipments
- HT Transformer with Built-in HT AVR
- HT AVR
- Isolation & Special Purpose Transformers
- Package Substation



Om Electrical Power Solutions is an ISO 9001: 2015 Certified, young & emerging company and offers wide range of products and solutions under the trade brand name of OM'S (A Complete Solution...). OM'S is based at Ayodhya and is basically a electrical equipment manufacturing company involved in manufacturing, trading & servicing of high quality electrical products upto 33 KV Class OM'S is focused to cater to the requirements of distribution transformers, LT rolling contact type Servo controlled Automatic Voltage controllers (Stabilizer's), Combo units (HT Transformers with built in voltage stabilizer's, Ultra Isolation Transformer, Rectifier equipment's, VCB, Ring Main Units & DG Sets etc.

What we do?

- Designing, Manufacturing, Testing and supplying of Electrical equipments which includes following.
- Distribution Transformers with OCTC & with OLTC as per customers requirement.
- Rectifier equipments for electroplating, anodizing, ED coating and other electro chemical processes.
- Rolling contact type LT Servo Voltage Stabilizers.
- Continuously variable rolling contact type Auto Transformers
- Furnace Transformers
- Isolation Transformers
- Package Sub Stations

Why OMEPS?

- Reliability
- Competitive prices
- Extended warranty
- Fast delivery
- Robust Designs
- Best after sales service network



Our Infrastructure:

We have our manufacturing facility at #160 Raipur, Kotsarai, Ayodhya Dham 224001 (Uttar Pradesh). This manufacturing facility have 4500 sq ft dust free covered area built of pre fabricated engineering building with a total area of 4500 Sq. Ft, to manufacture the quality transformers. The plant has the complete set up of state of art production and testing facility, equipped with all modern PLC based LV and HV Winding Machines, Insulation Machines, Fabrication plant, Oven, Oil filtration plant, Oil storage Tanks, Overhead Crane and other supporting machineries and tools. The Plant has a complete set of all modern Testing equipments including Yakogawa makes Power Analyzer and other test kits to test all our products for all routine tests in accordance to IS 2026 & IS 1180.

Our Vision:

Om Electrical Power Solutions aspires to be the most vibrant & professionally managed organization focused to serve all clients with total commitment to its ethical business practices and guaranteed customer satisfaction.

Our Mission:

We strives for total CUSTOMER SATISFACTION through focus on product quality, its performance and after sales services, with constant emphasis on improvement in process and engineering, we as an organization believes in continuous growth and development of employees by motivation, mutual trust and cooperation, teamwork based on honesty and integrity, for delivering cost effective products and to meet QMS.



Quality Control

Om Electrical Power Solutions is committed to offer superior quality and best services to its customers at competitive prices. As an ISO 9001:2015-certified company. We follows regular quality checks and auditing for better efficiency of products and services through proper channel. All power equipment's are tested in accordance to relevant standard. There is a dedicated, in-house quality check team, well-trained & equipped to monitor each stage of production for ensuring zero-defect systems and to ensure that the product meets QAP.



LT. Automatic Voltage Stabilizers (Servo Stabilizers) RANGE: From 30 KVA Upto 2000 KVA.

Om Electrical Power Solutions is manufacturing wide range of LT AUTOMATIC VOLTAGE REGULATORS also commonly called as SERVO STABILIZERS Voltage fluctuation is a common phenomenon in every part of the country, inspite of best efforts, Public utility companies can not ensure quality power to consumers due to long and inadequate distribution lines and irregular load patterns on distribution network.

Demand of power in our country is continuously increasing day by day, the electricity boards and other power utilities are also increasing their Distribution network and transformers. In spite of efforts by the power utilities, there is a gap between power generation and T&D causing heavy voltage fluctuations at consumer's end. This fluctuated voltage obtained from utilities is fed to electrical machines like motors, CNC Machines and other precision electrical gadgets causing damage to the equipments.

