

Automatic Voltage Regulator (AVR) Type JS1

DESCRIPTION

This AVR is best suited for brushless separately excited generators. This would mostly be used for 6-100kVA three phase generators, eg. MeccAlte, Stamford, Caterpillar & Markon. This regulator is available in a 400V and 525V model. The 400V model can be connected 400V three phase, 220V three phase and 220V single phase.

SPECIFICATIONS

Max Excitation Voltage: 90V
Max Excitation Current: 6A

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

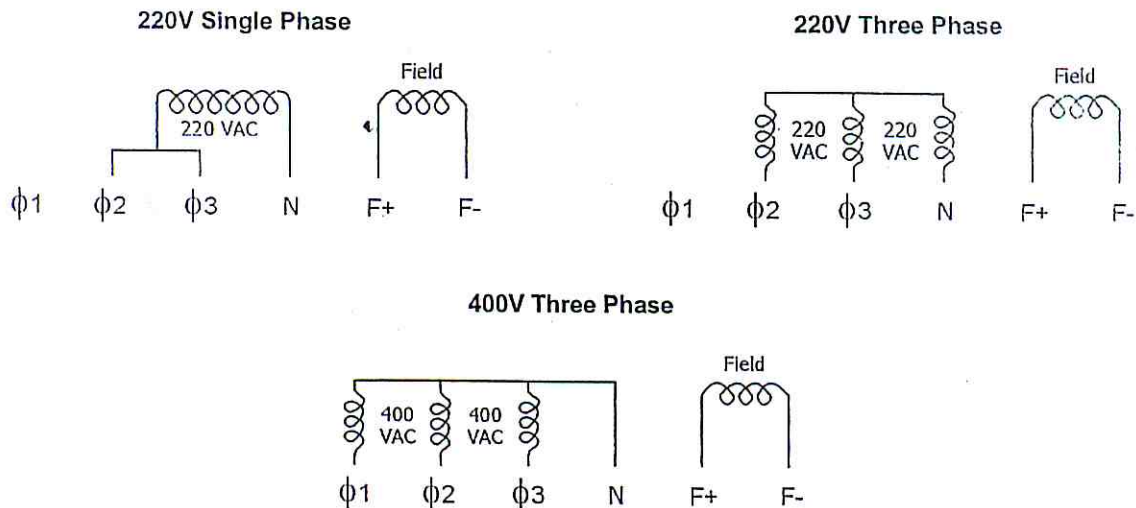
PRECAUTIONS

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 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

1. Connect the regulator to the generator terminals in one of the following ways.



2. Connect the field excitation winding to the Regulator.
3. Start engine and adjust to the required voltage by using the coarse & fine current adjustment pots.
4. Load the engine to rated load.
5. If the engine is unstable (oscillating) then the stability pot must be adjusted until the voltage remains stable under load.