# VERTEX



Innovation, Quality & Service.. Par Excellence



Solutions In Power Conditioning

# SERVO STABILISERS SINGLE PHASE AIRCOOLED 1 kVA - 20 kVA







Standard Model

Audio/Video Model

Single Phase Servo Stabilisers are used to protect the sensitive equipment from voltage fluctuations caused due to switching ON/Off of heavy machinery, load distribution on the transformers, etc. Under varying voltage conditions the sensitive equipments like medical, analytical, audio/video, Computers, etc malfunction or can be damaged. VERTEX Stabiliser provides constant output voltage, 220 /230 volts with a tolerance of +/- 1% with high/low output voltage cut-off and overload cut-off. This ensures smooth operation and longer life for the equipments.

Oilcooled stabilisers find their applications in industries like Spinning & Garment which are used to prevent the ingress of dust and foreign particles.

#### 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

#### PRODUCT RANGE

- ♦ SERVO VOLTAGE STABILISERS
- **♦ STATIC VOLTAGE STABILISERS**
- **♦ ULTRA ISOLATION TRANSFORMERS**
- **♦ K-RATED TRANSFORMERS**
- **♦ CONSTANT VOLTAGE TRANSFORMERS**
- **♦ UN-INTERRUPTED POWER SUPPLIES**
- **♦ SURGE PROTECTION DEVICES**
- ♦ EMI/RFI FILTERS

#### **APPLICATIONS:**

- Textiles, Spinning, Garment, Knitting, Dyeing
- Machine Tools, Robotics, Granite
- Food Processing, Packaging, Printing Press
- Hospitals, Pharmaceuticals, Testing Labs
- Office / Commercial Estab/ UPS Bypass, Lighting
- Audio/Video, Residential loads



# SPECIFICATIONS—SINGLE PHASE STABILISER

Type of Stabiliser	Single Phase Stabiliser		
Construction	Indoor Purpose		
	Outdoor, Customised Models Available		
Type of Design	Servo Stabiliser with O/P sensing feed-back system		
Type Of Cooling	Aircooled (Oilcooled, customised Models available)		
Servo Motor Type	A.C. Synchronous Stepper Motor		
Input Voltage Range	<ul> <li>170 V - 270 V</li> <li>140 V - 270 V (Other Customised Models Available)</li> </ul>		
Input Frequency	47 Hz - 53 Hz		
Output Voltage	230 V; User Settable - 220 V (OR) 240 V (L - N)		
Output Voltage Regulation	± 1 %		
Control Design	Microcontroller (Digital Signal Processor) based system		
Waveform Distortion	NIL (Output Waveform same as Input Waveform)		
Effect of Load PF on O/P Voltage	NIL		
Correction Speed	30 V/ Sec		
Response Time	10 milli sec		
Efficiency	≥ 98%		
Under / Over Voltage Cut-Off	<ul> <li>Upper Limit +5% (Above set O/P Voltage)</li> <li>Lower Limit -10% (Below set O/P Voltage)</li> </ul>		
Short Circuit Protection	HRC Fuse at Input Optional - MCB / MCCB at Input		
Output Overload Protection	Electronic Operative above 110% of rated output current		
Stabiliser "ON/OFF" Operation	<ul> <li>User Settable Auto Restart 1 sec - 998 sec</li> <li>User Settable Manual Restart</li> </ul>		
Display Type	Backlight LCD Display		
Parameters Displayed	I/P Voltage, O/P Voltage, Hz, Current		
Front Panel Indications	LED Indication for - Input Present, Output Normal		
Front Panel User Interface	MENU, UP/DOWN KEY, ENTER/SET KEY		
	<ul> <li>Input Cable - 1.5 metres (1 kVA with 5A Plug-top, 2 kVA with 15A Plug-top, 3 — 5 kVA only cables)</li> </ul>		
Input / Output Connection	<ul> <li>Output Sockets (Upto 5 kVA) / Cable (As per request)</li> <li>Input / Output Terminal Plate (7.5 kVA onwards)</li> <li>With Nut-Bolt arrangement</li> </ul>		
<b>Emergency Manual Bypass</b>	Optional		
Output Relay / Contactor	Built-in		
Surge Protection Device (SPD)	Optional (MOV with RC - Standard in Audio/Video Models)		
EMI / RFI Filter	Optional (Standard in Audio/Video (AV) Models)		
Ambient Temperature	0° C to 50° C		
Standard kVA Ratings	1 kVA to 20 kVA (Customised Models Available)		
Design Standards	As per IS:9815		
· · ·	ı		

