

Section V

Power Section

The Kliegpac 9 power pack section contains an ac control power supply and a set of nine dimmers rated at either 2.4 or 6KW.

Normal operation of the dimmers is simple. The ac output voltage varies in proportion to the dc control voltage supplied from the control console. The dimmer output follows the control voltage in a "Square Law" curve in standard dimmers, although special curves are sometimes supplied on special order. The normal tolerance from the curve is +/- 2V

Various special circuits and circuit elements are incorporated to safeguard and improve dimmer operation. An integral circuit breaker provides primary circuit protection. Inductive and capacitive filtering prevent objectionable line and radio-frequency interference.

Output power is controlled by an SCR pair that produce a symmetrical, full wave signal. The control for the SCR's is divided onto an input stage, a regulating stage, and a firing stage (with associated power supply).

The SCR's control the flow of current to the load by switching on at predetermined point in the alternating current cycle. This produces a variably clipped waveform that has an rms voltage level determined by the firing and control circuits.