Output Voltage Adjustment
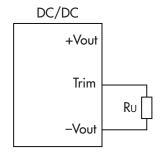
This feature allows increasing and decreasing the output voltage of single output models. This is accomplished by connecting an external resistor between the Trim pin and either the +Vout or -Vout pin. The resulting external Trim resistor is specified in Ohm and needs to be rated at least 1/16 Watt.

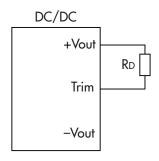For trimming up, it must be assured that max. output power is not exceeded.

Connection of trim up resistor

Connection of trim down resistor

Trim up equation

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

Trim down equation

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

Trim constants				
Models	**G**	**H**	**K**	**L**
THN 20-xx10WIR	5110	2050	0.8	2.5
THN 20-xx11WIR	5110	2050	2.6	2.5
THN 20-xx12WIR	10000	5110	9.5	2.5
THN 20-xx13WIR	10000	5110	12.5	2.5
THN 20-xx15WIR	56000	13000	21.5	2.5

For example: Trim up model THN 20-2412WIR with ΔU = 10 % to output voltage of Uout,up = 13.2 V

$$R_U = \frac{G \cdot L}{\left(U_{out,up} - L - K\right)} - H = \frac{10'000 \cdot 2.5}{(13.2 - 2.5 - 9.5)} - 5'110 = 15'723 \; \Omega$$