

str. 131 / úloha 690

$$P_0 = 30 \text{ kW} = 30\,000 \text{ W}$$

$$\eta = 80\% = 0,8$$

$$W = ? \text{ [J]}$$

$$\Delta = 5 \text{ min} = 300 \text{ s}$$

$$P = \frac{W}{\Delta}$$

$$\eta = \frac{P}{P_0}$$

$$W = P \cdot \Delta$$

$$P = \eta \cdot P_0$$

$$W = 24\,000 \cdot 300$$

$$P = 0,8 \cdot 30\,000$$

$$W = 7\,200\,000 \text{ J}$$

$$P = 24\,000 \text{ W}$$

$$\underline{\underline{W = 7,2 \text{ MJ}}}$$

Motor vykona práci 7,2 MJ.