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

Single Phase (AC)- 170 V - 270 V Models							
Rating				Weight			
(kVA)	Length	Width	Height	(Kgs)			
1 DL	290	225	280	8			
2 DL	290	225	280	9			
3 DL	290	225	280	10			
3	410	325	245	16			
4	410	325	245	19			
5	410	325	245	21			
7.5	350	290	500	42			
10	350	290	500	47			
15	600	380	420	78			
20	550	500	700	120			

Single Phase (AC) - Audio/Video Models						
Rating (kVA)	Length	Width	Height	Weight (Kgs)		
1 DL	440	220	340	13		
2	440	220	340	21		
3	440	220	340	23		
4	440	220	340	25		
5	440	220	340	27		



ounded in 2001 in Chennai, India, VERTEX is involved in manufacturing Electrical Power Protection Systems. Over the years, the company has earned a reputation for excellence and professionalism for continuously striving to meet and even exceed the standards thereby setting the environment for a sustainable business relationship with its clients.

Today we are one of the leading manufacturers of Servo Voltage Stabilisers and Isolation Transformers in India with **over 1 lakh installations.** 

**VERTEX** employs technically skilled, qualified and highly dedicated personnel working cohesively to promote value-added solutions at competitive pricing to suit distinct clientele needs.

### Some of our valued Customers

**Textiles:** Veejay Lakshmi, TVS (textile division), LMW, Lakshmi Mills, Premier Mills, KPR Group, Loyal textiles, SCM textiles, GTN Group, GMR Spintex, Bharat Silks, Raymond Mills, Ambika Mills, Paramount Group, Indian Rayon, Gopalakrishna Mills, Mangrool Mills, Mount Exports, etc

Petroleum: HPCL, Petro Araldite.

**Cellular/Telecom**: IDEA Cellular, Reliance.

**Educational /Research Institute:** Indian Institute of Science **(IISC),** Sri Venkateshwara University, SKBR Group, and Good Shepherd School of Education, etc

**Government & Public Sector:** ETDC, South Central Railways, LIC of India, State bank Of India, Bharat Electronics (BEL), BHEL, HIAL, NAL, CWSSES, CONCOR, CSIR-SERC, IRCTC, IGCAR, etc

**Pharma /Analytical:** Dr.Reddy's Lab, Nicholas Piramal, NATCO Pharma, VIRCHOW Labs, AIMIL, Helpanel System, etc

**Engineering:** Veejay Lakshmi Engineering Pvt Ltd, Pride Machine Tools, Rane Madras group, Madras Engineering Industries P. Ltd., Alfa Laval, Yuken India, Deccan Hydraulics, Rolastar Group, Maini Precision, Ashok Leyland, Sundaram Clayton, Associated commercial, Nash Industries, Solidus Hitech, Indo Shell Cast, Virpan Precision, Kirby Building systems Pvt Ltd, Fenesta Building system, Gokul Industries, Dream Valley Castle Services Pvt Ltd, Myung Sung India Precision Pvt Ltd, SL Lumax Ltd., etc

**Others:** ITC Bhadrachalam Paper & board Ltd., The Andhra Sugars Ltd., L & T - ECC Div, ECLAT Auto pack, Ascents Circuits, AT & S (India), Reliance Fresh, India Cements, Ingersoll-Rand India, TUV Suddeutschland India, SKOL Breweries Ltd, Mission Hospital, Kotak Mahindra Bank Ltd, Hindustan Liver Ltd., Whirl pool of India Ltd., Vieston Automotive, Standard Chartered bank, Aachi Masala Pvt Ltd., Uniply Industries, Thirumala Milk products Pvt Ltd, APC Consultants Pvt Ltd, Sidra Foot Wear Pvt Ltd, Imaan Shoes Pvt Ltd., Harshal Printing, Wingtech Mobile, Amararaja Batteries, etc.

# Head Office & Works:

## **VERTEX POWER SOLUTIONS PRIVATE LIMITED**

No. 38, Muthupalaniyappan Nagar, Samy Street, Nagalkeni, Chrompet, Chennai – 600 044 Tamilnadu, India.

Chennai: +91 99400 58974 / 9886081610 Coimbatore: +91 98420 11833, Bangalore: +91 91646 57788

Email: ho@vertexpower.co.in / sales@vertexpower.co.in

www.vertexpower.co.in