

## 0.1 Elektromotor und Generator

### Elektromotor

- Permanenzmagnete
- Anker (Eisenkern, Spule(n))
- Schleifkontakte
- Kommutator

$$\eta = \frac{P_{\text{rat}}}{P_{\text{ret}}} = \frac{U_i I}{U_0 I} = \frac{U_i}{U_0} = \frac{U_0 - U_R}{U_0} = 1 - \frac{U_R}{U_0};$$

### Generator (B. S. 260)

$$U_i = N \dot{\phi} = N(\dot{A}B) = nB\dot{A} = nB(\hat{\cos \omega t}) = nB\hat{A}\omega \cdot \sin \omega t;$$

$$P = \frac{U^2}{R};$$