LT automatic voltage Regulator is an equipment to obtain constant voltage from fluctuating supply system. OM'S manufactures state of art 'Servo Voltage Stabilizer-Linear Type' which ensure constant output voltage thus providing complete protection and optimum efficiency of all electrical & electronic equipment's. There are designed for balanced supply and unbalanced loads as well as Unbalanced Supply and Unbalanced Loads. The range of input supply for stabilizer depends upon the voltage condition at the supply point.

GENERAL TREND OF VOLTAGE ROUND THE CLOCK

360V -400V	400V -420V	360V -400V	400V -440V	420V-460V	400V -440V
9 AM to 1PM	1PM to 2 PM	2 PM to 6PM	6 PM to 11 PM	11 PM to 6 AM	6 AM to 9 AM

Disadvantages of fluctuating voltage

1. High electricity consumption
2. Low Power Factor since capacitors banks installed by the consumers fail to compensate the reactive power at desired level, therefore, consumers are penalized to pay penalties, even without utilizing the power.
3. Frequent breakdowns in equipment's like CNC machines, Motors etc due to fluctuating voltage.
4. Loss of production.
5. Increase in rejection of finished products.
6. Increase in diesel consumption as the consumer has to switch over to costlier DG Power supply due to low / high voltage or some breakdown in the machine.
7. Reduces the life of equipment drastically

Advantages of OM'S make Servo Voltage Stabilizers

1. Reduction in breakdown of the electrical equipment.
2. Energy saving ranging from 5% to 10% depending upon the input voltage variation and working hour of plant.
3. Reduced Electricity Bill.
4. Wear & Tear of the carbon is minimal due to friction less and smooth surface of the winding track and rolling mechanism of the carbon roller.
5. Better current carrying conductor as copper strip is used instead of copper wire.
6. Low No load losses due to use of better grade CRGO.
7. In case of failure of the automatic controller, the operation can be shifted to motor control, in case of failure of motor; the same can be shifted to manual mode.
8. Installation can be done for Indoor / Outdoor area.
9. Life of our LT. Automatic Servo Voltage Stabilizer under normal working conditions is 15 - 20 Years.

Rating	30 KVA to 3500 KVA
Technology	linear+/- vertical rolling contact on load voltage regulator with stepless regulations.
Input Voltage	350-450, 340-460, 330-470, 320-480, 300-500
Efficiency	99.5% 99% 98.7% 98.5% 98%
Output Voltage	400 Volt +/- 1%, 3-Phase, 50 Hz
No. Of Phase	3- Phase
Frequency	50 Hz
Type of Cooling	Natural Oil Cooled
Application	Indoor / Outdoor As per site requirement
Type	BALANCE / UNBALANCE
Duty Cycle	100 % Continuos.
Mounting	On unidirectional wheels.
Correction Rate	6-15 V/Sec (upto 500 kv) 3-4 V/sec (Above 500 KVA)
Response Time	Less than 10 milliseconds.
Wave Form Distortion	Virtually Nil
Temp. Rise	Maxm 35 Deg. C Rise above ambient temp. at full load



PAY BACK PERIOD

OM'S Automatic Voltage Stabilizer, in addition to protecting your costly equipment's from High/Low Voltage, also saves energy upto 30% (depending upon several factors). It also reduces the breakdowns in the plant resulting in continuity of production with uniform quality of end product.

Because of its high efficiency and other advantages, the payback period for the cost of Stabilizer is generally 12 months to 24 months depending upon the nature and duration of load and input voltage fluctuation range.

SALIENT FEATURES OF OUR SERVO VOLTAGE STABILIZERS:

1. Stepless on load Rolling Contact Type Regulator
2. Designed for 100% Continuous load
3. No Waveform Distortion
4. High Efficiency
5. Negligible maintenance



Rolling Contact Type Servo Voltage Stabilizers

OM'S LT Servo Voltage Stabilizers are auto wound Transformers having helical Coils made out of Copper Strip, mounted on a conventional Laminated core (Whereas most of the manufacturers in the market use wire wound coils on toroidal core called variacs). Carbon Rollers assembled on a fibre glass carrier board move traverse the length of the coil. (whereas in variac type stabilizers, ordinary carbon brushes are used which side on the wire wound coils, while correcting the voltage resulting in more wear and tear). These rollers are connected to the output terminals and as they are driven over the track, a variable voltage is obtained.

