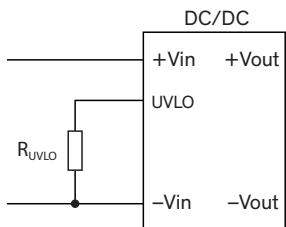


**Startup and Shutdown adjustment**

These series have an ultra wide input voltage range, thus they can cover many nominal input voltages in one module. In order to prevent incorrect operation under different input conditions, they offer Under Voltage Lockout (UVLO) adjustment by connecting a resistor between UVLO and  $-V_{in}$  pin.

**Connection**

**Table for Constants**

Model	A	B	C
<b>THN 15-36xxUIR</b> <b>THN 20-36xx-UIR</b>	14'804	144'000	16'500
<b>THN 15-72xxUIR</b> <b>THN 20-72xxUIR</b>	22'330	321'000	24'000

**Startup equation**

$$V_{StartUp} = (0.8 + \frac{A \times R_{UVLO}}{A + R_{UVLO}} \times 5 \times 10^{-6}) \times (1 + B \times \frac{C + R_{UVLO}}{C \times R_{UVLO}})$$

**Shutdown equation**

$$V_{Shutdown} = 0.785 \times (1 + B \times \frac{R_{UVLO} + C}{R_{UVLO} \times C})$$