

d) Az indítókapacitátor kapacitása:

$$X_{Ls} = \sqrt{Z_s^2 - R_s^2} = \sqrt{50^2 - 35^2} = 35,5 \, \Omega$$

$$Z_s' = \frac{R_s}{\cos \varphi_s} = \frac{35}{0,66} = 53 \, \Omega$$

$$X_c = \sqrt{Z_s'^2 - R_s^2} + X_{Ls} = \sqrt{53^2 - 35^2} + 35,7 = 75,5 \, \Omega$$

$$C_i = \frac{1}{2 \cdot \pi \cdot f \cdot X_c} = \frac{1}{2 \cdot \pi \cdot 50 \cdot 75,5} = 42,1 \, \mu\text{F}$$

$$C_i = 42,1 \, \mu\text{F}$$

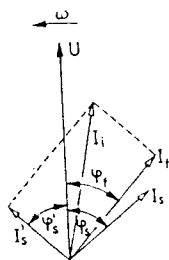
e) Az indítási áram:

$$I_s' = \frac{U}{Z_s'} = \frac{220}{53} = 4,15 \, \text{A}$$

$$I_i = \sqrt{I_f^2 + I_s'^2} = \sqrt{5,5^2 + 4,15^2} = 6,9 \, \text{A}$$

$$I_i = 6,9 \, \text{A}$$

f)



5.2.3. feladat

$$a) \, q_f = \frac{2}{3} \cdot \frac{Z}{2 \cdot p} = \frac{2 \cdot 24}{3 \cdot 2} = 8$$

$$q_f = 8$$

$$q_s = \frac{1}{3} \cdot \frac{Z}{2 \cdot p} = \frac{24}{3 \cdot 2} = 4$$

$$q_s = 4$$