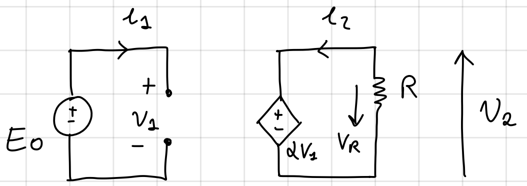
Gen Con - ATTIVI



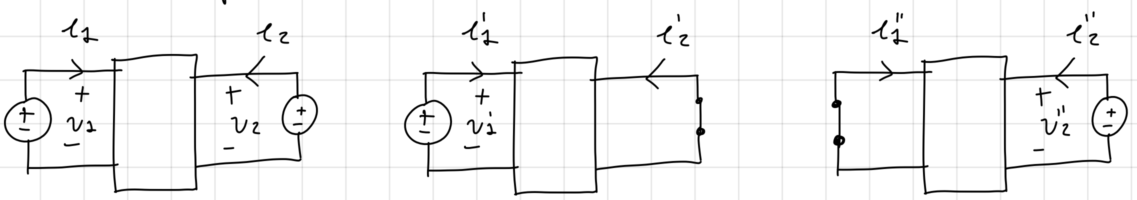
RC : $\begin{cases} i_1 = 0 \\ V_2 = \alpha V_1 \end{cases}$ $\rightsquigarrow$ $\begin{pmatrix} i_1 \\ V_2 \end{pmatrix} = \begin{pmatrix} 0 & 0 \\ \alpha & 0 \end{pmatrix} \begin{pmatrix} V_1 \\ i_2 \end{pmatrix}$

$\rightarrow P(t) = V_1(t) \cancel{i_1(t)}^{\,0} + V_2(t) i_2(t)$

$\rightarrow P(t) = \alpha V_1 \cdot i_2$ ma $V = R \cdot i \Rightarrow V_2 = -R \cdot i_2 \Rightarrow i_2 = \dfrac{V_2(t)}{-R} = \dfrac{\alpha E_0}{-R}$

$\rightarrow P(t) = \alpha E_0 \cdot \dfrac{\alpha E_0}{-R} = \dfrac{\alpha^2 E_0^2}{-R} \leq 0$ $\rightarrow$ BP. ATTIVO

Forme di reciprocità



- Tensione
- Corrente

Potenze Virtuali

$\sum^{e} v'(t) \cdot i''(t) = \sum^{e} v''(t)\, i'(t) = 0$

(1) $\sum^{e} V_k'' i_k' - \cancel{V_1'' i_1'}^{\,0} - \cancel{V_2'' i_2'}^{\,0}$

(2) $\sum^{e} V_k' i_k'' - \cancel{V_1' i_1''}_{\,0} - \cancel{V_2' i_2''}_{\,0}$

$\sum V_k'' \cdot i_k' = \sum \underbrace{(R \cdot i_k'') \cdot i_k'}_{V_k'} = \sum V_k' i_k''$ $\rightarrow (2-1) = -V_2'' i_2' + V_1' i_1''$

ma $V_2'' = V_1' = V$

$\rightarrow -V i_2' + V i_1'' \rightarrow \boxed{\dfrac{i_1''}{V} = \dfrac{i_2'}{V}}$ (1)

$-V_2' i_2'' + V_1'' i_1' \rightarrow i_1' = i_2'' = I \rightarrow \boxed{\dfrac{V_2'}{I} = \dfrac{V_1''}{I}}$ (2)

$V_1'' i_1' + V_2'' i_2' = 0 \rightarrow V_1'' i_1' = -V_2'' i_2' \rightarrow i_1' = I \quad V_2'' = V$

$\rightarrow V_1'' I = -V i_2' \rightarrow \dfrac{V_1''}{V} = -\dfrac{i_2'}{I}$

MAT CONDUTT