



COSMO

ELECTRICAL INSTRUMENTS

AN ISO 9001:2015 CERTIFIED COMPANY



- SERVO VOLTAGE STABILIZERS
- LINEAR TYPE SERVO VOLTAGE STABILIZER
- ISOLATION TRANSFORMER
- VARIAC AUTO TRANSFORMER
- DIGITAL SERVO VOLTAGE STABILIZER
- DISTRIBUTION TRANSFORMER
- STEP DOWN TRANSFORMER
- MANUAL STABILIZERS
- CONTROL PANELS



ABOUT US

Cosmo has been a prominent name in the power conditioning sector since the company's inception in 1994. The company's main aim has always been to serve customers by providing excellent and reliable power conditioning solutions. From humble beginnings, when we started manufacturing a few basic models of stabilizers to becoming a global name in the power conditioning industry, ours has been an exhilarating journey. An original and innovative approach to manufacturing has led us to specialize in a modular and highly diversified range of products including Servo Voltage stabilizers, Distribution Transformers, Isolation Transformer, Step Down Transformer and CVT. Cosmo has the distinction of achieving ISO 9001:2015 and certifications. Our complete range of products adheres to the highest quality standards through rigorous quality tests which include Insulation Resistance Test, Di-Electric Test and Insulation Oil Test etc. These tests are administered in a well equipped Quality Testing Unit established solely for this purpose. Cosmo has witnessed tremendous growth over the years, especially under the guidance and leadership of Mr. Rais Siddiqui, Technical and Managing Director. Mr. Rais Siddiqui's technical expertise and extensive experience of more than 25 years has helped the company scale new heights. Since 1994, our customer base has expanded vastly to include loyal customers in India . Our extensive client list is an acknowledgment of the immense trust our clients place in our products and service



VISION

We vision to become the most trusted respected & preferred brand for the servo voltage stabilizers, Isolation Transformers, Stepdown transformers & CVT, & other electrical saving energy saving equipment

MISSION

To create unique and out standing products that it unmatched to others. We thrive to develop a new world class technology & products in order to expand our offering to customers.

Oil Cooled Digital Servo Stabilizer

We offer oil Cooled Servo stabilizers which give a complete voltage supply solution for all type of industrial, offices and residential setups. Days are gone when individual stabilizers were installed with every equipment / Air Conditioner or any electronic item, now we offer specially customized single servo stabilizer that will cater complete electrical load connected, Protects and stabilizes the whole voltage supply within accuracy of $\pm 1\%$

SPECIFICATIONS

Standard Rating	Confirms to latest IS-9815 & ISO 2026 (Can be customised)
Input Voltage Ranges	15 KVA to 1000 KVA Single Phase : 160V-260V, 140V-280V and 90V-270V (Can be customised) Three Phase ; 270V-460V, 250V-460V and 150V-460V (Can be customised)
Output Voltage Ranges	Single Phase : 220/230/240 + 1% & Three Phase : 380/400/415 \pm 1%
Output Perform	110V output for imported equipments
Input Frequency	47 - 53 Hz
Response Time	Instantaneous (millisec)
Correction Speed	10 - 60V/sec (as required)
Correction Methods	Step less correction using Cosmo make variac
Cooling	Oil Cooled
Efficiency	More than 98%
Duty Cycle	Continuous 24 Hrs.
Operation	Auto / Manual
No Load Loss	Less than 0.4%
Compatibility Test	Specially designed control card for faithful operation on Mains as well as DG Set
Suitability	Suitable for 100 % Unbalanced / Balanced Supply & 100 % Unbalanced / Balanced Loads
Operating Temperature	-15C to 50C above ambient

OPTIONAL FEATURES (which can be incorporated for extra cost)

- High Voltage Cut Off System
- Low Voltage Cut Off System
- Over Load and Short Circuit Protection
- Singe Phase Prevention System (in Three Phase) shuts down the stabilizer in case any phase fails
- Phase sequence change protection
- Change Over switch to by pass the stabilizer and use main voltage directly
- Earth Fault Protection
- Surge and RF Suppression System
- Ammeter with CT to monitor the connected load

Range 15 KVA to 1000 KVA



Range 10 KVA to 50 KVA
Single Phase

Air Cooled Digital Servo Stabilizer

We offer Air Cooled Servo stabilizers in both supplies. Normally these Air Cooled Servo Stabilizers are used with Individual sensitive electrical / electronic equipments.



