opgave 11.04:

$U := 230 \cdot V$

$I_{bel} := (8 \cdot A) \angle -30$

$R_g := (0.3 \cdot \Omega) \angle 0$

$X_g := (0.6 \cdot \Omega) \angle 90$

$Z_g := R_g + X_g = (0.3 + 0.6i)\,\Omega$ $\quad |Z_g| = 0.671\,\Omega$ $\quad \arg(Z_g) = 63.435 \cdot deg$

$\Delta U_g := I_{bel} \cdot Z_g = (4.478 + 2.957i)\,V$ $\quad |\Delta U_g| = 5.367\,V$ $\quad \arg(\Delta U_g) = 33.435 \cdot deg$

$E := U + \Delta U_g = (234.478 + 2.957i)\,V$ $\quad |E| = 234.497\,V$ $\quad \arg(E) = 0.722 \cdot deg$

$I_k := \frac{E}{Z_g} = (160.262 - 310.667i)\,A$ $\quad |I_k| = 349.568\,A$ $\quad \arg(I_k) = -62.712 \cdot deg$