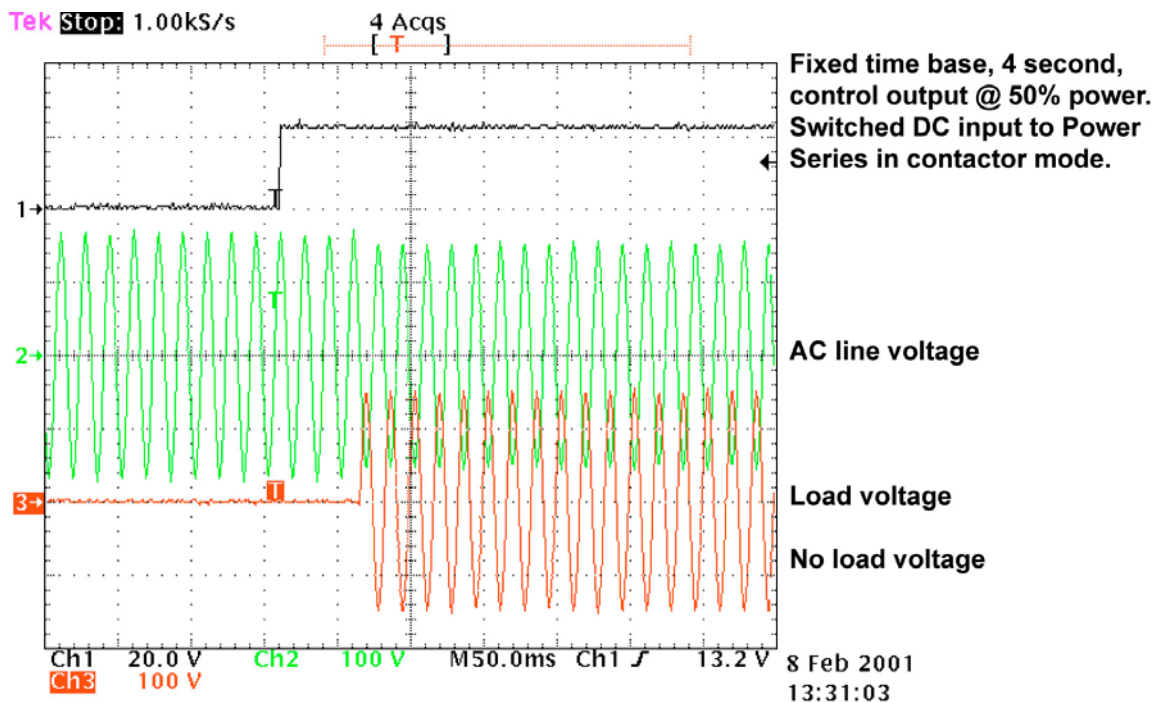# Using Contactor Mode with a POWER SERIES

The contactor mode in the Power Series cannot be used with the "Burst Fire" mode from a temperature control. Use a fixed cycle time base greater than 4 seconds.

The microprocessor looks at the input signal every 100 milliseconds; therefore if it is receiving very short ON pulses it may or may not see an input logic high.

The first scope picture shows a SERIES 988 in fixed time base (4 second cycle time). The top oscilloscope trace is the output from the SERIES 988, the center oscilloscope trace is the incoming power to the Power Series, and the bottom oscilloscope trace is the load. There are 50+-milliseconds of delay before power is turned on.
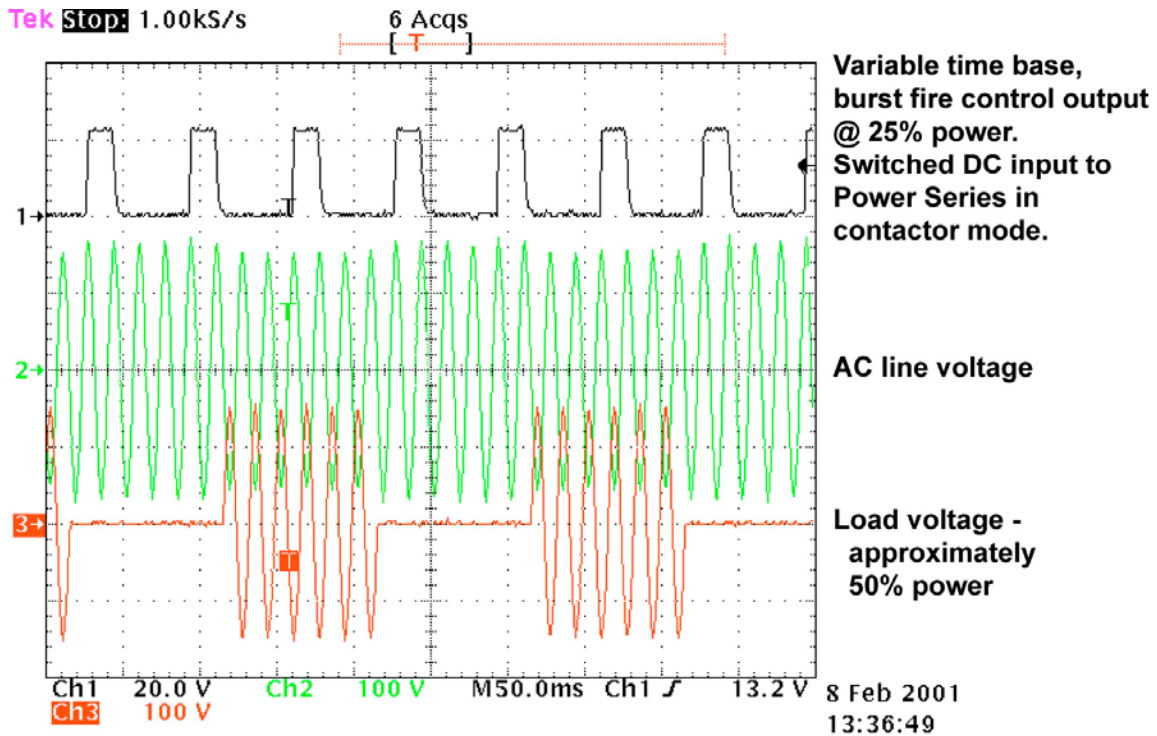