Range 2 KVA to 50 KVA
(Single Phase)

SPECIFICATIONS



Standard Rating	Confirms to latest IS-9815 & ISO 2026 (Can be customised) 6 KVA to 100 KVA
Input Voltage Ranges	Single Phase : 160V-260V, 140V-280V and 90V-270V (Can be customised) Three Phase ; 270V-460V, 250V-460V and 150V-460V (Can be customised)
Output Voltage Ranges	Single Phase : 220/230/240 + 1% & Three Phase : 380/400/415 ± 1%
Output Perform	110V output for imported equipments
Input Frequency	47 - 53 Hz
Response Time	Instantaneous (milisec)
Correction Speed	10 - 60V/sec (as required)
Correction Methods	Step less correction using Cosmo make variac
Cooling	Natural Air
Efficiency	More than 98%
Duty Cycle	Continuous 24 Hrs.
Operation	Auto / Manual
No Load Loss	Less than 0.4%
Compatibility Test	Specially designed control card for faithful operation on Mains as well as DG Set
Suitability	Suitable for 100 % Unbalanced / Balanced Supply & 100 % Unbalanced / Balanced Loads
Operating Temperature	-15C to 50C above ambient

OPTIONAL FEATURES (which can be incorporated for extra cost)

High Voltage Cut Off System	Change Over switch to by pass the stabilizer and use main voltage directly
Low Voltage Cut Off System'	Earth Fault Protection
Over Load and Short Circuit Protection	Surge and RF Suppression System
Singe Phase Prevention System (in Three Phase) shuts down the stabilizer in case any phase fails	Ammeter with CT to monitor the connected load
Phase sequence change protection	

APPLICATIONS

- Air Conditioning Plants • Medical Equipments • Offset Printing Machines • CNC Machines • Escalators & Elevators
- Industries & Lighting Loads • Mall & Commercial Complexes • Residence & Office Telecommunication Systems
- Sophisticated Laboratory Equipments • Defence Equipments • Motors • Cement Plants • Hotels Industries • R&D Instructions
- Data Centres • Sophisticated Laboratory Equipments • Defence Equipments • Motors • Cement Plants • Hotels • Industries
- R&D Instructions • Data Centres • Distilleries & Beverages • Tea Estates • Meterological Equipments • Food Processing Units
- Cold Storages • Rubber industries Rice Mills Sugar Mills RO Plants

Linear Type Servo Voltage Stabilizer

INTRODUCTION

Voltage fluctuation is a common phenomenon in the county. The industrial units which are running 24 hours, face the high and low voltage problem, 85% of industrial load is of motors. Electric motors draw considerably high current at high and low voltage. This higher current affects the electrical motors in different ways.

Higher current produces higher losses in electrical motors which causes premature failure of winding insulation. It increases the losses of electric motors and other associated equipments.

This higher current of electric motor require higher setting of overload really to avoid frequent gripping of motors. Higher setting of overload relay have very little safety margin against single phasing & mechanical faults.

ROLLING CONTACT TYPE TECHNOLOGY

In regulator we are using heavy section of Electrolytic grade. Rectangular copper strip instead of copper wire to minimize the losses. It increases efficiency of the equipment. We are also using self-lubricating Carbon roller assemblies instead of ordinary Carbon Brushes which offers more reliability & trouble free performance of the equipment

DOUBLE WOUND BUCK & BOOST TUBE SERIES TRANSFORMER

In Buck & boost transformer we are using CRGO lamination to minimize Iron losses. The core of Buck & boost transformer are wound with heavy section of electrolytic copper strip to minimize copper losses for getting better efficiency of equipment.

CORE

The core is build from low-losses cold rolled grain-oriented (CRGO) annealed steel sheet. Cores are fabricated with maximum numbers of steps so as to utilize maximum area of winding.

WINDING

Coils are wound with paper covered (MAKE: JAPNESE) electrolytic grade copper strip or synthetic enameled copper conductors Cooling ducts to keep the hot spot temperature as low as possible. Coils re dried in electric ovens. Rigid connection supports and coil damping is provided to ensue high short circuit strength.