The variation of more than +/-1% of the rated output voltage are sensed through Microprocessor based Controller which sends signals to the Servo Motor which further drives the Rollers upward or downward, so as to increase or decrease the voltage to the required level.

Application.

- Engineering industries
- Pharmaceutical Units
- Hospitals.
- Cold Storage Units.
- Roiling mills.
- Hotels
- Plastic Moulding industries.
- Textile Industries.
- IT Companies.
- Flour Mills.
- Footwear & Leather Units.
- Educational Institute.
- Tube Mills.
- Rubber Mills.
- High Rise Buildings.
- Paper Mills.
- Rice Mills.
- Malls & Multiplexes.
- Cement Plants.
- Food Processing.
- Domestic Use.

Electroplating Rectifier Equipments (Silicon Controlled Rectifier Equipments)

RANGE: Upto 25000 AMPS. (D.C.)

Rectifier is a device that converts AC Supply into DC Supply, Om Electrical Power Solution make Silicon Rectifiers have been designed to full fill the needs in electroplating, anodizing, hydrogenation and other electrochemical processes. These Silicon Rectifiers and Electroplating Rectifiers are made according to customer's requirement and are available in a range starting from 25 Amps to 25000 Amps at different output DC Voltage. The Silicon Rectifiers are available in two different models, depending upon the variable DC output voltage i.e. 40-100% in 15 steps and 0-100% step less on load control by voltage regular.

On Load Volts (D.C.)	Current in Amperes (D.C.)
8	50, 500, 750, 1000, 2000, 3000 up to 15000
12	50, 500, 750, 1000, 2000, 3000 up to 15000
16	250, 500, 750, 1000, 2000, 3000 up to 15000
24	250, 500, 750, 1000, 2000, 3000 up to 15000

APPLICATIONS

- Electroplating
- ED Coating
- Anodizing
- Hydrogen Gas Production
- Hard Anosizing
- Chlorine Gas Production
- Hand Chrome Plating
- Annealing
- Etching

H.T. Automatic Voltage Stabilizer (HT AVR/HT Servo Stabilizer)

RANGE: Upto 2000 KVA in 11 KV Class.

HT. Automatic Voltage Stabilizers are used to get stable input voltage, irrespective of the voltage variations received from electricity authorities. Additionally, these stabilizers also prevent the transformer and other electrical equipment from getting overloaded. Wide voltage variation ranges are taken care continuously and in on load condition. The variations of more than $\pm 1\%$ of the rated output voltage are sensed through solid state relay. This relay operates on 230V, 1 Φ supply and sends signals to the stabilizer's motor, which drives the roller mechanism in a direction to bring voltage to the rated output voltage.

Construction:

H.T. Automatic Servo Voltage Stabilizers have helical coils mounted a conventional laminated core. Carbon rollers are assembled on a fibre glass carrier board and are traverse to the length of the coil track. The rollers are connected to the electric output terminals. Nearby the regulating coil, a number of compensating winding is connected in parallel, which are short circuited to reduce the effect of core-flux fringing. It also keeps the reactance of the regulator constant at any position of the rolling contact.

H.T. Transformer with Built in H.T. AVR

RANGE: Upto 2500 KVA in 11 & 33 KV Class.

A normal distribution transformer generally Steps-down the voltage from HT to LT, however it cannot take care of the fluctuating voltage and most of the times and at most of the sites, it has been realized that, the problem of fluctuating voltage remains, resulting in improper function of electrical systems. H.T. Transformer with Built in H.T. Automatic Voltage Stabilizer provides total solutions for voltage fluctuation and stabilization. The unit is basically a combination of H.T. Automatic Voltage Stabilizer and standard HT Distribution Transformer working in conjunction. These are available up to 2500 KVA in 11 KV & 33 KV Class.

