

Ej 3

9/7/2013

$$\bar{Z}_s = \bar{X}_{gs1} + \bar{X}_{ps2} + \bar{Z}_{Ls} = 51 j \quad (\Omega)$$

$$\bar{Z}_o = \bar{Z}_s$$

$$\bar{Z}_o = 3\bar{Z}_n + \bar{Z}_{L0} + \bar{X}_{g01} + \bar{X}_{g02} = 30 j \quad (\Omega)$$

$$\bar{U} = 400 \times \bar{Z}_s = 20400 j \quad (V)$$

Tomo U como nuevo origen de Fases

$$\bar{I}_h = \frac{-\bar{Z}_o \cdot \bar{U}}{\bar{Z}_s \cdot \bar{Z}_o + \bar{Z}_s \cdot \bar{Z}_o + \bar{Z}_o \cdot \bar{Z}_o} = 184 j \quad (A)$$

$$\cancel{I_{rela}} \quad I_{rela} = 3 I_h \cdot \frac{5}{500} = 5,51 A$$

$$t = 0,398 s$$