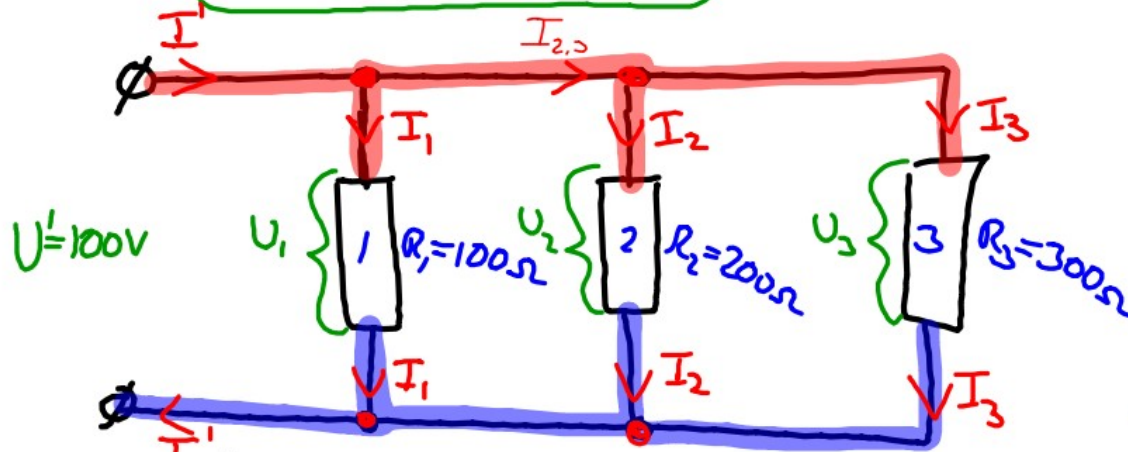


PARALLEL KREDS

(PARALLEL FORBINDELSE)

$$U' = U_1 = U_2 = U_3$$



	U	I	R
1	100V	1A	100Ω
2	100V	500mA	200Ω
3	100V	333,33mA	300Ω
Tot	100V	1,83A	54,55Ω

$$I_1 = \frac{U_1}{R_1} \Rightarrow \frac{100}{100} = \underline{1A}$$

$$I_2 = \frac{U_2}{R_2} = \frac{100}{200} = 0,5A \sim \underline{500mA}$$

$$I_3 = \frac{U_3}{R_3} = \frac{100}{300} = \underline{333,33mA}$$

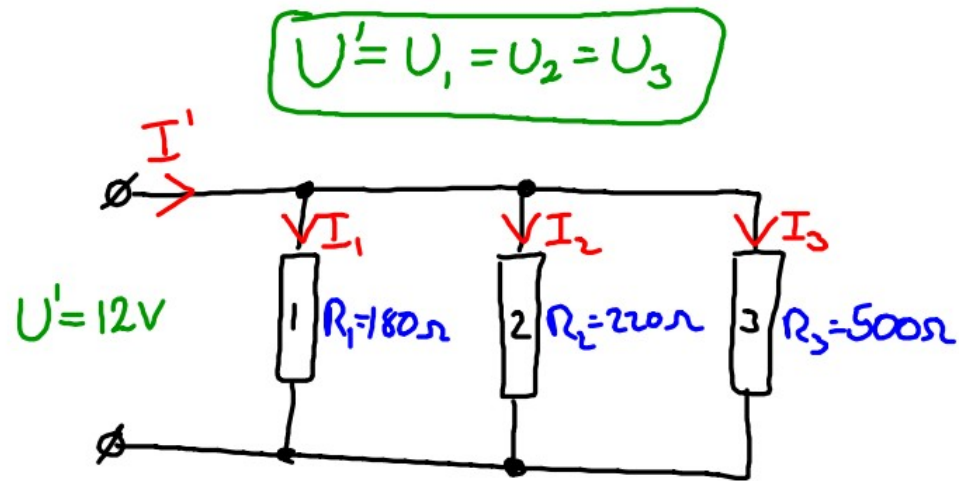
$$I' = I_1 + I_2 + I_3 = 1 + 0,5 + 0,33333 = \underline{1,83A}$$

$$R' = \frac{U'}{I'} = \frac{100}{1,83} = \underline{54,55\Omega}$$

RECIPROKKE REGNE METODE:

$$R' = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}} \left\{ R' = (R_1^{-1} + R_2^{-1} + R_3^{-1})^{-1} \right.$$

$$R' = (R_1^{-1} + R_2^{-1} + R_3^{-1})^{-1} \Rightarrow (100^{-1} + 200^{-1} + 300^{-1})^{-1} = \underline{54,55\Omega}$$



