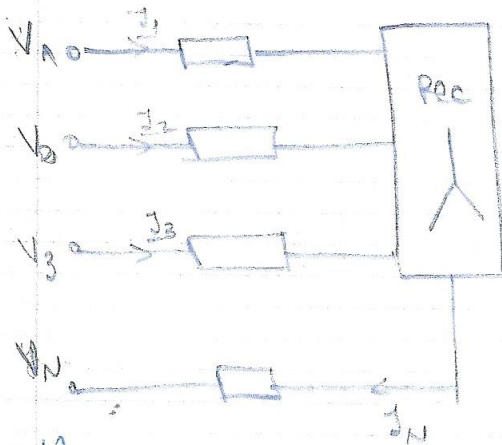


Dacă receptorul este echilibrat:

$$I_e = \sqrt{3} I_f$$

Puterea în sist. trifazele echilibrate



$$\underline{S} = \underline{V}_1 \underline{I}_1^* + \underline{V}_2 \underline{I}_2^* + \underline{V}_3 \underline{I}_3^*$$

$$\underline{I}_1 + \underline{I}_2 + \underline{I}_3 = \underline{I}_N$$

$$U_{10} = U$$

$$U_{20} = 2U$$

$$U_{30} = aU$$

$$\underline{S} = (\underline{V}_1 - \underline{V}_0) \underline{I}_1^* + (\underline{V}_2 - \underline{V}_0) \underline{I}_2^* + (\underline{V}_3 - \underline{V}_0) \underline{I}_3^*$$

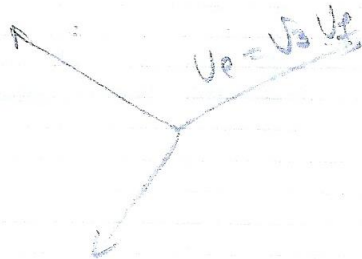
$$\underline{S} = \underline{V}_{10} \underline{I}_1^* + \underline{V}_{20} \underline{I}_2^* + \underline{V}_{30} \underline{I}_3^*$$

$$\underline{S} = \underline{V}_{10} \underline{I}_1^* + a^2 U (a^2)^* \underline{I}_2^* + a U (a)^* \underline{I}_3^*$$

$$(a)^* = a^2$$

$$(a^2)^* = a$$

$$\underline{S} = \underline{V}_{10} \underline{I}_1^* + \underline{V}_{10} \underline{I}_2^* + \underline{V}_{10} \underline{I}_3^*$$



$$S = 3 U_f I_f^*$$