

$$p(t) = \frac{U_m I_m}{2} \cos \psi - \frac{U_m I_m}{2} \cos(2\omega t - \psi)$$

$$P_{sr} = \frac{1}{T} \int_0^T p(t) dt =$$

$$= \frac{1}{T} \int_0^T \frac{U_m I_m \cos \psi}{2} dt + \frac{1}{T} \int_0^T \frac{U_m I_m \cos(2\omega t - \psi)}{2} dt$$

$$P_{sr} = \frac{U_m I_m \cos \psi}{2} = P = \frac{U_m}{\sqrt{2}} \cdot \frac{I_m}{\sqrt{2}} \cos \psi$$

$$P = UI \cos \psi$$

↓ u opstom sledoy4 ja to

$$P = UI \cos \psi$$

$$\cos \psi = \frac{P}{UI} \quad (\text{faktor snopce})$$

= predstavu premo uovp. broys

$$u(t) \Rightarrow U_m \sin(\omega t + \theta)$$

$$\Rightarrow \frac{U_m}{\sqrt{2}} (\cos \theta + j \sin \theta) =$$

$$= U \cos \theta + j U \sin \theta = \bar{U}$$

$$i(t) \Rightarrow I \cos \psi + j I \sin \psi = \bar{I}$$