



## **VERTEX** SERVO STABILISER THREE PHASE — AIRCOOLED 3 kVA — 150 kVA

## **SALIENT FEATURES:**

- Microcontroller (DSP) based control system
- True RMS voltage sensing & correction
- LCD Displays I/P & O/P Voltages (L-N & L-L), Output Current (R/Y/B) & Frequency
- User adjustable setting of O/P Voltage, High/Low cut-off limits & Manual / Auto Restart time delay, with great accuracy
- ➤ Higher response time through its Microcontroller design
- > Cut-off protection with graded time delay

**Vertex Power Solutions Pvt. Ltd.,** is managed by a team of Engineers with over 25 years of experience in the field of Power conditioning Equipment. The Products are manufactured at Chennai, under the brand name of VERTEX.

VERTEX, through its quality products & service, has made its presence felt in various segments like Textile, Telecom, Engineering & Automobile, Printing, Packaging, Medical, Analytical, Audio/Video, IT, etc.

Three Phase Aircooled Servo Stabilisers consists of three single phase units connected in star. The voltage sensing & correction is done in each phase independently with respect to the neutral, also called as unbalanced type voltage stabilisers. These stabilisers are used for various kinds of machinery like CNC, Textile, CT Scans, Printing, Packaging, Freezers, etc. VERTEX Stabiliser uses a Microcontroller (DSP) control system to provide a steady voltage and also protects the machinery from under/over voltage, overload, single phasing and phase reversal conditions.

**Applications:** Textile, Garment, Packaging, Medical, Analytical, UPS (bypass), Printing, CNC machines, Lifts, Centralized AC, Telecom (GSM towers), Petrol Bunks, Residential, Food processing, Offices/Commercial Complexes etc.

## TECHNICAL SPECIFICATIONS – VERTEX SERVO STABILISER

Type of Stabiliser
Type of Application
Three Phase Stabiliser
Indoor Application

Type of Design Servo Stabiliser with O/P sensing feed-back system

Type Of Cooling Aircooled

Servo Motor TypeOpto Coupler based Triac driveServo Motor DriveA.C. Synchronous Stepper Motor

Input Voltage Range 360 V - 460 V / 340 V - 460 V / 310 V - 480 V

Input Frequency 47 - 53 Hz

Output Voltage 415 V; Adjustable 380 V OR 400 V(L - L)

Output Voltage Regulation ± 1 %

Control Design Microcontroller (Digital Signal Processor) based system

**Voltage Sensing & Correction** True RMS Sensing & Correction

Waveform Distortion NIL (Output Waveform same as Input Waveform)

Effect of Load PF NIL (Effect of Load PF on Output Voltage is Nil)

Correction speed 60 V/ Sec Efficiency ≥ 98%

Under / Over Voltage Cut Off Upper Limit +5%, Lower Limit -10% of O/P nominal Voltage

Short Circuit HRC Fuse at Input (OR) MCB (OR) MCCB

Over Load Operative above 110% of rated output current

Single Phasing Prevention Built-in Phase Reversal Protection Built-in

Reset Auto restart / Manual restart (User Settable)

**Auto / Manual for Operation** Increase / Decrease (Thru key combination on front panel)

**Display Type** 2 x 16 Character LCD with Back-light

Parameters Displayed

I/P & O/P Voltage L-L, L-N, Hz, Current R-Y-B (all Phases)

Front Panel Indications

LED Indication for – Input Present, Output Normal

Front Panel User Interface MENU, UP/DOWN KEY, ENTER/SET KEY

**Event Recorder** Provided for fault detection

Input / Output Connection 7 Way terminal Connector (With Nut Bolt arrangement)

**Emergency Manual Bypass**Built-in upto 50 kVA (Above 50 kVA – Optional)

Output Relay / Contactor Built-in

Transient Protection MOV with RC Filter on Request

**EMI / RFI Filter** Optional Ambient Temperature 0 to 50° C

Standard kVA Ratings 1 kVA to 150 kVA

Design Standards As per IS:9815

Specifications are subject to change without notice, on account of development in product design

<u>Custom Designed:</u> Stabilizers of more than 150 kVA are also available with wider / shorter input voltage range & also with special output voltage, as per customer requirements.

## **JS Power Services**

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