



$$L = 0,1 \text{ H} ; R = 100 \Omega ; \alpha = \frac{\pi}{3} ; \phi = 0,3043$$

$$\phi_0 = 1,8727 + \frac{\pi}{2} ; Z = 104,81$$

$$\approx 107,3^\circ + \frac{\pi}{2} = 197,3$$

$$\omega L = 31,415$$

$$V_{\text{med}} = 3 \times \frac{1}{2\pi} \times \int_{\frac{\pi}{2}}^{\frac{\pi}{2} + 1,8727} \sqrt{2} \cdot 230 \sin(\theta) d\theta + 0$$

$$= 148,2804 \text{ [V]}$$

$$I_{\text{med}} = 0,49426 \text{ [A]} \text{ [AVERAGE]}$$

$$I_{\text{med}} = 3 \times 0,49426 = 1,48278$$

$$P_{\text{med}} = 3 \times \frac{1}{2\pi} \times \int_{\frac{\pi}{2}}^{\frac{\pi}{2} + 1,8727} \sqrt{2} \cdot 230 \sin(\theta + \alpha) \times \sqrt{2} \cdot 230 \sin(\theta) d\theta + 0$$

$$= 299,416 \text{ [W]}$$

$$\left[ -\frac{\sqrt{2} \cdot 230}{104,81} \sin\left(\frac{\pi}{2} - 0,3043\right) + \frac{\sqrt{2} \cdot 230}{104,81} \sin\left(\theta + \frac{\pi}{2} - 0,3043\right) \right]$$