

$I_2' = \frac{U_{1n}}{\sqrt{\left(R_1 + \frac{R_2'}{s_n}\right)^2 + X_s^2}} = \frac{220}{\sqrt{\left(1,05 + \frac{1,05}{0,04}\right)^2 + 5,62^2}} = 7,89 \text{ A}$	
$\cos \varphi_2 = \frac{R_1 + \frac{R_2'}{s_n}}{\sqrt{\left(R_1 + \frac{R_2'}{s_n}\right)^2 + X_s^2}} = \frac{1,05 + \frac{1,05}{0,04}}{\sqrt{\left(1,05 + \frac{1,05}{0,04}\right)^2 + 5,62^2}} = 0,9794$	
$I_{2h}' = I_2' \cdot \cos \varphi_2 = 7,89 \cdot 0,9794 = 7,73 \text{ A}$	
$\sin \varphi_2 = \sqrt{1 - \cos^2 \varphi_2} = \sqrt{1 - 0,9794^2} = 0,2016$	
$I_{2m}' = I_2' \cdot \sin \varphi_2 = 7,89 \cdot 0,2016 = 1,59 \text{ A}$	
$I_{nh}' = I_{2h}' + I_r = 7,73 + 0,5 = 8,23 \text{ A}$	
$I_{nm}' = I_{2m}' + I_m = 1,59 + 2,933 = 4,52 \text{ A}$	
$I_n = \sqrt{I_{nm}'^2 + I_{nh}'^2} = \sqrt{8,23^2 + 4,52^2} = 9,392 \text{ A}$	
$M_n = \frac{3 \cdot I_2'^2 \cdot \frac{R_2'}{s_n}}{\omega_0} = \frac{3 \cdot 7,893^2 \cdot \frac{1,05}{0,04}}{157,079} = 31,23 \text{ N}\cdot\text{m}$	
$I_n = 9,392 \text{ A}$	
$M_n = 31,23 \text{ N}\cdot\text{m}$	
a) A fordulatszám: $n_0 = \frac{60 \cdot f}{p} = \frac{60 \cdot 50}{3} = 1000 \text{ 1/min}$ $n = (1 - s) \cdot n_0 = (1 - 0,02) \cdot 1000 = 980 \text{ 1/min}$	
b) Az áram: $P_1 = \frac{P_n}{\eta} = \frac{200}{0,91} = 220 \text{ kW}$ $I_n = \frac{P_1}{\sqrt{3} \cdot U_n \cdot \cos \varphi} = \frac{220}{\sqrt{3} \cdot 1 \cdot 0,85} = 149,4 \text{ A}$	
5.1.28. feladat $n = 980 \text{ 1/min}$ $I_n = 149,4 \text{ A}$	