



An ISO 9001 : 2000 COMPANY



RELIABLE

AUTOMATIC VOLTAGE STABILIZER



RELIABLE • MORE EFFICIENT • ADVANCED TECHNOLOGY • FLAWLESS PERFORMANCE

RELIABLE POWER SYSTEMS founded in 2003 having a team of Engineers having experience of more than 26 years in developing, designing, manufacturing & marketing Automatic Voltage Regulating Transformers (Stabilizers) both for H.T.&L.T., Silicon Power Rectifiers, DC Welding Rectifiers, Electrical Control Panels, A.C. Variable Supplies and other Electrical Equipments.

A long experience and technical development have made **RELIABLE** competitive and technologically upto date. Beyond the standard products **RELIABLE POWER SYSTEMS** is organized to be extremely flexible in developing and manufacturing special regulating Transformers according to user's specifications.

The belief that Product quality and customer satisfaction are the basis for a modern organization led to the implementation of an ISO 9001:2000 approved quality system.

AUTOMATIC VOLTAGE STABILIZER (CONTROLLER)

RELIABLE'S Voltage Regulating Transformer is a Power device that is used to provide variable voltage for the purpose of variation, stabilization without phase shift or deterioration of the supply wave form and power factor.

Voltage Regulator Transformer or Regulator as commonly known, is a variable ratio Transformer.

Variation in the voltage is achieved by the movement of carbon roller contacts over a column of turns where a strip of insulation has been removed to allow the contacts to run on the conducting material of the transformer coil. This arrangement allows continuous variation across the range of voltage present on the coil turns.

The Regulator coils are fully compensated. Compensation is a method whereby the naturally high reactance of long coils is limited to a low value across the range of variation. Limiting the reactance tends to produce a linear variation in the output voltage of the regulator, across the range of operation.

The control is based on a very simple closed loop with a voltage monitoring Solid State sensing system which sends signals to the controlled servo motor which drives the roller mechanism thus stabilizing the output voltage to the desired level.

BROADLY THE AUTOMATIC VOLTAGE REGULATORS ARE CATEGORIZED AS UNDER:-

- Transformer with Built-in High Tension Automatic Voltage Regulator
- High Tension Automatic Voltage Regulator
- Low Tension Automatic Voltage Regulator



<i>Vision</i>	To be Globally recognized organization Manufacturing & Marketing D.C. Power Supplies, Voltage Regulating Equipments both for HT & LT, Distribution Transformers & Power Transformers.
<i>Mission</i>	To become customer focused, quality conscious, globally competitive company in Voltage Regulating Equipments & Transformers through quality, technology & innovation. To strive for customer satisfaction through product, performance, delivery & service.
<i>Quality Policy</i>	We will offer Products that Meets or exceeds customer satisfaction in term of quality & delivery, We will achieve this by continuous improvement in our design processes by scientific approach through involvement of our employees & suppliers.
<i>Guarantee</i>	All Transformers ,Chokes, Regulating Coils manufactured by RELIABLE are Guaranteed for a period of FIVE YEARS from the date of dispatch. Components not manufactured by RPS like Meters, Diodes, Breakers, Contactors, Relays, Fans, Motors, Temperature Indicators, Pilot Indicator are guaranteed for one year.

BEST PRODUCT

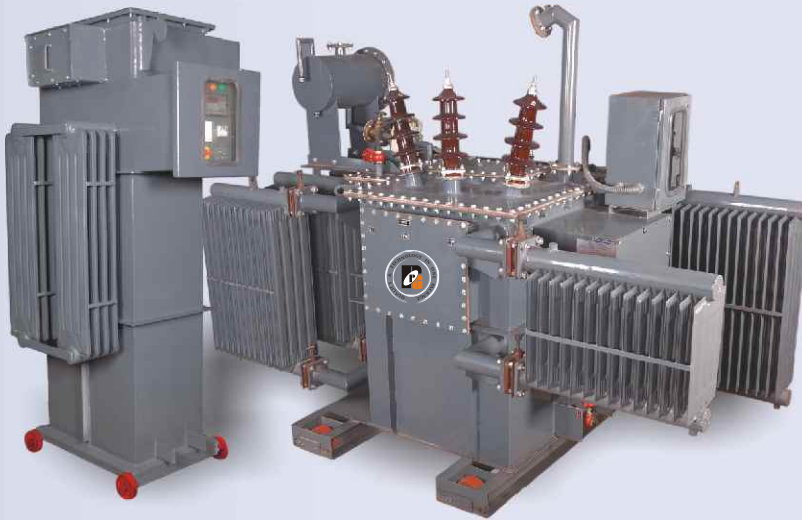
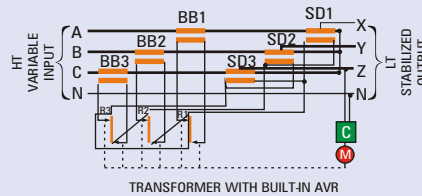
BEST PRICE

B

H.T. Transformer with BUILT IN Automatic Voltage Stabilizer

It is a very altogether different product basically a combination of Standard Distribution Transformer and HT Automatic Voltage Regulator. The Standard Transformer with OLTC can correct limited voltage variation in certain steps where as Built-in operates steplessly monitoring the output voltage continuously. The incoming fluctuating H.T. supply is initially stabilized and then fed to the stepdown transformer and thereby the L.T. Output is maintained within $\pm 1\%$ accuracy. Built - in has the following advantages:

