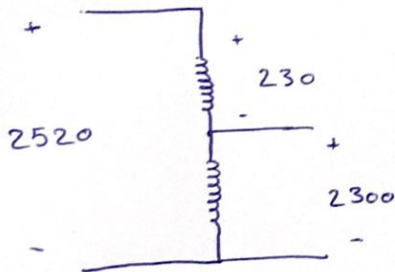


#3

$$\left\{ \begin{array}{l} 20 \text{ KVA} \\ 2300 \\ \hline 230 \end{array} \right\}$$

ضریب بار، بار  
ضریب قدرت  
واند



$$S_{BT} = S_T \left( \frac{V_H}{V_H - V_L} \right) = 20 \left( \frac{2520}{230} \right) = 220$$

$$S_T = 20 \text{ KVA} \quad \text{استاتی}$$

$$S_C = 200 \text{ KVA} \quad \text{مغناطیسی}$$

$$\eta = \frac{k_c S_n \cos \phi}{k_c S_n \cos \phi + P_{cu} k_c^2 + P_{fe}} = \frac{P_2}{P_2 + \Delta P} \Rightarrow 0.96 = \frac{12}{12 + \Delta P}$$

$$\Rightarrow \Delta P = 0.5 \text{ KW}$$

$$\eta_{BT} = \frac{220 \times 0.6}{(220 \times 0.6) + 0.5} \times 100 = 99.62 \rightarrow \text{بازدهای انتقال انرژی}$$