$$I_1 = \frac{U_1}{R_1} \Rightarrow \frac{12}{180} = \underline{\underline{66,67mA}}$$

$$I_2 = \frac{U_2}{R_2} \Rightarrow \frac{12}{220} = \underline{\underline{54,55mA}}$$

$$I_3 = \frac{U_3}{R_3} \Rightarrow \frac{12}{500} = \underline{\underline{24mA}}$$

$$I' = I_1 + I_2 + I_3 \Rightarrow 66,67 + 54,55 + 24 = \underline{\underline{145,22mA}}$$

$$R' = \frac{U'}{I'} \Rightarrow \frac{12}{0,14522} = \underline{\underline{82,64\Omega}}$$

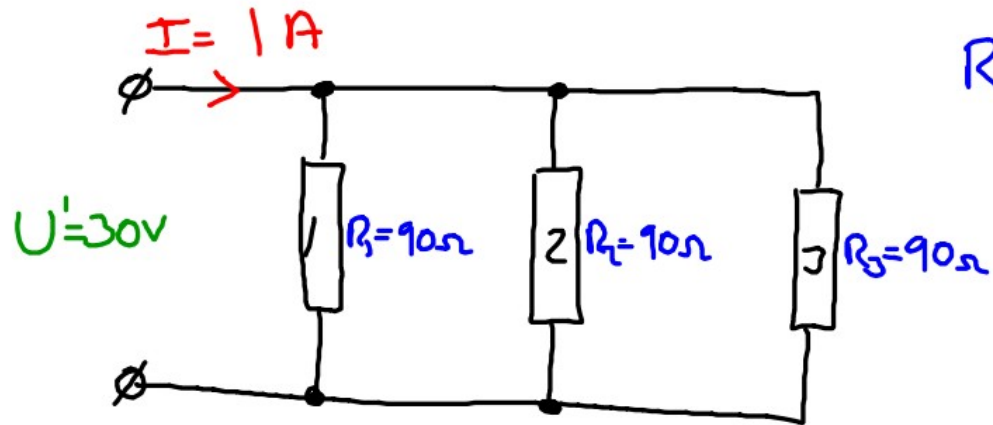
ELLEN

$$R' = (R_1^{-1} + R_2^{-1} + R_3^{-1})^{-1} = (180^{-1} + 220^{-1} + 500^{-1})^{-1} = \underline{\underline{82,64\Omega}}$$

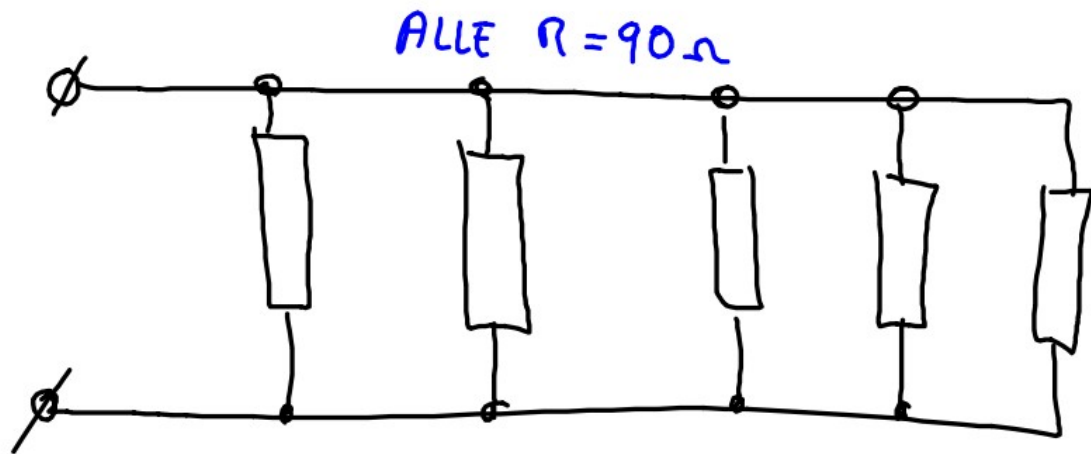
	U	I	R
1	12V	66,67mA	180Ω
2	12V	54,55mA	220Ω
3	12V	24mA	500Ω
Tot	12V	145,22 mA	82,64Ω

GULDKORN I PARALLEL

30 Ω



$$R' = (R_1' + R_2' + R_3') = (90' + 90' + 90') = \underline{\underline{30\Omega}}$$



$$\frac{90}{5} = \underline{\underline{18\Omega}}$$