## Output Voltage Adjustment

Output voltage is adjustable by connecting an external resistor between the Trim pin and either the +Vout or -Vout pins. With an external resistor between the Trim and -Vout pin, the output voltage set point increases. With an external resistor between the Trim and +Vout pin, the output voltage set point decreases. Maximum output deviation is inclusive of remote sense. The value of external resistor can be obtained by equation below. The external TRIM resistor must be at least 1/16W of rated power.

For dual output models the Output Voltage Adjustment affects both outputs symmetrically. For example: A Trim up of ΔU = 10 % for a 5V model results in +5.5 VDC on output 1 and -5.5 VDC on output 2.

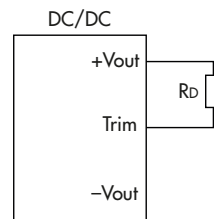Trimming Up: Max. output power must not be exceeded.

Connection of trim up resistor

Connection of trim down resistor
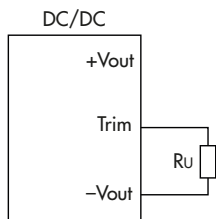
Trim up equation

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

Trim down equation

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

Note: For dual output models both output voltages as absolute values must be added in the equation. This must be applied to nominal output voltage $U_{out,nom}$, trimmed up output voltage $U_{out,up}$, and trimmed down output voltage $U_{out,down}$.

Trim constants				
Single models	**G**	**H**	**K**	**L**
THM 3/6/10-xx10(WI)	5110	2050	0.8	2.5
THM 3/6/10-xx11(WI)	5110	2050	2.5	2.5
THM 3/6/10-xx12(WI)	10000	5110	9.5	2.5
THM 3/6/10-xx13(WI)	10000	5110	12.5	2.5
THM 3/6/10-xx15(WI)	56000	13000	21.5	2.5
Trim constants				
Dual models	**G**	**H**	**K**	**L**
THM 3/6/10-xx21(WI)	3000	3000	7.5	2.5
THM 3/6/10-xx22(WI)	56000	13000	21.5	2.5
THM 3/6/10-xx23(WI)	30000	13000	27.5	2.5

For example: Trim up model THM x-xx11 with ΔU = 10 % and Vout nominal = 5 VDC:

$$R_U = \frac{G \times L}{(U_{out,up-L-K})} - H = \frac{5'110 \times 2.5}{(5.5 - 2.5 - 2.5)} - 2'050 = 23'500 \, \Omega$$

For example: Trim down model THM x-xx22 with ΔU = 5 % and Vout nominal = 12 VDC:

$$R_D = \frac{((|U_{out,down_1}| + |U_{out,down_2}|) - L) \times G}{((|U_{out,nom_1}| + |U_{out,nom_2}|) - (|U_{out,down_1}| + |U_{out,down_2}|))} - H = \frac{((11.4 + 11.4) - 2.5) \times 56'000}{((12.0 + 12.0) - (11.4 + 11.4))} - 13'000 = 934'333 \, \Omega$$