

U_1 [V]	U_2 [V]	R_1 [Ω]	R_2 [Ω]	L_1 [mH]	L_2 [mH]	C_1 [μF]	C_2 [μF]	f [Hz]
3	4	10	13	220	70	230	85	75

Nejprve si převedeme hodnoty na základní jednotky

$$L_1 = 220mH = 0.22H$$

$$L_2 = 70mH = 0.07H$$

$$C_1 = 230mH = 0.00023F$$

$$C_2 = 85mH = 0.000085F$$

$$\omega = 2\pi f = 2 \cdot \pi 75 = 471.23889803846896 // Addunits$$

$$Z_{L1} = 1j\omega L_1 = 1j \cdot 471.23889803846896 \cdot 0.22 = 103.67255756846318j \Omega$$

$$Z_{L2} = 1j\omega L_2 = 1j \cdot 471.23889803846896 \cdot 0.07 = 32.98672286269283j \Omega$$

$$Z_{C1} = -\frac{1j}{\omega C_1} = -\frac{1j}{471.23889803846896 \cdot 0.00023} = 9.226373512573643j \Omega$$

$$Z_{C2} = -\frac{1j}{\omega C_2} = -\frac{1j}{471.23889803846896 \cdot 0.000085} = 24.965481269316918j \Omega$$