

Parametrii cuadripolului se pot determina prin calcul, experimental sau prin înlocuirea de măsură în pol al scurtcircuit.

$$\begin{cases} \underline{U}_1 = \underline{A} \cdot \underline{U}_2 + \underline{B} \cdot \underline{I}_2 \\ \underline{I}_1 = \underline{C} \cdot \underline{U}_2 + \underline{D} \cdot \underline{I}_2 \end{cases}$$

$$\Rightarrow \underline{z}_{1g} = \left. \frac{\underline{U}_1}{\underline{I}_1} \right|_{\underline{I}_2=0} = \frac{\underline{A}}{\underline{C}}$$

$$\underline{z}_{1sc} = \left. \frac{\underline{U}_1}{\underline{I}_1} \right|_{\underline{U}_2=0} = \frac{\underline{B}}{\underline{D}}$$

$$\underline{z}_{2g} = \left. \frac{\underline{U}_2}{\underline{I}_2} \right|_{\underline{I}_1=0} = -\frac{\underline{D}}{\underline{C}}$$

$$\underline{z}_{2sc} = \left. \frac{\underline{U}_2}{\underline{I}_2} \right|_{\underline{U}_1=0} = -\frac{\underline{B}}{\underline{A}}$$

$$\Rightarrow -\underline{z}_{1g} \cdot \underline{C} \cdot \underline{z}_{2g} \cdot \underline{C} - \underline{z}_{1sc} \cdot \underline{D} \cdot \underline{z}_{2sc} \cdot \underline{C}^2 = 1$$

$$\underline{C}^2 = -\frac{1}{\underline{z}_{1g} \cdot \underline{z}_{2g} + \underline{z}_{1sc} \cdot \underline{z}_{2sc}} \Rightarrow \underline{C}$$

respectiv

\underline{T}

\underline{A}

$$\underline{Y} = \underline{C}$$

$$\underline{z} = \underline{B}$$

$$\underline{z}_1 = \frac{\underline{A}-1}{\underline{C}}$$

$$\underline{y}_1 = \frac{\underline{D}-1}{\underline{B}}$$

$$\underline{z}_2 = \frac{\underline{D}-1}{\underline{C}}$$

$$\underline{y}_2 = \frac{\underline{A}-1}{\underline{B}}$$