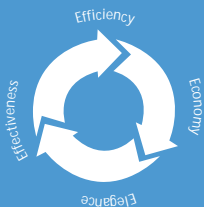


SERVO CONTROLLED AC VOLTAGE STABILIZERS

Air Cooled

Ranging from
0.5 KVA to
250 KVA & above



The One answer to all your Power needs



Data Center



Telecom



Industry



Network



Security



Labs



Medical



Metro

PRINCIPLE OF OPERATION

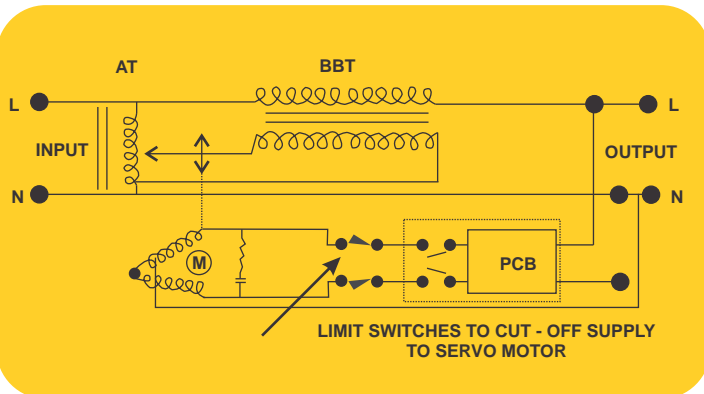
Pentaapower Solutions Controlled Voltage Stabilizer is essentially comprised of four major units:

- 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.



SPECIFICATIONS

Model	TPS 3000NO & TPS 1000NA
Capacity	0.5KVA TO 250KVA & above
Application Type	Unbalanced Load & Input
Nominal Input range	3ph 295V to 470V 1ph 160V to 260V
Input Frequency	50 ± 3HZ
Nominal Output	3ph 380 V / 400 V / 415 V 1ph 220V / 230V
Output Voltage Regulation	±1%
Efficiency	98% at full load
Speed of Voltage Correction	3ph 70 V/sec phase to phase 1ph 45V/sec
Effect of Load Power factor	Nil
Duty Cycle	Continuous
Servo Motor Drive	AC Synchronous
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
Humidity	0-95% RH non condensing
Enclosure	CRCA Mild Steel
Standard for Stabilizer	as per IS : 9815
Standard for Oil	as per IS : 335

Other Range of Products



Online UPS
0.5 KVA to 200 KVA



Offline UPS for PC
0.5 KVA to 2 KVA



Domestic Inverters
03 KVA to 10 KVA

Pentaapower Solutions

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