



Power-Tronics, Inc.

Electronic Voltage Regulators and Static Exciters

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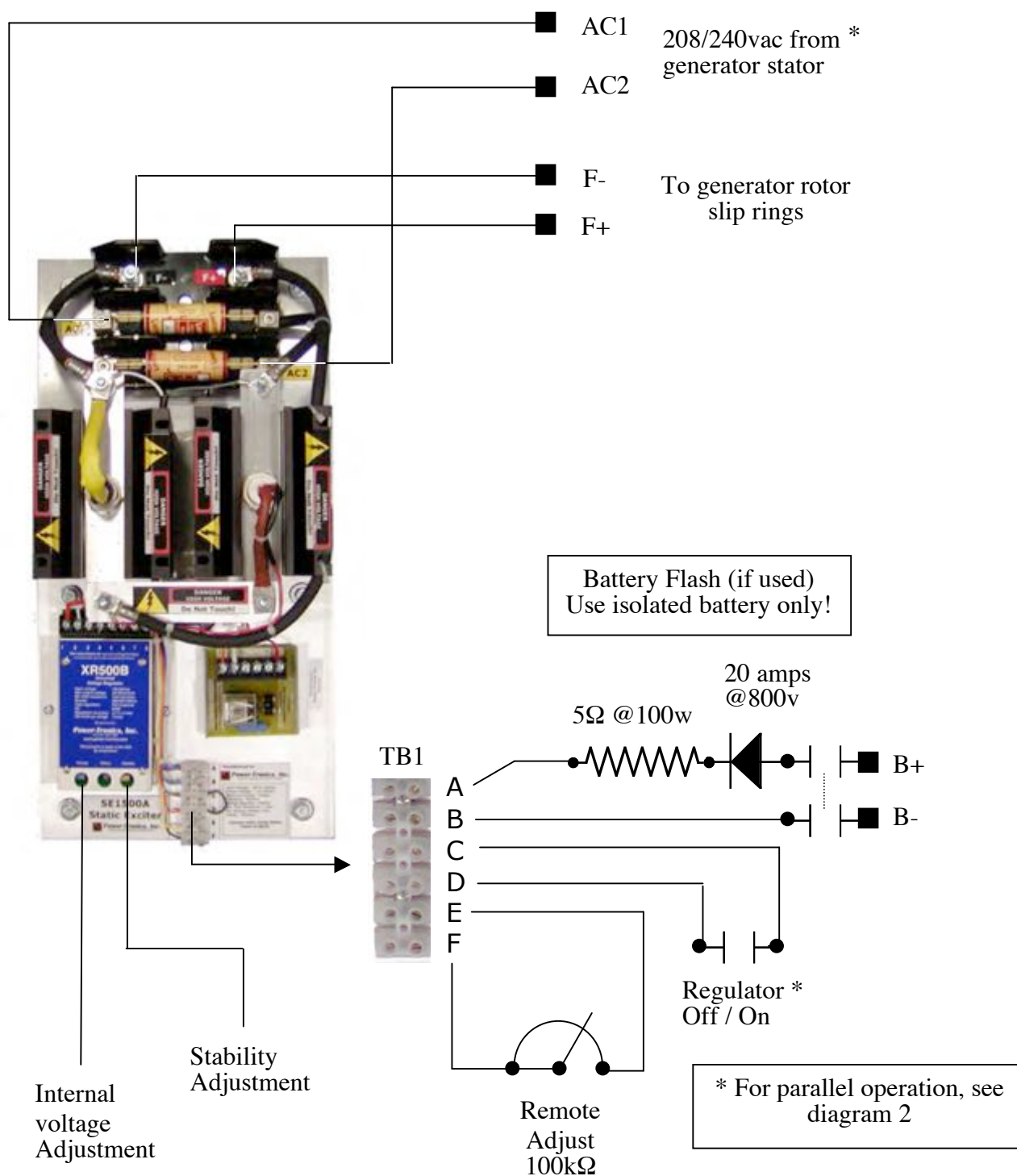
SE1500A Static Exciter

The SE1500A Static Exciter is a 100amp complete static exciter designed to replace older rotary, electronic and magnetic amplifier types of exciters. Installation of the SE1500A is a simplified process that involves only four main connections to the generator. The SE1500A is complete with fusing, snubber circuits and build up provisions.



