

Automatic Voltage Regulator (AVR) Type JS0

DESCRIPTION

This regulator is designed to be a general purpose substitute AVR for small directly fed field excited generators.

This would typically be up to 6kVA Honda, Kawasaki, Suzuki & Kubota generators.

SPECIFICATIONS

Max Excitation Voltage: 90V
 Max Excitations Current: 4A
 Field: $\pm 10 - 30 \Omega$

Full load excitation example:

Field Resistance	Field Current	Resulting AVR Voltage	
12 Ohm	2A	24V	OK
56 Ohm	2A	112V	Bad – Voltage too high
12 Ohm	7A	84V	Bad – Current too high

PRECAUTIONS

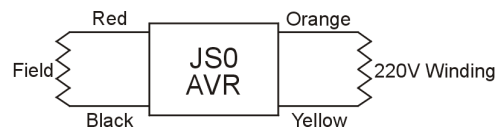
It is very important that the generator engine is in a good running condition. If there is a fuel shortage or the governor does not operate correctly, it causes the AVR to push a higher current into the field in order to maintain the voltage. This overloads the AVR, causing it to blow.

Before connecting the AVR, first check the generator as follows. Run the engine and then excite the generator with a small DC current to see if the voltage builds up. If the voltage builds up, then the generator winding should be in working order. Fit the regulator and follow the directions for use.

DIRECTIONS FOR USE

This regulator is very simple to use:

1. Connect the Orange & Yellow leads to the 220V Power Winding.
2. Connect the Red & Black wires to the field excitation winding.
3. Ensure that the voltage adjustment pot is set to the centre position.
4. Start the engine and adjust the voltage to 230V
5. Load the generator to rated load and ensure that the excitation field and current does not exceed rated specifications. Also ensure that the engine speed does not vary significantly from no load to load by checking the frequency / engine R.P.M.



TYPICAL RESULTS

No Load	Load	Bad Load	Bad Load
230V	210-215V	210V	190V
52Hz	48Hz	45Hz	50Hz
Result:	OK	Bad, engine too weak	Bad, field resistance too high