Three Phase & Single Phase Servo Controlled Voltage Stabilizers

- All components sourced from reputed manufacturers, with confirmation to International standards as minimum prerequisite.
- 100% raw material and components inspection is done as per inward inspection manual. Individual assemblies and sub-assemblies also tested separately for higher reliability.
- Final equipment is tested for accelerated life test to identify and replace any weak links at QA.
- All electronic assemblies are tested on full load at 55°C in a oven for 48 hours to minimize failures.

VOLTAGE STABILIZER

GENERAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Input Voltage Range</th>
<th>300 - 460V AC 3 Ph 50Hz/60Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase to Phase</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Input Ranges</th>
<th>320 - 460V AC / 340 - 480V AC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>360 - 460V AC &amp;</td>
</tr>
<tr>
<td></td>
<td>340 - 500V 3Ph 50Hz/60Hz</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output Voltage (3 Ph)</th>
<th>400V AC / 415V AC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Voltage (1 Ph)</td>
<td>230V AC / 240V AC</td>
</tr>
<tr>
<td>System</td>
<td>Unbalanced 4 wire: R Y B N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connections</th>
<th>Star</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Frequency</td>
<td>47 to 53 Hz / 55 to 66 Hz</td>
</tr>
<tr>
<td>Output Voltage Adjustable</td>
<td>380 to 415V AC in 3 Ph</td>
</tr>
<tr>
<td></td>
<td>220 to 240V AC in 1 Ph</td>
</tr>
<tr>
<td>Output Voltage Regulation</td>
<td>± 1 % (No Load)</td>
</tr>
<tr>
<td>Output Voltage Regulation</td>
<td>± 1 % (Full Load)</td>
</tr>
<tr>
<td>Overload Capacity</td>
<td>120%</td>
</tr>
<tr>
<td>Correction Rate</td>
<td>35V/Sec-1 Ph; 60V/Sec-3 Ph</td>
</tr>
<tr>
<td></td>
<td>110 V /Sec with DC Motor</td>
</tr>
<tr>
<td>Waveform Distortion</td>
<td>Nil</td>
</tr>
<tr>
<td>Output Waveform</td>
<td>True Reproduction of Input</td>
</tr>
<tr>
<td>Insulation</td>
<td>Class &quot;B&quot;</td>
</tr>
</tbody>
</table>

| Short Circuit period | 300% for 250 Milli Sec. |
Normal Operation
Temperature : 0° C to 45° C
Climate Conditions : 90% Rh Max. Non Condensing at : 35° C

Type of Cooling : Natural air cooled upto 150KVA
Mode of System : Fully automatic / manual
System Construction : As Per IS:9815-1994

PROTECTIONS
Low voltage protection
High voltage protection
Overload protection with MCB / MCCB
Short Circuit Protection
Single phasing preventer

PANEL CONTROLS
Input / output select switch
Auto / Manual select switch
Increase / decrease switch to control the output voltage in manual mode
Volts adjust to set required output voltage in auto mode

PANEL INDICATIONS
Input - On  Output - On
Input - Low  Input - High
Output - Cutoff

PANEL METERS
Voltmeter with Selector Switch to read Input / Output voltages
Ammeter with Selector Switch (From 15 KVA 3 Ph onwards)

INPUT / OUTPUT CONNECTIONS
Separate cable entry box is provided.

OPTIONAL ACCESSORIES IN 3 Ph.
Input under! Over voltage tripp
Output sensing under lover voltage alarm
Digital voltmeter! ammeter
Frequency meter (digital / analog)
Frequency tripp high / low adjustable
(with setting thumb wheel switch)
MCB / MCCB for output
Dimmer protection arrangement
Phase reversal protection
### PHYSICAL DIMENSIONS

