

## SERVO CONTROLLED AC VOLTAGE STABILIZERS

Oil Cooled

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The One answer to all your Power needs



## PRINCIPLE OF OPERATION

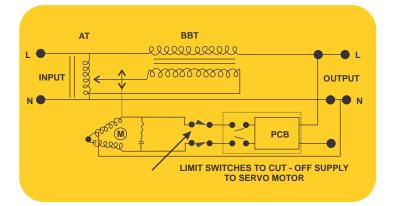
Pentaapower Solutions Controlled Voltage Stabilizer is essentially comprised of four major units:

- An IC Controlled Electronic Sensing Circuit (PCB)
- A geared reversible Motor (M)
- A Continuously adjustable Auto Transformer
- A fixed ratio Buck-Boost Transformer

The input Voltage is applied across the Auto Transformer (AT). Output of AT is taken from a fixed tapping and variable tapping (Variable tapping is a Carbon Brush mounted on a moving arm coupled to the geared reversible Motor - M). Which is applied across the primary windings of the Buck-Boost transformer (BBT) connected in series with sources (Input) & Load (Output)

Whenever the input Voltage raises (or) falls, the PCB that supply power and controls the geared reversible Motor-M. Moves the Carbon Brush mounted arm of the AT in such directions to cause in-phase (or) Out-of-phase Voltage build up (or) down in the secondary Windings of Buck-BoostTransformer (BBT)

This Voltage Secondary of BBT adds (or) Subtracts the mains Voltage continuously until the specified output voltage is achieved.



Other Range of Products



Online UPS 0.5 KVA to 200 KVA

## **SPECIFICATIONS**

Model	TPS 3000NO
Capacity	30KVA TO 1000KVA
Application Type	Unbalanced Load & Input
Nominal Input range	295V TO 470V
Input Frequency	50 ± 3HZ
Nominal Output	380 V / 400 V / 415 V
Output Voltage Regulation	±1%
Efficiency	98% at full load
Speed of Voltage Correction	70 V/sec phase to phase
Effect of Load Power factor	Nil
Duty Cycle	Continuous
Servo Motor Drive	AC Sychronous
Indications	Input on Output OK High Voltage Cut-Of Low Voltage Cut-Off
Meeting	Analog Input Voltmeter Analog Output Voltmeter Analog Output Ammeter Optional : Digital Meter
Protections Input	Short Circuit MCB / MCCB
Protections Output	Electronic Over voltage trip Electronic Under voltage trip Single Phase Prevention Overload & Short Circuit
Manual Bypass	
facility(optional)	Through Change over switch
Operating Temperature	0-50°C
Humdity	0-95% RH non condensing
Enclosure	CRCA Mild Steel
Standard for Stabilizer	as per IS : 9815
Standard for Oil	as per IS : 335



Offline UPS for PC 0.5 KVA to 2 KVA



Domestic Inverters 03 KVA to 10 KVA

## Pentaapower Solutions

 Head Office : New No.25/1, Old No.13/1, 12th Avenue Ashok Nagar Chennai - 83. Ph. 91-44-24712644, 95000 84457, 95000 72275

 Reg. Office : No.16A, Narayanasamy lind Street, Saidapet (West), Chennai - 600 0015. Ph : 91-44-24712644

 Pondicherry: B-74, PIPDIC industrial Estate, Mettupalayam, Pondicherry - 605 009

 Colmbatore : No.10, Chandra Gandhi Nagar, 4th Cross Streetm Sowripalayam, Coimbatore - 641 028.

 Mayladuthurai : No.360, Balaji Nagar, 1st Street Poombookar Main Roa, Mayiladuthurai Nagapattinam Dist. - 609 001.

 Madurai : No.198, Meenas Buildingm Chandra Gandhi Nagar, Bye Pass Road, Madurai - 625 010.

email : pentaapower@gmail.com

Sales@pentaapower.com