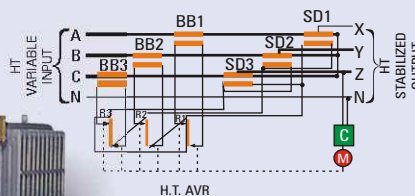
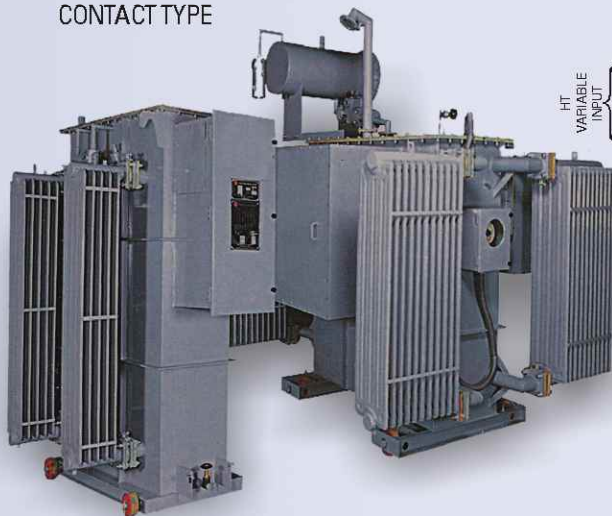
- Space saving
- Reduced Installation cost
- More efficiency
- Reduction in Electricity Bill



H.T. Automatic Voltage Stabilizer

HT AVR supplies rated Stabilized Voltage to the Transformer and thereby the utilization of the Transformer will be upto the full rated KVA and is protected from High/Low Voltage fluctuations.

The special features of these AVR is they are ON LOAD, STEPLESS AND ROLLING CONTACT TYPE



- SD = Stepdown Transformer
- BB = Buck Boost Transformer
- R = Regulator
- M = Servomotor
- C = Electronic Control Circuit

Air-cooled Transformer



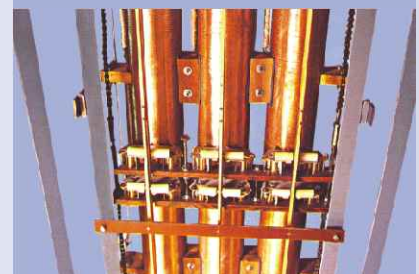
Distribution Transformer
11 KV / 415 V



Auto & Buck Boost
Transformer Assembly



B4C Regulator Coil Assembly



BEST SERVICE

BEST GUARANTEE

2000 KVA L.T. AVR

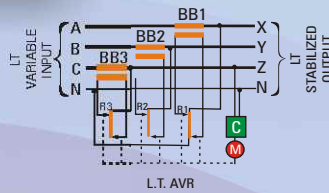


L.T. Automatic Voltage Stabilizer

L.T. AVR being easy to handle are installed in all the running units, units having L.T. connections, units having small H.T. connections. These can be manufactured for Balance Input Voltage and Unbalanced load or Unbalanced Voltage and unbalanced load.

The units are designed for Standard Input Voltage Ranges as under:

Input Voltage	360-450 V	350-460 V	340-460 V	320-460 V	300-460 V
Efficiency (as calculated)	99.60%	99.50%	99.35%	99.00%	98.70%
Output Voltage	400 V ± 1%, 3 Phase, 50 Hz				
Cooling	Naturally Oil Cooled.				
Type	Indoor.				
Temperature Rise (Max.)	35°C above ambient				
Mounting	On Uni-directional Wheel				
Wave form distortion	Nil				
Duty Cycle	100% Continuous				



TECHNICAL ADVANTAGES

- Low Replacement Cost
- Undistorted output characteristics i.e. no wave from distortion
- Moving parts on L.T. side and it's mass is extremely low, only few lb-inch torque
- Energy savings
- High efficiency (about 99%) and minimum no-load losses
- Simplicity and Flexibility of design
- On load stepless Voltage variation
- Long service life
- Regulating coils are wound with rectangular conductors on their edge, thus giving high mechanical strength compared to other designs

APPLICATIONS OF VOLTAGE REGULATORS

- ❖ Cement Plants ❖ Flour Mills ❖ Engineering Units
- ❖ Pharmaceutical Units ❖ Cold Storages ❖ Rolling Mills
- ❖ Textile Mills ❖ Paper Mills ❖ Tube Mills ❖ Rice Shellers
- ❖ Rubber Industries ❖ Food Processing Units
- ❖ Oil & Vanaspati Plants ❖ Footwear & Leather Units
- ❖ Tea Gardens ❖ Distilleries & Beverages ❖ Hospitals & Nursing Home ❖ Clubs ❖ Hotels ❖ High Rise Buildings
- ❖ Furnace Transformers ❖ Test Rooms ❖ Glass Industries
- ❖ Research Stations ❖ Chemical Industries



Reliable Power Systems

43-D, HSIDC, Sector-31, Faridabad-121 005 (Haryana) INDIA
 Phone : +91-129-2273512, Telefax : +91-129-4047870
 Mobile : +91-9810073870, +91-9212430407
 E-mail : info@reliable.net.in, contact_rps@yahoo.co.in,
 rps.arunsharma@gmail.com, Website : www.reliable.net.in