PScontactr4sec.jpg

LCr 04/13/05

Using Contactor Mode
with a POWER SERIES

This second picture shows the SERIES 988 in burst fire mode with 25% power output signal. The Power Series output is at approximately 50% power.
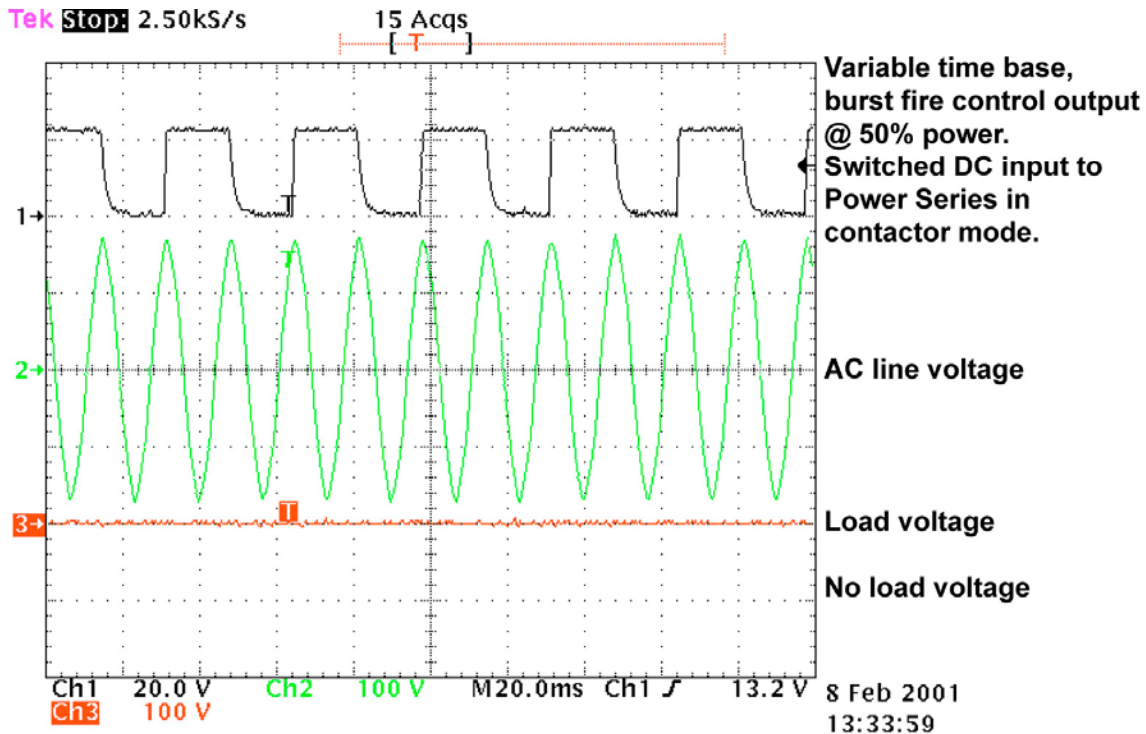

PScontactrbrst25%.jpg

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This third picture shows the SERIES 988 in burst fire mode with 50% power output signal. The Power Series is so confused there is no output.

PScontactrbrst50%.jpg

Another problem is that the heater diagnostics will not function. If the Power Series is not aware of the required power, it cannot determine if a heater is out of tolerance. The KW reading and current readings also will not function.

It is recommended to either eliminate the contactor mode, or define its limitations.

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