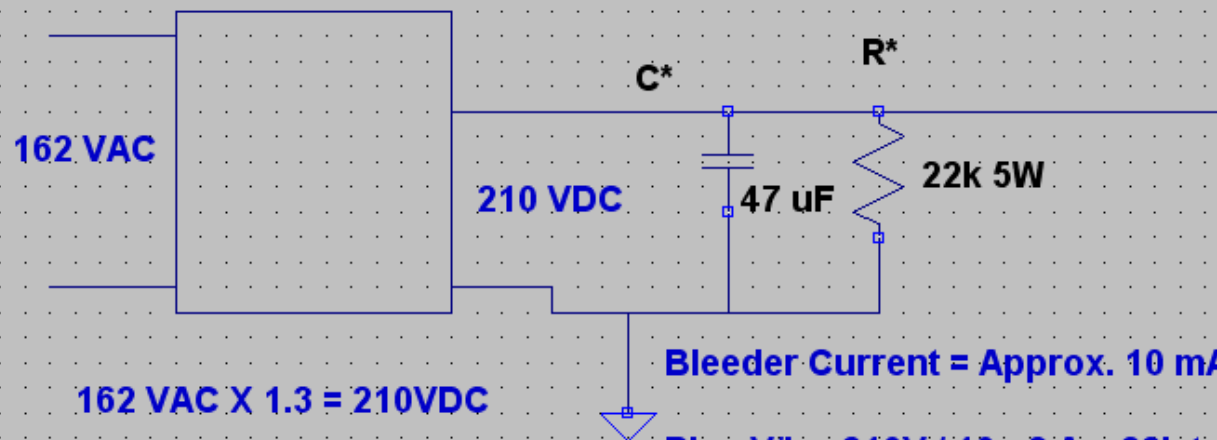


## Quick and Dirty MV Power Supply

**FULL Wave Bridge Rectifier**    **Choose Bleeder Current = Max Load Current X 0.070**



$$162 \text{ VAC} \times 1.3 = 210\text{VDC}$$

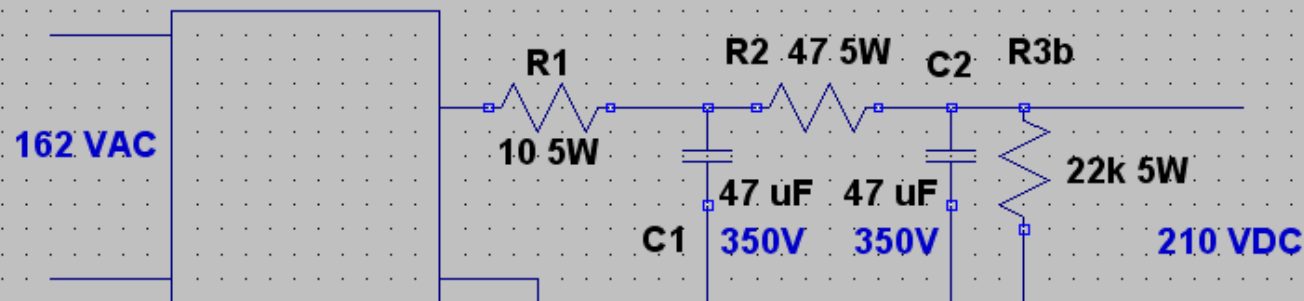
$$R_b = V/I = 210\text{V} / 10\text{e-}3 \text{ A} = 22\text{k to the nearest Conv. Value}$$

$$Pr = I^2 \times R_b = 10\text{e-}3 \text{ A}^2 \times 22\text{e}3 = 2.2\text{W}; \text{ Choose a 5W WW}$$

$$\tau = R \times C = 1.03 \text{ Seconds}; \text{ Allow 5 seconds to discharge.}$$

## Quick and Dirty MV Power Supply with Pi Filter

FULL Wave Bridge Rectifier Choose Bleeder Current = Max Load Current X 0.070



$$162 \text{ VAC} \times 1.3 = 210 \text{ VDC}$$

Bleeder Current = Approx. 10 mA

$$R_b = V/I = 210 \text{ V} / 10 \text{e-}3 \text{ A} = 22 \text{ k to the nearest Conv. Value}$$

$$P_r = I^2 \times R_b = 10 \text{e-}3 \text{ A}^2 \times 22 \text{e}3 = 2.2 \text{ W}; \text{ Choose a 5W WW}$$

$$\tau = R \times C = 1.03 \text{ Seconds; Allow 5 seconds to discharge.}$$