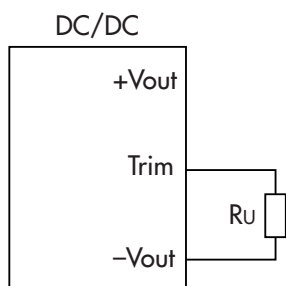


## Output Voltage Adjustment

This feature allows increasing and decreasing the output voltage of single output models. 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, it must be assured that max. output power is not exceeded.

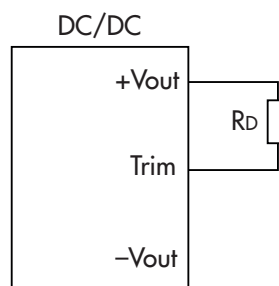
### Connection of trim up resistor



### Trim up equation

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

### Connection of trim down resistor



### 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
THN xx-xx10	5110	2050	0.8	2.5
THN xx-xx11	5110	2050	2.5	2.5
THN xx-xx12	10000	5110	9.5	2.5
THN xx-xx13	10000	5110	12.5	2.5
THN xx-xx15	56000	13000	21.5	2.5

For example: Trim up model THN 15-2411WI with  $\Delta U = 10\%$  to output voltage of  $U_{out,up} = 5.5\text{ V}$

$$R_U = \frac{G \cdot L}{(U_{out,up} - L - K)} - H = \frac{5110 \cdot 2.5}{(5.5 - 2.5 - 2.5)} - 2050 = 23500\ \Omega$$