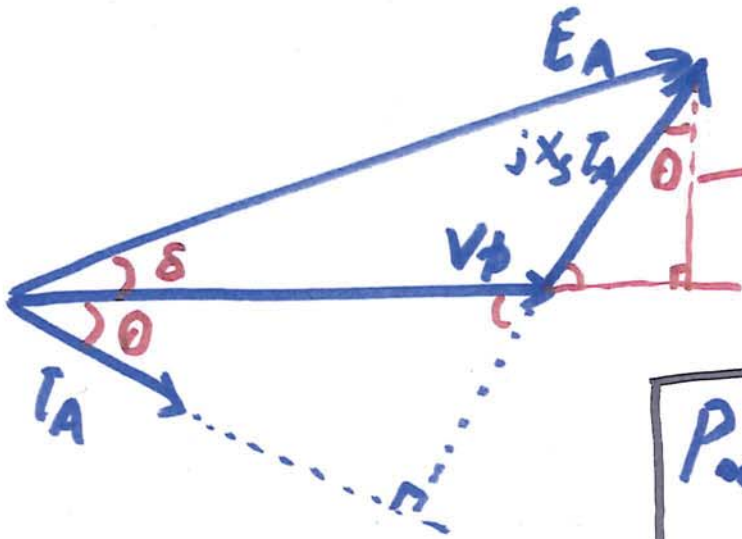


$$E_A = V_\phi + I_A (R_A + jX_s)$$

If  $R_A \ll X_s$ , then  $E_A = V_\phi + I_A (jX_s)$

$$P_{out} = 3V_\phi I_A \cos \theta$$



$$X_s I_A \cos \theta = E_A \sin \delta$$

$$I_A \cos \theta = \frac{E_A \sin \delta}{X_s}$$

$$P_{out} = P_{conv} = 3V_\phi \frac{E_A \sin \delta}{X_s}$$

$$T_{ind} = \frac{P_{conv}}{\omega_m} = 3V_\phi \frac{E_A \sin \delta}{\omega_m X_s}$$

