## Three Phase Firing Circuit

The firing circuit board, also referred to as the trigger board, was specially designed to accomplish heavy industrial requirements (for proper operation in a high electrical and thermal stress ambient).



Part No. 60.004

## Functions of the Firing Circuit

- Generates the 3-phase synchronization signal(s) used by gate-pulse circuitry.
- Filters the synchronization voltage, to obtain an increased stability of the system
- Senses the lack of a phase voltage or a pronounced imbalance between the phase voltages. When this happens, it blocks the gate pulses and signals a fault.
- Generates and amplifies the gate pulses. It can fire SCRs in any amperage range.
- Generates the control signal for the phase angle delay. Contains an interface between regulator board signals and the firing ICs, with independent high and low clamping of the firing angle domain.
- Has an input for external fast inhibit of the gate pulses, but also a soft start/stop input.
- Contains a delay circuit that inhibits any external drive signal for several seconds after powering the board, to allow for the stabilization of the power supply voltages.

## Specific Features

- 1. GATE PULSE PRESENT LEDs (yellow or amber). These LEDs indicate that gate pulses are present to the SCR's when operating.
- 2. FAULT Indicator. The LED illuminates when a fault condition occurs. It can be tied to a front panel fault light and reset pushbutton in order to clear the fault light.



- 3. SYNCHRONIZATION LOSS Indicator. This LED will illuminate in the event of a loss of sync. It may also be used to indicate when the equipment On/Off switch is in the "Off" position.
- 4. This assembly is normally sold with its companion regulator board encased in a modular enclosure that is din rail mountable as shown above.

Contact the factory for pricing and further information.