Standard transformers can correct limited voltage variations and cannot regulate the voltage in 'on load condition. The only smart way to tackle this problem is by installing highly efficient H.T. Transformer with Built in H.T. Automatic Voltage Stabilizer. These systems can be used in various industrial and commercial applications.

Working

The fluctuating voltage from electricity authority input is initially stabilized by the Built-in H.T. Automatic Voltage Stabilizer and then fed to the Transformer, providing constant LT. Output within $\pm 1\%$ accuracy.

Advantages:

- Better Efficiency.
- Reduced production break down.
- Reduced Electricity Bill.
- Protection of Motors.
- Reduced Installation Cost.



Advantages in Comparison to Transformer with OLTC

OLTC can correct limited voltage variation in certain steps whereas this equipment operates steplessly, monitoring, continuously output voltage level and maintains it within $\pm 1\%$ accuracy

Because of Robust and liberal design, OM'S Distribution transformer with Built in Stabilizer does not need regular maintenance as compared to OLTC and hence life is more. running expenses are less.

Oil Cooled Distribution Transformer with OFF Load/On Load Tap Changer RANGE: Upto 5000 KVA in 11 & 33 KV Class.

Om Electrical Power Solutions is manufacturing wide range of oil cooled Distribution and Medium Power transformers designed to ensure the reliability, high efficiency and long life.

Our transformers are carefully designed for electrical & mechanical calculations using latest design software/applications to ensure low losses, better regulation, and low noise level thereby offering high reliability, longer durability, high efficiency and long life.

Distribution Transformers can be used for indoor or outdoor applications and can be provided with on-load tap changers and off-load tap changers. Transformers can be provided with a variety of terminations so as to suit the requirements for installation or replacement.

Transformers can be classified in 2 categories.

- **Conventional Distribution Transformers.** (Tank with PSR, conservator and breather-Free Breathing type)
- **Corrugated tank Transformers.** (Tank with Corrugated panel and is hermetically sealed)

STANDARD SPECIFICATION

Capacity	Up to 5000 KVA
No. of Phase	3 Phase
Frequency	50 Hz.
Voltage Range	11V / 22KV / 33V
Tapping	+5% to -15% taps on H.T. Side in steps of 1.25% each.
Insulation	Class 'A'
Vector Group	Dyn 11
Duty Cycle	Continuous
Winding	Cooper Wound
Terminals	as per required

STANDARD FITTINGS

Rating & Diagram plate	Earthing terminals
Lifting lugs	Thermometer pocket
Oil Conservator with drain plug	Air release hole with plug
Oil Level indicator	Explosion vent
Top-filter Valve	Inspection cover.
Silica gel breather	Drain -cum-filter valve
Cooling radiators	Uni / Bi- directional rollers

OPTIONAL FITTINGS

Buchholz relay with alarm and trip contact
Pressure Release Valve
Cable Box on HT. Side
Oil Temp. Indicator with alarm & trip contact
Winding Temp. indicator with alarm & trip contact
Magnetic oil level gauge with alarm and trip contact
Marshalling box to house O.T.I. and W.T.I.
Cable Box on L.T. Side.
RTCC (Remote Tap Changer Control) Cubicle
Electronic Automatic Voltage Controller
Bus duct chamber on LV side



- Magnetic Circuit of the Transformer is made by assembling high grade Cold rolled grain Oriented Silicon laminations having high permeability and low hysteresis loss (MOH 0.23/0.27Thk). HV and LV windings are made in shape of coils, perfectly circular, with electrolytic grade Copper (Electrolytic grade 99.95% purity) conductor (as per client's demand). These coils are dried and pressed to pre-determined stack heights, assembled concentrically on the core and magnetically balanced with respect to each other, thus minimizing mechanical stresses. Core & Coil Assembly is clamped by clamping structure and is dried for a specified heating cycle, under controlled temperature to drive away any moisture, After drying, the assembly is put inside the prefabricated tank, clamped and filled with filtered, dehydrated Transformer oil.

