Efficient Power Solutions

eST Voltage Stabilisation unit

The **eST** Static voltage stabiliser system utilises the latest generation high speed microprocessor controlled thyristors to provide plant and equipment with stabilised voltage and is designed for use in areas where the electrical supply grid is prone to sudden changes such as spikes or sags. Eliminating these sudden changes in supply voltage reduces the risk of premature failure by consistently operating electrical loads within their design voltage range.

The **eST** Stabiliser benefits from industry leading voltage detection and response times of <300 mS to maintain voltage and protect equipment from an ever more increasingly unstable electrical supply system.





Efficient Power Solutions Ltd BG House, Campbell Way, Dinnington, South Yorkshire S25 3QD UK

- Product Range 2kVA to 3000kVA
- Single Phase and Three Phase output versions
- Worldwide range of single and three phase voltages. (208-380-400-415-480-600V) & 50 / 60 HZ supplies
- Latest generation power management technology using thyristor based control, with no moving parts, suitable for all supply environments
- Flexible design and software allowing easy orientation to local grid conditions
- Microprocessor based control system
- Fast reaction to changing voltage profiles (<300mS)
- Optional remote management system allowing remote viewing and management of all values
- Manual bypass for statutory inspections
- Static modular structure with thyristor technology used in power control and SMPS technology
- Electronic protection for over-load, over-voltage, over-temperature and short circuit
- Aesthetic and ergonomic design. Durable enclosure design, powder coated with standard colour (RAL-7035)
- User friendly, comprehensive LCD screen

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Techn	ical Specifications for eST 1 & 3 phase
Model Range	eSTABILISER 1 Phase & 3 Phase
KVA Range	1 Phase 2-50 kVA, 3 phase 10-3200 kVA
Power factor	0.9
Input	
Voltage	220 V 1Phase & 380V 3 Phase + Neutral
Voltage Tolerance	S-25 + 15% (other ranges as options)
Frequency	50Hz±5%
Input Connection	Copper Busbar Terminal
Output	
Voltage	220 V 1Phase & 380V 3 Phase + Neutral
Voltage Tolerance	± 2% other tolerances available
Frequency	50Hz±5%
Current	Rating Dependent
Overload Capability	101%-125% 3 Min, 126%-150% 10 Sec
	Higher loadings auto shut off
Response time	20 m/sec
Correction speed	500V/Sec
Efficiency	>97% Typical
Output connection	Copper Busbar Terminal
LCD Display	Input Voltage (L-N), Output voltage (L-N), Output Load %, Output Frequency, Stabilizer condition and fault history, Warnings (Overload, over temp, input failure)
Communication Protection	Optional Network Connectivity and Remote Management kit
Input Voltage Protection	Automatic Over / under voltage Stabilizer off
Output Voltage Protection	Automatic Over / under voltage Stabilizer off
Input Current Protection	MCB
Output Current Protection	MCB (Option)
Output Overload Protection	101%-125% 3 Min, 126%-150% 10 Sec higher load auto shut off
Over temperature protection	Automatic stabilizer off for unit over temperature
Bypass	Manual 1-0-11 position by-pass
Surge Arrestor	Suitable surge arrestor for lightning and voltage surges (Option)
Environmental Protection	
Operational Temperature	-10 deg c to +40 deg c
Maximum Altitude	<3000 m
Maximum Humidity	<90% Non-Condensing
Acoustic Noise	<65 db. (Rating dependent)
Enclosure Specification	
Туре	Indoor (External option available)
IP Rating	IP21
Standard Colour	RAL 7035
Base	Plinth
Cooling	Temp controlled fans

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