

# SERVO CONTROLLED VOLTAGE STABILIZER



**SINGLE PHASE**  
( 1 KVA To 20 KVA )



**THREE PHASE AIR COOLED**  
( 6 KVA To 100 KVA )



**THREE PHASE OIL COOLED**  
( 30 KVA To 500 KVA )



**THREE PHASE LINEAR SERVO STABILIZER OIL COOLED**  
( 100 KVA To 2000 KVA )

## Why us:

CNC Make | Aesthetic Looks | Better Efficiency | Dual Powder Coated Tank  
Flawless Performance | Micro Processor Technology

# SERVO STABILIZER

## MAIN FEATURES

- Specialty designed high performance controller based control circuit for ultra high reliability.
- All parameter like O/P V, I/P V high, low cut off, time delay, overload, set by front control panel.
- High efficiency  $\geq 98\%$
- Fast correction speed up to 60 V / Sec. variable speed servo motor and proportional control circuit provide a response time of 10msec to correct voltage fluctuations without noise or oscillations in output.
- Accuracy  $\pm 1\%$  from no load to full load
- Auto / manual operation facility.
- Plug and play single control card for easy serviceability.
- Reduced power loss and resultant lower running cost yield higher cost savings and help the customer recover the cost difference in few months.

## TECHNICAL SPECIFICATIONS

Capacity	1 KVA To 20 KVA ( single phase )
	6 KVA To 2000 KVA ( three phase )
Input voltage range	200 – 480 V, 300 - 480V, 340-480 V AC 3 Ph 50Hz Phase to Phase – THREE PHASE
	110 - 270 , 140 - 270, 170 - 270 V AC 1 Ph 50 Hz – SINGLE PHASE
System	4 wire in three phase
	3 wire in single phase
Input frequency	47 to 53 Hz
Output voltage adjustable	380/400/415 V AC in 3 Phase and 220/230/240 V AC in 1 Phase
Output voltage regulation	$\pm 1\%$ (No Load)
Ambient temperature	0 to 55° C
Output voltage regulation	$\pm 1\%$ (Full Load)
Overload capacity	110% of full rated load current with time delay
Correction rate	$\leq 80V / \text{Sec}$
Waveform distortion	True reproduction of Input
Servo motor drive	Rugged AC step synchronous motor
Insulation	Class F
Short circuit period & percentage	300% for 250 Milli Sec. normal
Climate conditions	90% Rh Max. Non condensing at 50° C
Type of cooling	Natural air cooled up to 100 KVA and Oil cooled up to 2000 KVA
Mode of system	Fully automatic / manual
System construction	As per IS : 9815 – 1994
Audio alarm	For tripping conditions
Protection	<ul style="list-style-type: none"> <li>• Low voltage protection, high voltage protection and single phasing prevention through contactor at O/p.</li> <li>• Over load protection, short circuit protection and power ON/OFF of SCVS through MCB / MCCB at input.</li> <li>• Change over switch at input to bypass the equipment in case of emergency ( optional )</li> <li>• Surge arrester or RF suppressor ( optional).</li> <li>• Neutral failure protection ( optional)</li> <li>• Earth neutral voltage cut off protection</li> </ul>
Display parameter	<ul style="list-style-type: none"> <li>• Input voltage ( line to neutral and line to line )</li> <li>• Output voltage ( line to neutral and line to line )</li> <li>• Load current in all phases</li> <li>• History or error log</li> <li>• LED indication for power on and trip bypass</li> </ul>

# LINEAR SERVO STABILIZER

## MAIN FEATURES

- Linear type vertical rolling contact type regulator
- Life span > 20 years
- Warranty 5 year unconditional
- Suitable for continuous 100 % duty cycle

## ADVANTAGES

- Up to 80% reduction in failure rate of electrical equipment
- Power saving
- Reduction in MDI
- Improvement in power factor
- Uniform quality of end products
- Improve productivity of the plant
- Owing to its high efficiency & associated benefits,
- The pay-back period for the cost Linear servo stabilizers is generally between 6 to 12 months. and it saves you significant costs in subsequent years through its life.

### ROLLER TYPE REGULATOR

- Power consumption is 0.5 to 1.5% depending upon the input voltage range
- Suitable for continuous 100% duty cycle
- Life at full load is 15-20 years
- Five years unconditional guarantee
- Negligible losses in full boost & buck condition

### FLAT CARBON BRUSH REGULATOR

- Power consumption is 2 to 7% under similar conditions
- Suitable for only 60 % to 80% duty cycle
- Maximum life is 5 -10 years at full load
- Normally guarantee for one year
- Max. losses in full boost and buck condition

## TECHNICAL SPECIFICATIONS

Input voltage	340 - 480, 320 - 480, 300 - 480
Efficiency (approx.)	99.5%, 99%, 98.7%
Output voltage	400 V $\pm$ 1%, 3 - Phase, 50 Hz
Cooling	Oil cooled
Type	Indoor / outdoor
Temperature rise (max)	30 degree centigrade above ambient temperature
Mounting	Uni-directional wheels
Correction rate	10 -15 V / Second
Wave form distortion	Virtually nil
Duty cycle	100% Continuous.

# PHYSICAL PARAMETERS

## SINGLE PHASE SERVO STABILIZER

Capacity (KVA)	1	2	3	5	7.5	10
Dimension W X H X D MM	370 X 410 X 390			445 X 445 X 445		
Weight KG	10	15	20	30	38	45

## THREE PHASE SERVO STABILIZER ( AIR COOLED )

Capacity (KVA)	6	10	15	20	25	30	45	50	60	75	100	
Dimension W X H X D MM	330 X 865 X 440					415 X 930 X 460		400 X 1115 X 670		405 X 1140 X 670		
Weight KG	65	70	80	85	90	130	145	180	225	260	325	

## THREE PHASE SERVO STABILIZER ( OIL COOLED )

Capacity (KVA)	75	100	125	150	200	250	300	400	500
Dimension									
W (mm)	1170	1215	1215	1360	2010	2010	2110	2160	2260
D (mm)	845	1025	1025	1045	1140	1140	1260	1355	1355
H (mm)	540	800	800	1050	1050	1050	1100	1400	1600
Oil Req. Ltr.	180	230	230	290	525	525	625	800	1100

## LINEAR SERVO STABILIZER ( OIL COOLED )

Capacity (KVA)	100	125	150	200	300	500
Dimension						
W (mm)	1140	1140	1190	1200	1300	1375
D (mm)	1020	1020	1070	1400	1500	1700
H (mm)	1475	1470	1475	1600	1750	1850
Oil Req. Ltr.	375	375	450	575	750	1000

## RANGE OF PRODUCTS :

- ONLINE UPS ( SINGLE PHASE & THREE PHASE )
- ISOLATION TRANSFORMER ( SINGLE PHASE & THREE PHASE )
- CVT
- DC POWERSUPPLY
- ELECTROPLATING RECTIFIER ( 200 TO 2000 AMP )
- LIFT INVERTER