

LINEAR A.C. VOLTAGE REGULATOR (Roller Type)



10 KVA TO 5 MVA

Accessories shown in picture are not part of standard equipment

Technical Specifications

Capacity	10 KVA to 5000 KVA (Three Phase)
Input Voltage Range	350V-450V, 340V-460V, 330V-470V, 320V-480V, 300V-500V
Output Voltage	400V/415V, Three Phase
Regulation	(±) 1.0 % ()
Supply Frequency	47 Hz - 53 Hz
Efficiency	Better than 99%
Effect of Load power Factor	Nil
Wave Form Distortion	Nil
Rate Of Correction	6-8V/sec
Duty Cycle	100% Continuous
Cooling	AN/ONAN
Over Load Capacity	upto 150% momentarily
Suitability	Suitable for 3Ph. Unbalanced/Balanced Supply & Load
Mounting	On Wheels
Earthing	2 Nos. of Earthing Terminals provided
Cable Termination Box	Input/Output Connections
Ambient temperature	-10°C + 50°C
Relative Humidity	Upto 95%

Note : Indicated Input Voltage Ranges are corresponding to Nominal Output Voltage.

At other settings of Output Voltage, the Input Range will shift proportionately

Standard Accessories

Controls

Auto/Manual switch
Output Voltage Adjustment
Increase/Decrease Push Buttons

Indications

AC Voltmeter with selector switch for Input/Output Voltages
Mains ON / Output ON
Under/Over Voltage
AC Ammeter with selector switch for Output Current

Optional Accessories (At Extra Cost)

Under/Over Voltage Trip-Off System Bypass Facility
Time Delay facility Surge Suppressor
Protection against Single/Reverse Phasing Remote Panel
Overload/Short Circuit Protection

Other Products

Servo Voltage Stabilizers/Static Stabilizers/IGBT Controlled Static Stabilizers/Isolation Transformers/ Ultra Isolation Transformer/ AVR/Step-Up & Step-Down Transformers/AMF Panels/UPS/Auto Variable Transformers

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Service Centres : All Over India

Company Profile



has a proven track record of more than three decades in manufacturing of highly reliable and efficient Servo Controlled Automatic Voltage stabilizers and other products. Our motto is total commitment towards customer's satisfaction. Since establishment in 1986 we have focused on the various aspects of power quality and its possible solutions. With this experience in hand, now we have started manufacturing linear A.C. Voltage Regulators (Roller Type) We move ahead with constant refinement of production techniques for the optimum satisfaction of our clients. Due to our special designs, stringent quality standards (as per IS:9815-94) and efficient after Sales Service, we enjoy a good rapport with our buyers. Our efforts have been amply rewarded with repeat orders and project assignments from Govt. Depts/ Public sectors / Institutions / MNCs & Big Business / Industrial Houses.

Introduction

Voltage Fluctuations are a common phenomenon in most parts of the country. Despite the best efforts by Electricity Boards/Undertakings the problems remain unresolved owing to diverse load conditions, losses in power during Transmission & Distribution.

These fluctuations in supply voltage from very Low to very High, results in frequent Breakdowns/Trippings of the Motors, Sophisticated Equipments, Machinery etc. leading to **Low Production, higher rate of rejection & high maintenance cost.**

Almost 90% of the Industrial Load is of Motors & that too Induction Motors. These Motors draw very high Currents both at Low/High Voltages. This results into higher Losses, causing Overheating of the Motors resulting in **Premature failure/damage** of the Windings. Higher Power Losses also increases the Losses in cables, Switches, Transformers & other Equipments, further **increasing the Maintenance cost & higher Electricity Bills. Also, at Low Voltages**, furnaces & heating loads take more time to reach the desired Temperatures & **at High Voltages** the heating Coils get damaged.

Beside Industrial loads, Voltage Fluctuations also effects the performance of Lighting, elevators & in some cases damage the sophisticated & expensive CNC/PLC controlled equipments.

Field of Application:

Selvon make **Linear A.C. Voltage Regulators** are the most suited to control low to high voltage fluctuations & provide constant voltage of 400V/415 +/- 1%.

These Regulators are the most suitable for :

- Information Technology & Call Centres
- Computers & Microprocessor Control Systems
- Sophisticated Research Instruments used in Scientific, Medical, Agriculture, Educational & Other Research Institutions
- Offset Printing Presses, Color Scanners, Processors, Phototypesetters, Photocopiers, Packaging Machines.

- Medical equipments, X-Ray machines, Refrigerators, MRI, CT Scans etc.
- Defence Installations, LPTs, HPTs, Broadcasting & Telecommunications.
- Lifts, Escalators & Elevators.
- Central Air-Conditioning plants, Processing plants, Chemical Industries, Textile Industries, Cold Store.
- CNC Machines, Laser machines & moulding machines etc.
- Commercial buildings & Complexes
- Cements plant, Food Processing Units.
- Hotels, Hospitals, Restaurants etc.

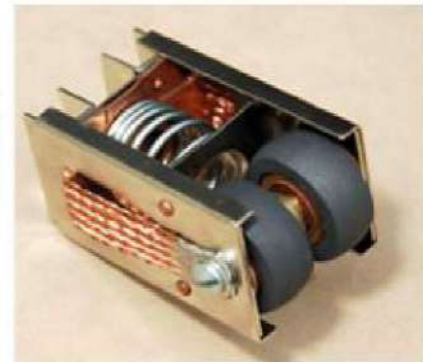
Advantages of Selvon Linear Voltage Regulators

1. Upto 80% reduction in Failure Rate of Installed Equipments
2. Reduction in MDI
3. Reduced Maintenance Cost
4. Improved Power Factor
5. Better Productivity/Quality of the end Product
6. Pay-Back in 12 - 18 Months (Load Based)
7. Voltage Correction Automatically & Continuously
8. **100% depreciation from Income Tax**
9. Save on diesel cost
10. **Reduction in electricity Bills upto 10% (This depends on Input Variation, Loading & Number of working hours)**

Product Details

Roller Carbon Brushes

The Roller brush technology gives high reliability due to less wear & tear, as the surface area in contact keeps on changing during the stabilization process. The roller contact is fitted with spring tension behind to keep the roller intact with coil for trouble free operation. There are self lubricating roller assemblies with a life span of appx. 1 lac track meters.



Roller Carbon Brush

Linear Voltage Regulator :

Linear Voltage regulators employ vertical windings with Carbon Rollers on both sides of the coil. Linear technology employs heavy section of electrolytic grade rectangular Copper Strip, in order to minimize the losses. The core is built from grain oriented silicon steel laminations to keep the losses to the minimum. This is suitable for 100% continuous duty & have the capability to adhere to heavy inrush starting Loads.



Linear Voltage Regulator

Outstanding features of Selvon Linear Voltage Regulators

- Higher Overload Capability for high inrush & regenerating currents of Induction Motors.
- Machine wound Variable Linear Voltage regulators.
- Specially designed Transformers to minimize losses, with CRGO/CRNO Laminations.
- 99.9% purity electrolytic Conductors used for regulators.
- Microprocessor Based Control Circuits used for correction.
- All components used are of reputed makes, confirming to relevant IS/BS standards.
- Suitably designed for 55 deg. Ambient.
- Efficiency better than 99%.
- Burn Proof/Brush less A.C. Synchronous Motors used for greater reliability & long life.