SE350 Voltage Regulator

BLUE STAR Power Systems Inc.

VOLTAGE ADJUSTMENT

The screwdriver adjustable potentiometer adjusts the generator output voltage. Adjustment clockwise increases the generator output voltage.

When using a remote voltage adjust rheostat, remove the jumper wire across terminals 6 and 7 and install a 2000 ohm 1/2 watt (minimum) rheostat. This will give ±10% voltage variation from the nominal. (For ±5% voltage variation use a 1000 ohm 1/2 watt rheostat).

STABILITY ADJUSTMENT

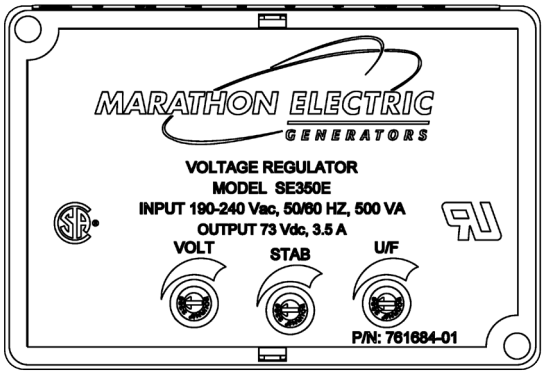
System stability is the ability of the generator to respond to load transients. Decreasing the stability makes the generator less sluggish and faster to respond to load transients. If the stability of the regulator is decreased too much, the generator will tend to hunt under steady state conditions.

The screwdriver adjustable potentiometer adjusts the system stability. Adjustment clockwise increases the stability. Increasing the stability increases the response time of the regulator. Conversely, decreasing the stability decreases the response time of the regulator.

V/HZ ROLL-OFF FREQUENCY ADJUSTMENT

The roll off point is the frequency where the generator voltage starts to decrease. This reduces the Kilowatt load to the engine, which allows the engine to recover in speed under heavy load transient conditions.

Use jumper to select 50 HZ or 60 Hz mode. The screwdriver adjustable potentiometer sets the roll-off frequency from 54-61 Hz in the 60 Hz setting or from 45-51 Hz in the 50 Hz setting. The SE350 has the roll-off point preset to 58 Hz in the 60 Hz mode and 48 Hz in the 50 Hz mode. To change the roll-off point, adjust engine speed to the desired rated speed. (50 or 60 Hz). Set the voltage to the desired setting at rated speed. Adjust engine speed to the desired roll-off point. Turn the potentiometer counterclockwise until the voltage starts to drop off. Then adjust the potentiometer clockwise until the voltage returns to rated voltage. Re-adjust engine speed to rated speed.



SPECIFICATION	SE350 REGULATOR
Sensing & Power Input	190-240 Vac
Burden	500 VA
Output Power- Continuous	73 Vdc at 3.5 Adc (255w)
Output Power - Forcing(240 Vac Input Power)	105 Vdc at 5 Adc (525w)
Regulation	1 .0%
Remote Voltage Adjustment Range	± 10% with 2000 ohm rheostat ± 5% with l000 ohm rheostat
Frequency Compensation	Adjustable
Roll Off Frequency	54-61 Hz for 60 Hz 45-51 Hz for 50 Hz
Weight	6.5 oz.
Operating Temperature	- 40°C to + 60°C
Storage Temperature	- 65°C to + 85°C
Power Dissipation	8 watts maximum
Size	3.94” L X 2.66” W X 2.20: H
Voltage Buildup	Internal provisions for automatic voltage build up from generator residual voltage as low as 10 Vac.
EMI Suppression	Internal Electromagnetic Interference Filter (EMI Filter)