- All electrical Connections are made and complete set of fittings and accessories are fitted. The Transformer after painting becomes ready for testing. Every equipment's manufacturing process and quality check is done under one roof by highly skilled and well qualified engineers, so that we deliver high quality products and ensure 100% customer satisfaction.

Package Substation (Unitized Substation Transformer)

RANGE: Upto 2000 KVA in 11 KV Class.

OM'S offers qualitative range of PSS (Package Substation) or USS (Unitized Substation) Transformer from 100 KVA to 2000 KVA in 11 KV Class. Compact Substation are used for feeding power from high voltage to low voltage. The substation is compact in size, suitable for frequent shifting and for use in indoor/outdoor locations. The substation is installed and mounted on skid frame or wheels or channels and is provided with lifting hooks. A unitized substation is a compact arrangement, which simplifies conventional substation design.

Substation housing is divided into three compartments i.e. the HV Compartment, the Transformer Compartment and the LV Compartment.

HV Compartment	Transformer Compartment	LV Compartment
Extendible & Non Extensible MV Switchgear-Ring Main Unit (RMU)	Oil Immersed Transformer/ Dry Type Transformer (VPI / Cast Resin)	LV Distribution Board
Vacuum/SF6 Circuit Breaker, RMU & HV Fuse.		LT Control Panel with Incomer ACB & Outgoing MCCB
RMU & Load Break Switch.		APFC Panel
Protection & Metering Devices		LV Switch fuse unit
Current & Potential Transformer for Metering/Protection.		Instrumentation and Metering
Illumination Internal Lightning & Door Limit Switches, Tailor made enclosures mounted on the transformer under base to provide single lift complete installation with theft proof design.		

Advantages

- Reduced electrical losses as USS can be installed near load centres.
- Total economy in cost.
- Higher degree of safety and operational reliability is achieved by HT and LT switchgears and protective relays to avoid overloading.
- Reduction in logistic cost as USS is delivered as a single unit.
- Low civil/foundation cost.
- Easy to operate, safe,
- Compact portable & ready to install
- Designed for better cooling
- Transformer dry type or oil cooled
- Low maintenance
- Customer made design
- Superior aesthetics
- Suitable for all weathers



Applications

USS (Unitized Sub Stations)/Package Sub Station are ideally suited for new residential and commercial complexes as it can be placed on Ground, partially or totally below/above ground level. Mainly used by Power Utilities, Multiplexes, Hotels, Hospitals, Shopping Malls, Software Parks, Residential Complex, Airport etc.



- We are committed to our customers for supplying a best quality product with warranty of 5 years against any manufacturing defect/faulty workmanship and or design from the date of supply. We shall be liable to making good by replacement/repair, and shall not charge any thing for the visit and spare parts during the warranty period.
- Free routine check up from time to time by our experienced technical person to ensure the customers satisfaction and the reliable operation of the equipment.
- We have developed after sale service network throughout EAST INDIA and are further in process of increasing the network in all parts of the country.
- Customer care is the strength of our business. OM'S have a qualified and experienced team of engineers and technicians who are dedicated to produce a quality product and also to provide excellent services at all stages. OM'S has a dedicated team to provide solution from enquiry to delivery and commissioning of equipment. Our marketing & sales team work closely with customer for any extra requirement and ensure to provide optimum power solution, thus building a valuable and ever lasting business relationship.
- To supplement the customer support we stock a reasonable stock of spare parts at our office. We are committed to give quick response to solve our clients problems within minimum time period. Due to our excellent and efficient support many customers who were using our competitor's products have been shifted to our products.

Customer Care: +91-9838521979, 9792060006, 9792760006

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