

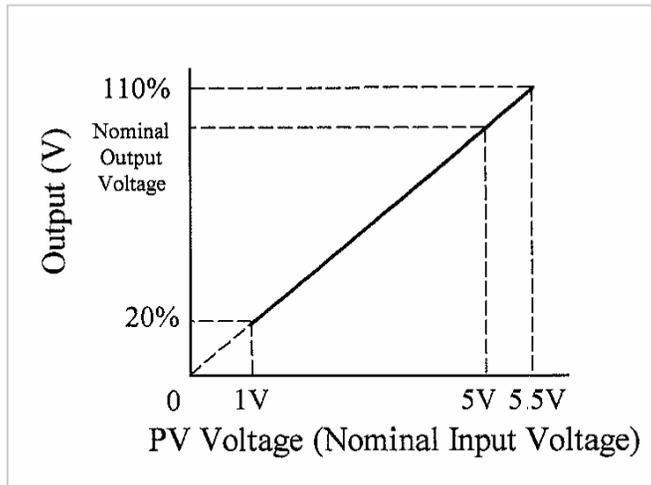
Wednesday, March 14, 2012

## Wide range adjustable power supplies

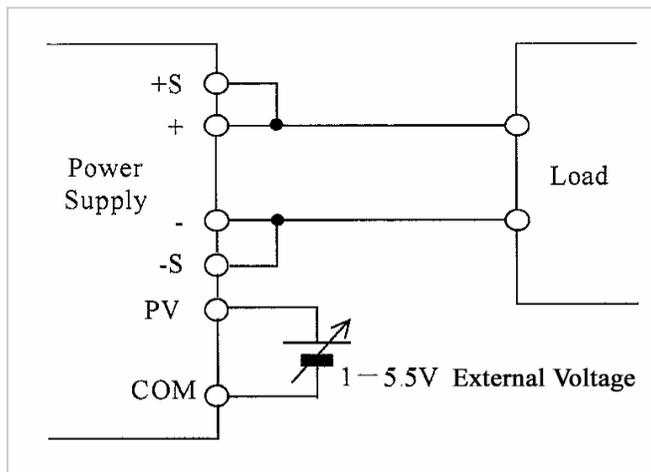


We had a customer that wanted a 1000-watt power supply to drive a medical centrifuge. The only catch was that the speed of the DC motor that drives the centrifuge had to be varied and they were going to do this by using a step down dc-dc converter to change the voltage applied to the motor from 12V to 60V.

We suggested TDK-Lambda's SWS1000L-60 power supply, which has, as standard, a Programming Voltage (PV) Input. By applying from 1 to 5.5 volts to this input, the output of the power supply can be varied from 12 to 66V.



The connections are very simple, using the PV input and common terminals on the front panel of the power supply (see diagram).



Alternatively, the Programming Voltage could have been derived from the SWS1000L's 12V auxiliary output, which in this case could be connected to an external potentiometer to provide the variable dc input.

This simple solution saved the customer both design time and money. More information about the SWS1000L power supplies can be found at this web link [http://www.us.tdk-lambda.com/lp/ftp/specs/sws600\\_1000l.pdf](http://www.us.tdk-lambda.com/lp/ftp/specs/sws600_1000l.pdf)

The PV function is also available as an option on TDK-Lambda's HWS series 300-600W models and is standard on the 1000-1500W models. More info can be found here <http://www.us.tdk-lambda.com/lp/ftp/specs/hws1500.pdf>

Posted by [Power Guy](#)