Current-to-Time Proportioning Converter



For Single and Three Phase Power Control

- Converts current to time-proportioned signal
- Converter circuitry powered by 4-20 mA control signal
- Drives single or multiple solid state relays (SSR's)
- Control (input) present LED indicator
- One to ten second adjustable cycle time
- Cycle time LED indicator
- Compact and economical
- Attaches directly to Solid State Relay



Current-to-Time Proportioning Converter Model 60804

Description

The Model 60804 Series I/TP Converter is a unique, current-totime proportioning (I/TP) converter designed specifically for driving solid state relays (SSR's). This I/TP converter accepts a standard 4-20 mA control (input) signal. The output is a time-proportioned on/off signal with "on time" proportional to the control signal. The I/TP converter is used to drive an SSR (an on/off device by nature) to fully proportion the energy going into a process. This is accomplished by proportioning the SSR's time ON to time OFF within a time period.

The I/TP converter circuitry derives its operating power directly from the 4-20 mA control signal. This unique design is the ultimate in simplicity, reliability, and versatility.

The I/TP circuitry includes an LED to indicate the 4-20 mA control signal is present and an LED to indicate when the SSR is on (cycle time).



Figure 1.

When used with SSR's, the I/TP converter provides zero crossover, time proportioned power control with input-to-output isolation (typically 1500VAC). Each I/TP converter will drive one or two SSR's.

The I/TP converter offers the flexibility of mounting directly on an SSR or Being surface mounted and wired over to an SSR. Figure 3 shows an SSR mounting wit an optional mounting kit.

Simplicity, convenience, flexibility, and reliability make the I/TP converter an ideal problem solver for a wide range of control applications.









Specifications

Current to Time Proportioning Converts

Converter Action	Converts a 4-20mA control signal to a time-proportioned on/off
	signal suitable for driving up to two Solid State Relays (SSR's).
	Output on-time is proportional to the control signal level.
Input Characteristics	
Control Signal	4 mA (-0, +0.75) to 20 mA (+-0.5) with a minimum compliance of 12 VDC
Input Impedance	Varies inversely with the control signal level – 3000 ohms at 4 mA, 600 ohms at 20 mA.
Output Characteristics	
Output Characteristics	
Cycle Time (nominal)	1 to 10 second adjustable
Output Voltage (nominal)	On State $- 6$ VDC. Off State $- 0$ VDC
Output Impedance	1500 ohms minimum
Environmental & Design	
Parameters	
Operating Temperature	0 to 50 Degrees C (32 to 122 Degrees F)
Diagnostics	LED for power indication and LED for SSR on.

Dimensions