TANK & PAINT

The tank are made of M.S. sheet with adequate bracing & stiffeners are the internal surface are given a coat of oil resistance zinc chromate primer & external surface are given a primer coat of aproxy primer & final coat of enamel/apoxy paint for best finishing & better life.

OIL

Oil tested for resistivity, dielectric & acidic characteristic conforming to IS:335:1993

GUARANTEE

Automatic Voltage Stablizers are guaranteed for period of 60 months from Date of sale, against any manufacturing defect or bad workmanship. Any repair or replacement shell be carried out by us free of cost.



Range 30 KVA to 5000 KVA



Inner view

Distribution Transformers

Range- 63 KVA to 5000 KVA

GENERAL

Transformer are designed by our expert, engineers to meet specific technical requirement of our customers. Transformer rating, Taping Voltage ratio, Impedance, Losses, Dimensions & Winding pattern and type of construction confirm to Indian and International Standards. Our transformers are designed to most stringent tests like Short Circuit test and lightning impulse Voltage test. Our procurement and quality ensure sourcing of best quality raw materials. In adeptness to this we ensure in process check during different manufacturing stages.

CORE

Transformer core are assembled from prime grade cooled rolled grain oriented (CRGO) silicon in different grades of low loss material. The lamination are assembled with the help of special jigs and fixtures to maintain minimum air gap a compact assembly and minimum noise level on energisation. Mitered joint core is used to have better magnetic path, provide minimum reluctance. Core assembly, clamped properly with heavy steel structure to reduce noise level. The maximum no. of steps so as to utilize the area in

WINDING

All winding are made from electrolyte copper / Aluminium as per requirement of customer. The conductor is in the form of Triple or double paper covered insulated strips & wire. The insulating craft paper is produced directly from importers. Extreme care is taken in design, method of manufacturing, quality of insulation & in the drying process.

TANK & PAINT

The tank are made of M.S. sheet with adequate bracing & stiffeners are the internal surface are given a coat of oil resistance zinc chromate primer & external surface are given a primer coat of epoxy primer & final coat of enamel/epoxy paint for best finishing & better life.

OIL

Oil tested for resistivity, dielectric & acidic characteristic conforming to IS:335:199

WARRANTY & CUSTOMER SUPPORT

Transformer is warranted against manufacturing defect and fault workmanship **COSMO ELECTRICAL INSTRUMENTS** Products are designed for trouble free service for a long period of time however each and every transformer is supported by an excellent team of our technical staff / executives who are always eager to serve & support around the clock and are known for their prompt service.



Isolation Transformer

PRODUCT DESCRIPTION

Leveraging on ethical business policies and a team of dedicated professionals, we are able to manufacture, supply and export a wide array of **Isolation Transformers**. Available at reasonable prices, the offered transformers are made using finest quality raw material sourced from the reliable vendors of the market. Our exclusive range of products is available in different capacity and other specifications as per the needs of our esteemed customers. We offer **Isolation Transformers** by employing the latest technology in compliance with the industry standards to ensure their safe usage.

Rating

Input Voltage	400 or 415V +/- 10% (Phase to Phase) Star or Delta connected
Output Voltage	400 or 415V +/- 10% (Phase to Phase) Star or Delta connected
Ratio	1:1 Isolation Transformer
Regulation	+ / - 4%
Wave Form Distortion	Nil
Suitability	Suitable for all power factor loads
Cooling	Natural Air Cooled and Oil Cooled
Duty Cycle	Continuous 24x7
Spike Clamping Level	500V (Normal)
Spike Voltage	6KV (Max)
Spike Current	5KA (Max)
Response Time	5 Nano Sec
Break Down Strength	2500V AC for 120 Sec.
Insulation Resistance	Greater than 100 mega ohms at 500V DC
Class of Insulation	F Class
Installation	Indoor type
Degree of Protection	IP - 30
No Load Loss	Less than 0.5%
Efficiency	97%
Winding & Wiring Material	Copper EC grade (99.9% Pure)
Transformer	Heavy duty Copper Wound Transformer
Input / Output Termination	On Bass studs / Connectors / Copper Bus Bar



Step Down Transformer

Keeping in mind the varied demands of the clients, we manufacture, supply and export a range of **Oil Cooled Transformers**. These transformers are made from finest quality material and . components that are procured from the reliable vendors for the market. Our offered products are stringently quality tested in compliance with the industry standards to ensure their defect free nature. According to the demands for clients, **Oil Cooled Transformers** are made available in various capacities and other technical specifications.

