

### 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 –Vin pin.

#### Connection

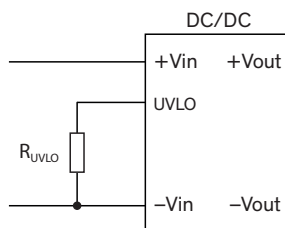


Table for Constants

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

#### Startup equation

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

#### Shutdown equation

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