

XR125DC

Voltage Regulator



The XR125DC Voltage Regulator is designed for voltage control of 125vdc electrical generators. The regulator features a safety start up system that requires the operator to physically apply the shunt fields across the armature to start the generator process. The XR125DC voltage adjustment can be made internally, or externally.

Specifications:

Input Voltage:	125vdc
Output Voltage:	0-120vdc
Maximum Amperage:	5adc
Voltage Regulation:	+/- 1%
Physical Size:	1 x 4 x 6in.
Weight:	1.5lbs.



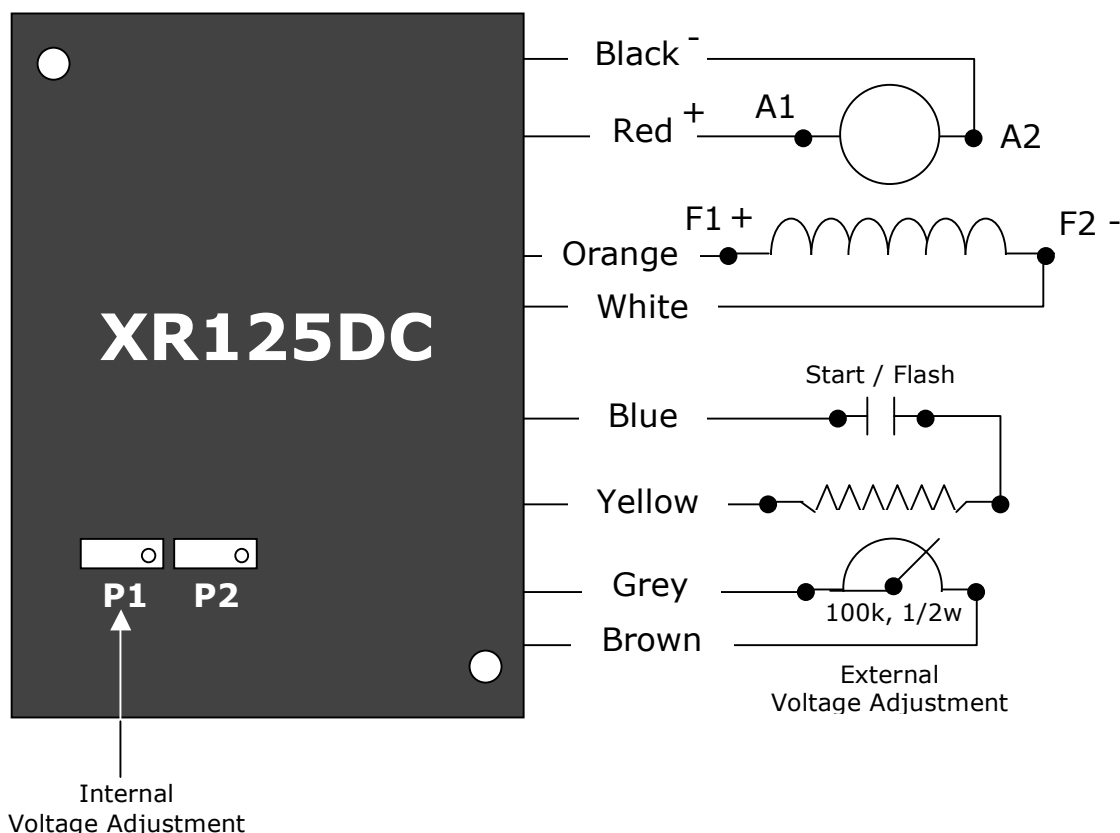
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Installation Instructions

Warning: Be sure that there is over voltage and over amperage protection between the generator and load! Voltage regulators fail in one of three ways: No voltage, unstable voltage or high and uncontrollable voltage.

1. Install wiring as shown below.



Notes:

The resistor shown connected from yellow to the start / flash switch will differ in value from one application to the next. The best selection

would be a 400 ohm, 100w adjustable power resistor. Set the resistance value to slowly bring up the generator voltage until the regulator takes over the control of the generator.

The Start / Flash switch could be a normally open push button switch, rated at least 10 amps / 300v.

2. Start generator up and run at design speed.
3. Measure DC voltage between A1 and A2. A1 should show a very low positive voltage. If it does not, stop and determine why it does not. (never assume that the generator wiring is labeled correctly)
4. After the correct polarity of A1 has been established, push the start / flash switch and look for the dc voltage to build to 75vdc, and release the switch. The regulator should take over and produce the selected dc voltage.
5. Adjust the generator speed to the desired rpm.
6. Adjust P1 to the desired dc output voltage
7. Place the generator on line.
8. To shut down the generator, stop the prime mover or open the input circuit into the red and black wiring to the regulator.

Special Note:

P2 is factory adjusted to a pulse rate of 125pps. Turning P2 ccw will increase the pps up to 1000pps. Do not adjust this setting unless advised to by Power-Tronics, Inc.



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