<table>
<thead>
<tr>
<th>Capacity</th>
<th>L</th>
<th>O</th>
<th>H</th>
<th>Wt.(Kgs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3KVA-3Ph</td>
<td>495</td>
<td>375</td>
<td>500</td>
<td>65</td>
</tr>
<tr>
<td>6KVA-3Ph</td>
<td>495</td>
<td>375</td>
<td>500</td>
<td>75</td>
</tr>
<tr>
<td>10KVA-3Ph</td>
<td>470</td>
<td>470</td>
<td>1050</td>
<td>85</td>
</tr>
<tr>
<td>12KVA-3Ph</td>
<td>470</td>
<td>470</td>
<td>1050</td>
<td>90</td>
</tr>
<tr>
<td>15KVA-3Ph</td>
<td>470</td>
<td>520</td>
<td>1200</td>
<td>140</td>
</tr>
<tr>
<td>20KVA-3Ph</td>
<td>470</td>
<td>520</td>
<td>1200</td>
<td>165</td>
</tr>
<tr>
<td>22.5KVA-3Ph</td>
<td>540</td>
<td>520</td>
<td>1350</td>
<td>180</td>
</tr>
<tr>
<td>25KVA-3Ph</td>
<td>540</td>
<td>520</td>
<td>1350</td>
<td>190</td>
</tr>
<tr>
<td>30KVA-3Ph</td>
<td>540</td>
<td>520</td>
<td>1350</td>
<td>200</td>
</tr>
<tr>
<td>40KVA-3Ph</td>
<td>540</td>
<td>520</td>
<td>1350</td>
<td>240</td>
</tr>
<tr>
<td>50KVA-3Ph</td>
<td>640</td>
<td>620</td>
<td>1400</td>
<td>270</td>
</tr>
<tr>
<td>60KVA-3Ph</td>
<td>640</td>
<td>620</td>
<td>1450</td>
<td>290</td>
</tr>
<tr>
<td>75KVA-3Ph</td>
<td>640</td>
<td>620</td>
<td>1450</td>
<td>320</td>
</tr>
<tr>
<td>80KVA-3Ph</td>
<td>1400</td>
<td>550</td>
<td>1250</td>
<td>440</td>
</tr>
<tr>
<td>90KVA-3Ph</td>
<td>1400</td>
<td>550</td>
<td>1250</td>
<td>460</td>
</tr>
<tr>
<td>100KVA-3Ph</td>
<td>1480</td>
<td>600</td>
<td>1300</td>
<td>480</td>
</tr>
<tr>
<td>125KVA-3Ph</td>
<td>1480</td>
<td>600</td>
<td>1300</td>
<td>520</td>
</tr>
</tbody>
</table>

### APPLICATIONS

- CNC Machines
- Bio Medical Equipments
- Printing Machineries
- Large Computer Installations
- Telecommunication Equipments
- Scientific Equipments
- Textile Machineries
- Cell Phone Networks
- Garment Equipments and many more.

### AIR COOLED THREE PHASE SERVO VOLTAGE STABILIZER

#### SPECIFICATION

- **RATING:** AS SPECIFIED
- **INPUT VOLTAGE RANGE:** AS SPECIFIED (Eg. 300V TO 470 V; 4 WIRE, 50Hz, UNBALANCE)
• INPUT SUPPLY FREQUENCY: 45Hz TO 55Hz
• OUTPUT VOLTAGE: AS SPECIFIED (Eg. 400V /415 V ±±±.1%, 4 WIRE, 50 Hz, BALANCE)
• VOLTAGE REGULATION: ± 1%
• RATE OF CORRECTION: USUALLY 25V / SEC/ PHASE BUT DEPENDS ON RATING
• EFFICIENCY: BETTER THAN 97%
• WAVEFORM DISTORTION: NIL
• EFFECT OF LOAD POWER FACTOR: NIL
• AMBIENT TEMPERATURE: 0-50ºC Max.
• TYPE: 3 PHASE

FEATURES
• OUTPUT VOLTAGE SENSING FOR VOLTAGE CORRECTION & FOR L/V & H/V TRIP
• HIGHVOLTAGE & LOWVOLTAGE TRIP BY MEANS OF CONTACTOR / RELAYS
• VOLTOMETER WITH SELECTOR SWITCH TO SEE INPUT & OUTPUT VOLTAGES
• SHORT CIRCUIT & OVERLOAD PROTECTION BY MEANS OF MCB / MCCB/SFU
• ADJUSTMENT: OUTPUT VOLTAGES ADJUSTMENT OF ± 5V PER PHASE WILL BE PROVIDED BY MEANS OF POTENTIOMETER ON FRONT PLATE
• CONTROLS: AUTO/ MANUAL IN CASE OF AUTO MODE FAILURE YOU CAN SET OUTPUT VOLTAGE THROUGH MANUAL MODE
• BUILT IN SINGLE PHASE PREVENTER

