

REFLEX<sup>®</sup> MODEL 219 THREE-PHASE PULSE AMPLIFIER

PART NUMBER 12M03-00120-01  
APPLICATION NOTES

1. If it is desired to disable the firing of a thyristor for troubleshooting or other purposes, the gate to cathode can be short-circuited without damage to the circuit. This is the preferred way to disable a thyristor since it avoids the possibility of noise pick-up or accidental connection of gate leads to a destructive voltage when a gate lead is disconnected to disable the thyristor.
2. Output voltage and current characteristics can be closely approximated by using a "load line" constructed with 12 volts at zero output current, linearly decreasing to zero volts at 0.5A. Since gate impedances vary widely, measurement of magnitude of output pulses connected to a thyristor gate is not particularly useful.
3. A nominal .22 MFD capacitor should be wired from gate to cathode of each thyristor to enhance the dv/dt rating of the thyristor.
4. All or any of the outputs can be used for driving loads other than thyristor gates, as long as duty cycle limitations are not exceeded. Similarly, any source capable of 50mA into 1.25 volts can be used to drive the input.
5. When the Pulse Amplifier is used with the Reflex Model 218 Pulse Generator and DC thyristor bridge, letter designations A, B, and C are arbitrarily assigned to the AC supply lines as shown in Figure 2 .

Shows terminals  
on the Model 219 PCB

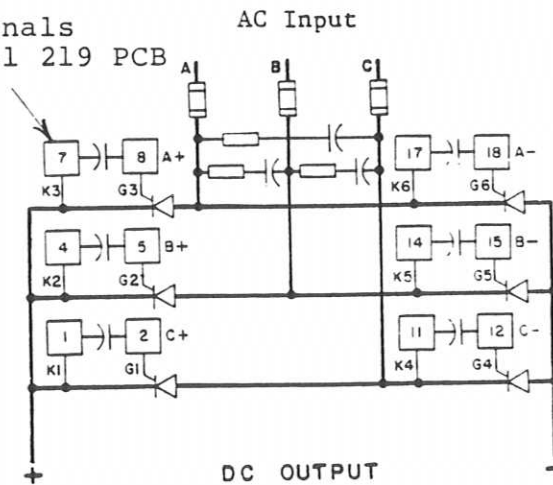


Fig. 2 Thyristor Bridge

Each line will have two thyristors associated. The thyristors with cathode connected to the plus DC bus are known as plus thyristors, and the thyristors with anodes connected to the minus bus are known as minus thyristors.

Synchronizing is automatically connected when the cathodes of the minus thyristors are connected to the Pulse Amplifier.

6. Insert a screw in the connecting terminal strip, position no. 35, to prevent inverting the assembly or interchanging it with the Model 218 Pulse Generator.