

Rackmount Automatic Voltage Regulator

■ *The Toughest Power Conditioner on the Market Today*

The Staco Energy Products Co. Automatic Voltage Regulator is based on a series regulation transformer controlled by variable transformers (VTs). It offers tight output regulation, robust design and easy customization.

In today's world, the cost of electrical power and its quality have become major operating concerns. The continuing increase in the cost of electrical power has heightened interest in energy savings, and poor power quality has been identified as a cause of expensive malfunctions and shutdowns in new high technology equipment.

Voltage regulation problems account for more than 90% of the power problems seen at most sites. The Staco Energy Products Co.'s base Automatic Voltage Regulator (AVR) provides protection against all but the most extreme voltage swings. When additional non-voltage issues occur, Staco Energy offers a series of options that address such issues as high voltage transients, high harmonic content and site load balance. This integrated and targeted approach provides site-specific power correction in a one-box solution.

Warranty

The industry leading 3-year warranty is our guarantee that Staco Energy offers the toughest, most robust Voltage Regulation System on the market today.

Advantages:

- **Options Offer More Features and Functionality**
- **Extremely High Overload/Inrush Rating**
- **Very Low Cost of Ownership Due to Efficiency and Virtually Maintenance-free Operation**
- **Trouble-free Operation with No Active Devices in Power Path**
- **1% or Better Output Voltage Regulation**
- **Continuous Voltage Regulation – Not Crude Step Regulation**
- **Redundant, Manual Regulation Control (raise/lower switch)**
- **Individual Coil Protection – Avoid Catastrophic Cascade Failures**
- **Gold Plated Contacts on All Coils**
- **Nickel Plated Copper Bus Bar**
- **Easy, Front Panel Access for Service/Installation**
- **No Waveform Distortion – No Harmonics Added**
- **Small Footprint**
- **Able to Withstand Continuous Vibration of Mobile Applications**

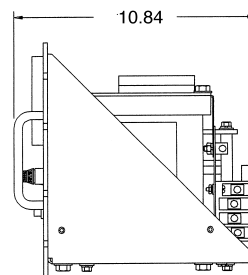
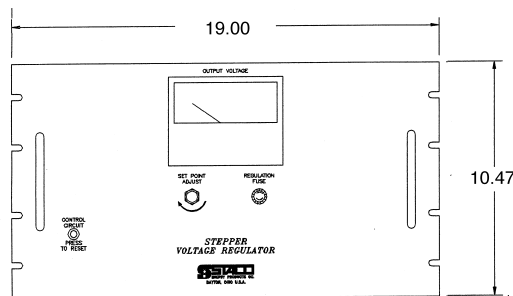


Automatic Voltage Regulator

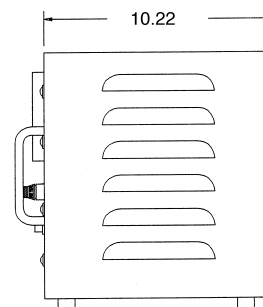
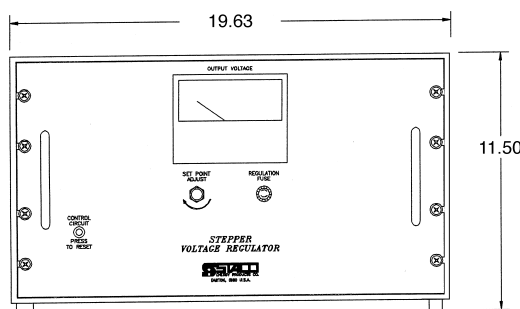
The Staco Energy Products Co. Automatic Voltage Regulator's unique construction blends precise regulation, high availability, and ruggedness into a highly customizable package.

Base Regulator System	
Technology	Motorized Variable Transformer controlled, series regulation transformer (buck-boost transformer with secondary wired in series with the load)
KVA rating (single-phase)	2.5, 5.0, 7.5, 10, 15
Voltage (single-phase)	100, 110, 115, 120, 200, 208, 220, 230, 240 Nominal
Frequency	50/60 Hz
Input Regulation ($\pm 1\%$ output)	+10% / -20%
Input Regulation ($\pm 5\%$ output)	+15% / -25%
Response Time	< 2mS
Correction Time	38 to 71 Volts per second depending on the model
Efficiency	99% typical
Mean Time Between Failure	Greater than 200,000 hours
Harmonic Distortion	None added
Harmonic Content	None added
Overload Rating	33% - 2 hours 50% - 1 hour 100% - 15 minutes 1,000% - 30 cycles
Output impedance	Less than 1% (maintains tight regulation with 100% load step)
Load Power Factor (pf)	0 lagging to 0 leading
Altitude (operating)	10,000 feet without derating
Temperature (operating)	0° to 40° C
Audible Noise	Less than 45 dBA
Wiring	Hardwired
Enclosure	NEMA 1 enclosure is optional

Dimensions:



Rack Mount



Enclosed Version

Available Models:

P/N	KVA	Nominal Input/ Output (adjustable)	Max Amps	Input Range	Correction Rate Volts/Second	19" Rack Mount	Enclosure
SVR-12WBSN002R	2.5	120	20.8	+10/ -20%	36	X	
SVR-12WBSN002	2.5	120	20.8	+10/ -20%	36		X
SVR-24WBSN002R	2.5	240	10.4	+10/ -20%	71	X	
SVR-24WBSN002	2.5	240	10.4	+10/ -20%	71		X
SVR-12WBSN005R	5.0	120	41.7	+10/ -20%	36	X	
SVR-12WBSN005	5.0	120	41.7	+10/ -20%	36		X
SVR-24WBSN005R	5.0	240	20.8	+10/ -20%	71	X	
SVR-24WBSN005	5.0	240	20.8	+10/ -20%	71		X
SVR-12WBSN007R	7.5	120	62.5	+10/ -20%	36	X	
SVR-12WBSN007	7.5	120	62.5	+10/ -20%	36		X
SVR-24PBSN007R	7.5	240	31.3	+7/ -17%	59	X	
SVR-24PBSN007	7.5	240	31.3	+7/ -17%	59		X
SVR-12PBSN010R	10.0	120	83.3	+7/ -17%	27	X	
SVR-12PBSN010	10.0	120	83.3	+7/ -17%	27		X
SVR-24PBSN010R	10.0	240	41.7	+7/ -17%	43	X	
SVR-24PBSN010	10.0	240	41.7	+7/ -17%	43		X
SVR-12PBSN015R	15.0	120	125	+7/ -17%	21	X	
SVR-12PBSN015	15.0	120	125	+7/ -17%	21		X
SVR-24HBSN015R	15.0	240	62.5	+6/ -10%	38	X	
SVR-24HBSN015	15.0	240	62.5	+6/ -10%	38		X

Many other models, and ratings are available. Please contact us with your requirements.

ISE, Inc. offers a broad range of single and three phase voltage regulators, UPS systems, variable transformers and instrumentation. Visit our website for a complete listing of ISE's capabilities.

ISE, Inc.

10100 Royalton Rd.
 Cleveland, OH 44133 USA
 Tel: (440) 237-3200 Fax: (440) 237-1744

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<http://ISEinc.com>