OPTIONAL FEATURES
• BY PASS FACILITIES
• RFI FILTER & SPIKE SUPPRESSOR
• GENERATOR COMPATIBLE CIRCUIT
• TIME DELAY CIRCUIT: OUTPUT POWER ON WITH SPECIFIED TIME DELAY
• ISOLATION TRANSFORMER /ULTRA ISOLATION TRANSFORMER AT OUTPUT
• AMMETER: TO SEE LOAD CURRENT’S
• DIGITAL VOLTOMETER & DIGITAL AMMETER

3ФSCVS(both AIR COOLED & OIL COOLED)
MODELS AVAILABLE FROM 3kVA 3 Ф TO 2000 kVA 3 Ф
APPROXIMATE DIMENSIONS OF 3 Ф STABILIZERS

INDICATIONS EACH PHASE SEPARATE
MAINS OK
OUTPUT OK
MAINS HIGH
MAINS LOW
OUTPUT CUT / DELAY
OVER LOAD
SINGLE PHASING PREVENTER
Single Phase Servo Controlled Voltage Stabilizer

Frequent fluctuations or variation of power not only causes financial loss but manpower loss too! SERVO CONTROLLED VOLTAGE STABILIZERS beats these happenings and provides all extra care needed to your valuable equipments.

SPECIFICATION

- RATING: AS SPECIFIED
- INPUT VOLTAGE RANGE: AS SPECIFIED (Eg. 170V-270 V)
- INPUT SUPPLY FREQUENCY: 45Hz-55Hz
- OUTPUT VOLTAGE: AS SPECIFIED (Eg. 230V /240V ± 1%)
- VOLTAGE REGULATION: ± 1%
- RATE OF CORRECTION: USUALLY 25V / SEC/P~SE BUT DEPENDS ON RATING
- EFFICIENCY: BETTER THAN 97%
- WAVEFORM DISTORTION: NIL
- EFFECT OF LOAD POWER FACTOR: NIL
- AMBIENT TEMPERATURE: 0- 50°C Max.
- TYPE: IPHASE

FEATURES

- OUTPUT VOLTAGE SENSING FOR VOLTAGE CORRECTION & FOR L/V & H/VTRIP
- OVERVOLTAGE & UNDervoltage TRIP BY MEANS OF CONTACTOR/ RELAY'S
- VOLTMETER WITH SELECTOR SWITCH TO SEE INPUT & OUTPUT VOLTAGES
- SHORT CIRCUIT & OVERLOAD PROTECTION BY MEANS OF MCB / FUSE/MCCB
- ADJUSTMENT: OUTPUT VOLTAGES ADJUSTMENT OF ± 5V /PHASE WILL BE PROVIDED BY MEANS OF POTENTIO METER ON FRONT PLATE
- CONTROLS: AUTO/MANUAL IN CASE OF AUTO MODE FAILURE YOU CAN SET OUTPUT VOLTAGE THROUGH MANUAL MODE.

OPTIONAL FEATURES

- BY PASS FACILITIES
- RFI FILTER & SPIKE SUPPRESSOR
- GENERATOR COMPATIBLE CIRCUIT
- TIME DELAY CIRCUIT: OUTPUT POWER ON WITH SPECIFIED TIME DELAY
- ISOLATION TRANSFORMER /ULTRA ISOLATION TRANSFORMER AT OUTPUT
- AMMETER: TO SEE LOAD CURRENT'S
- DIGITAL VOLTMETER & DIGITAL AMMETER
INDICATIONS
MAINS OK
OUTPUT OK
MAINS HIGH
MAINS LOW
OUTPUT CUT / DELAY
OVER LOAD