Rating

Input Voltage	As per required
Output Voltage	Custom built Star / Delta connection
Wave Form Distortion	Nil true to input
Suitability	Suitable for all power factor loads
Duty Cycle	Continuous 24x7
Cooling	Natural Air Cooled and Oil Cooled
Break Down Strength	2500V AC for 2 MInutes
Insulation Resistance	Greater than 100 mega ohms at 500V DC
Installation	Indoor & Out door type
Degree of Protection	IP - 30 to IP - 55
No Load Loss	Less than 0.5%
Efficiency	97-99%
Winding & Wiring Material	Copper EC grade (99.9% Pure)
Transformer	3 Nos. Heavy duty Copper Wound Transformer
Input / Output Termination	On Bass studs / Connectors / Copper Bus Bar

Variac Auto - Transformer Range 2 AMP to 1200 AMP



Electrical Panels

Keeping in mind the specific requirements of the clients, and providing an array Electrical Panels some of which are listed below. These panels are made of good quality materials in accordance with industrial quality standards. These find their application in commercial buildings, hospitals, industries, dairies, telecommunications, research laboratories etc.

SYNCHRONIZING PANEL

Synchronizing Panel works between two or more different power sources like DG sets to manage power supply. Synchronization helps in making different DG sets behave as a virtual single unit and eliminates subdivision of total load. It helps in transferring load from one unit to another as during service period, so that the unit requiring service can be easily shut off. In this way the critical load need not be interrupted and there is no production loss. During low load we can run any single unit, and synchronize more units as the load increases. This can be manual or automatic.



LT PANEL AND HT PANEL

LT Panel is an electrical distribution board that receives power from generator or transformer and distributes the same to various electronic devices and distribution boards. Such panels are used in industries both for internal and external use and, therefore, they are quite rugged to withstand different climatic conditions. Our LT panels are designed to work with low electricity consumption that makes them cost effective.

HT Panel is like LT Panel except that it is used for high tension cables.



APFC (Automatic Power Factor Control) PANELS:

These panels are where there is fluctuation in voltage and power supply. The electrical load required by a unit depends upon the type of devices installed. There is always a possibility of damage equipments if power fluctuates. In case of fixed loads they can be safeguarded using capacitors, but in case of varied loads, a mechanism to switch in and switch out the capacitors is required which is basically handled using APFC panels.

PCC (Power Control Center) PANELS:

Its basic function is to control power supply to various units and equipments as per their load requirement so that they can work in harmony.

MCC (Motor Control Center) PANELS :

These are effectively used with motors or submersible pumps to provide sufficient protection from overloads and short Circuits. These are high on performance, require low maintenance and can withstand extreme temperature variations.



Why to use our panels?

1. Our panels are made of good quality materials in accordance with industrial quality standards and latest technology.
2. The panel casing is of strong weather-proof galvanized stainless steel and is durable, efficient and highly functional.
3. These ensure durability, high performance, trouble free operation, less maintenance and low power consumption.
4. We adhere strictly to stringent quality checks required by various industries like telecom, electrical and electronics industries.



COSMO ELECTRICAL INSTRUMENTS

Manufacturers of :

Servo Voltage Stabilizer, Isolation Transformer, Distribution Transformer, Control Panel, Linear Type Servo Stabilizer, Digital Servo Voltage Stabilizer, Step Down Transformer, Variac Auto Transformer, Manual Stabilizer
Office : 216-B, Street 5, Lalita Park, Laxmi Nagar, Delhi - 110092
Factory : Plot No. A-11, Sharad City, Khajuri Pusta Road, Near Vijay Vihar Police Chowki, Loni, Ghaziabad (U.P.)
Tel.: 011 - 2245 7691, Mob.: 981 114 7869, E-mail : cosmoelectricals@gmail.com Website : www.cosmoservo.com

AUTHORISED DEALER