Specifications

Voltage Input	208/240vac 1ø
Output Voltage Range	.75 to 105vdc
Maximum Output Amps	100adc
Minimum Field Resistance	1.05Ω
Operational Frequency	50/60hz
Regulator Accuracy	+/- 1%
Voltage Response	1/2 cycle
Regulation	Flat response
Maximum Burden	10.5kva
Internal Fusing	100 amps
Minimum Build Up Volts	3.5vac
Physical Size	10 x 20 x 8in
Weight	18lbs
Voltage Regulator	XR500B



Interconnection Diagram for the SE1500A Static Exciter

Installation Instructions

Installation of this product should be performed only by an experienced electrical generator service technician. Failure to do so could result in damage to the electrical generator and/or the voltage regulating system. Follow all safety procedures while installing this system.

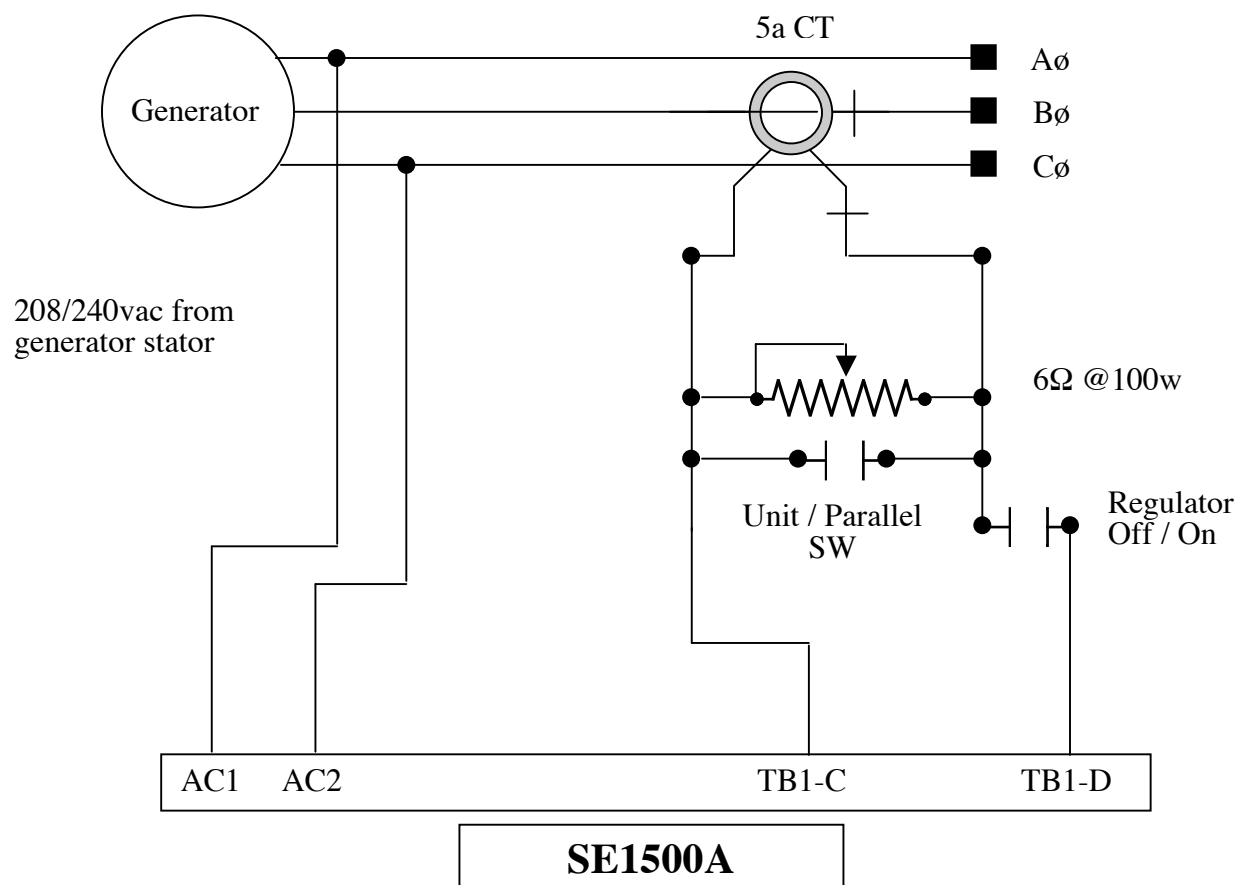
Special Note: Slip ring and brush problems are the most common problem when installing a replacement static exciter. Many times, the failure of the system that is being replaced was caused by contact problems with the brushes and slip rings. Do not attempt to install this static exciter on an application that has evidence of brush and ring problems.

