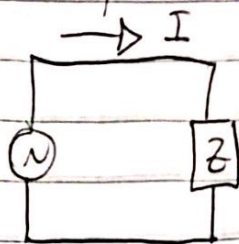


zda paralel 2017



$$e = ZI$$

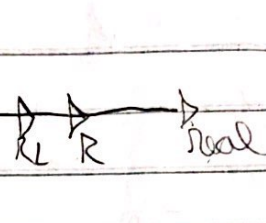
$$|E| = |Z| |I| = I_{max}$$

$\underbrace{|E|}_{V_0} \quad \underbrace{|I|}_{I_0}$

$$Z = \frac{V_0}{I_0}$$

$$I_{max} = E/|Z|$$

d



xL

A ↓ |Z| ↑ I_{max}



$$I_{max} = I_0$$

|Z| menas paralel
 $(\omega L - \frac{1}{\omega C}) = 0$

$$Z = R + RL + jX_L + jX_C$$

$\underbrace{\quad}_{\omega L} \quad \underbrace{\quad}_{\frac{1}{\omega C}}$

$$\boxed{L = \frac{1}{\omega C}}$$

$$Z = (R + RL) + \underbrace{\left(\omega L - \frac{1}{\omega C} \right)}_{\text{imaginary}}$$

$$|Z| = \sqrt{(R + RL)^2 + \left(\omega L - \frac{1}{\omega C} \right)^2}$$

$$\frac{\omega^2 LC - 1}{\omega C}$$

$$|Z| = \frac{V_0}{I_0}$$

$$|Z| = \sqrt{R + RL}$$

$$|Z| = \frac{100}{0,2} = 500$$

$$|Z| = R + RL$$

$$RL = (500 - 450) \Omega$$

$$0,2$$

$$RL = 50 \Omega$$

$$i_{rms} = \frac{I_0}{\sqrt{2}} = \frac{0,2}{\sqrt{2}} = 0,14 A$$

$$P_{gen} = i \cdot V$$

$$P = R \cdot i_{rms}^2$$

$$P = 450 (0,14)^2 = 9 W$$