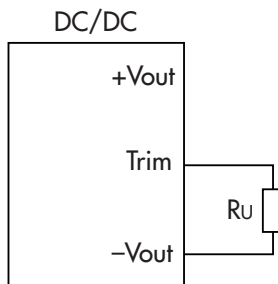


## Output Voltage Adjustment

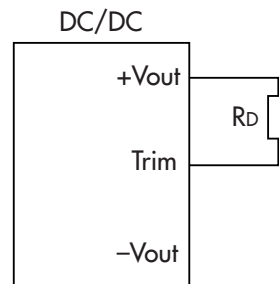
This feature allows increasing and decreasing the output voltage of TPP 30A-D and TPP 30-D series. This is accomplished by connecting an external resistor between the Trim pin and either the +Vout or -Vout pin. The resulting external Trim resistor is specified in Ohm and needs to be at least 1/16 Watt of rated power.

For trimming up, please assure max. output power is not exceeded.

### Connection of trim up resistor



### Connection of trim down resistor



### Trim up equation

$$R_U = \frac{G \cdot L}{(U_{out,up} - L - K)} - H$$

### Trim down equation

$$R_D = \frac{(U_{out,down} - L) \cdot G}{(U_{out,nom} - U_{out,down})} - H$$

### Trim constants

Models	G	H	K	L
TPP 30-103(A)-D	5100	2050	0.8	2.5
TPP 30-105(A)-D	7500	2000	2.5	2.5
TPP 30-109(A)-D	33000	2000	6.5	2.5
TPP 30-112(A)-D	51000	2000	9.5	2.5
TPP 30-115(A)-D	68000	2000	12.5	2.5
TPP 30-124(A)-D	130000	2000	21.5	2.5
TPP 30-136(A)-D	220000	2000	33.5	2.5
TPP 30-148(A)-D	620000	2000	45.5	2.5

For example: Trim up model TPP 30-112A-D with  $\Delta U = 10\%$  to output voltage of  $U_{out,up} = 13.2\text{ V}$

$$R_U = \frac{G \cdot L}{(U_{out,up} - L - K)} - H = \frac{51000 \cdot 2.5}{(13.2 - 2.5 - 9.5)} - 2000 = 104.25\text{ k}\Omega$$