- Check brushes and slip rings of the generator. Make sure that the brush faces do not show signs of arcing, lines or grooves, burned spots, pitting or rough surfaces.
- Inspect the slip rings for grooves, discolored areas, and pitted or rough areas and for surface trueness.
- Make sure that the brush springs are working and have the correct tension. Check the brushes for length.
- Connect up the SE1500A as per the diagram included with this instruction sheet. It is recommended that a circuit breaker or manual disconnect is placed in the incoming ac power circuit to AC1 and AC2.
- Check all connections and make sure that the regulator is turned off and the main disconnect is open.
- Start up prime mover and bring up to rated speed. Allow the unit to run for a few minutes to allow the brushes and slip rings to seat.
- Make sure that the internal voltage controls and stability controls are turned counter clockwise about 10 turns.
- Close main disconnect and turn the regulator switch on.
- Adjust the internal voltage control clockwise until the voltage output of the generator begins to rise (the adjustment pot is 25 turns) and set to the desired voltage setting. If the voltage is pulsating after the voltage is set up, adjust the stability adjustment clockwise until the voltage stabilizes (as the stability is turned clockwise, the voltage will rise, keep the voltage at the preferred setting with the internal voltage adjustment).
- Place the generator on line and observe for proper operation.

Connections for parallel operation of SE1500A Static Exciter

Shown below are the AC input connections for reactive droop parallel operation.

Diagram 2



Interconnection Diagram for the SE1500A Static Exciter

Installation form

It is very important that you fill out this form completely when installing a voltage regulator. This form serves as a history record on the application. This form also contains the information needed by Power-Tronics, Inc., for repair and troubleshooting of any product you may be having problems with.

Product			Other options		
Serial Number					
Date of Installation					
Type of Generator				Model #	
	Brush type	[]			
	Brushless	[]			
AC Stator Information					
Wired for	Volts	Phase	Hz		
Generator Configuration: Lead					
Exciter/Rotor Information					
Exciter field resistance		Ω		@ F+ / F-	Ω
Exciter field volts		vdc		@ Slip Rings	Ω
Description of problem with product or generator					
Your phone number			Name:		
Your fax number			Ship to Address:		
Your email address			Ship to City, State, Zip:		

PRODUCT WARRANTY

Power-Tronics, Inc., assumes no liability for damages due to incorrect voltage or other voltage related damages resulting from either output of the generator or input to the generator exciter system. These problems should be protected with external devices provided by the customer such as **fuses, surge suppressors, over/under voltage and frequency controls**.

Power-Tronics, Inc., warrants **only parts and workmanship** of this product for a **period of 2 years from the original date of purchase from Power-Tronics, Inc.** Under warranty, Power-Tronics, Inc. will replace, exchange or repair the defective product **without labor or parts cost to the customer**. Remaining warranty of the original product will be transferred to the replaced or repaired product.

To obtain warranty, a copy of the original purchase receipt must be sent in with the defective product, which clearly shows the purchase date and serial number of the defective part. A repair request form must be sent in with the product before repairs will begin. You can obtain this form through contacting Power-Tronics, Inc.. Send repairs to: Power-Tronics, Inc., 2802 Cobbler Ln., Kerrville Texas USA 78028. Send in repairs only by UPS or FedEx. Do not send in repairs by U.S. mail.

Any one of the following conditions will void the warranty:

- ❖ Overheating of the power supply resistor on the printed circuit card.
- ❖ Overheating of the SCR or freewheeling diode.
- ❖ Physical damage to the printed circuit card, housing or components.
- ❖ Unauthorized repair or alteration of printed circuit card.
- ❖ Conductive or corrosive contamination of the circuit card.
- ❖ Removal of our company identification from the product.
- ❖ Removal of any conformal coating of the printed circuit card or components.
- ❖ Overheating of foil on the printed circuit card.
- ❖ Inappropriate or infeasible application.
- ❖ Installation by a non-professional electrical generator service technician.
- ❖ Damage caused by excessive vibration.
- ❖ Use on any external device other than manufactured by Power-Tronics, Inc.

No other warranty is expressed or implied.