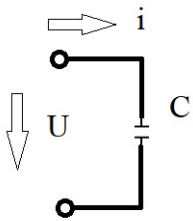


Kondenzátor:



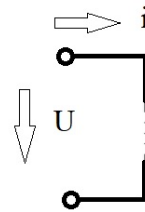
$$i_c(t) = C \frac{du_c}{dt}$$

$$Q = C U$$

$$\text{energiája: } W(t) = \frac{1}{2} C u^2(t)$$

$$u_c(-0) = u_c(+0) \text{ Folytonos}$$

Tekercs:



$$u_L(t) = L \frac{di_L}{dt}$$

$$\Psi = L I$$

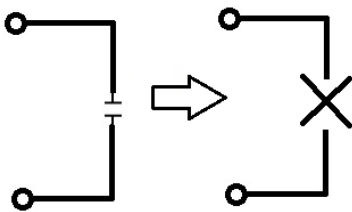
$$\text{energiája: } W(t) = \frac{1}{2} L i_L^2(t)$$

$$i_L(-0) = i_L(+0) \text{ Folytonos}$$

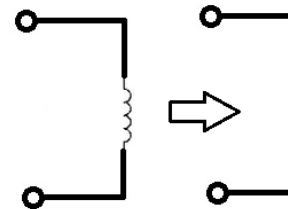
Állandósult állapot:

Kondenzátor:

[$t=(-0)$, $t=(\infty)$]



Tekercs:

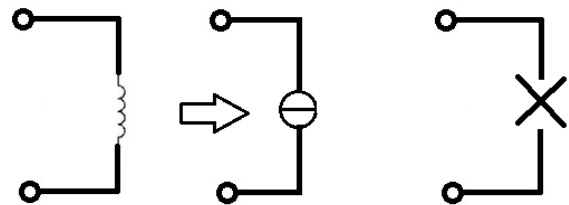
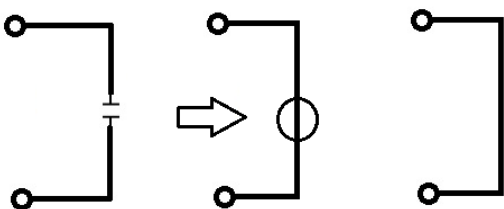


Kapcsolás pillanata:

[$t=(+0)$]

ha $u_c(-0) = 0$

ha $i_L(-0) = 0$



$$\bar{Z} = x + j \cdot y = Z \cdot e^{j\varphi}$$

- Euler-formula: $e^{j\varphi} = \cos(\varphi) + j \cdot \sin(\varphi)$

$$x = \text{Re}(\bar{Z}) = Z \cdot \cos(\varphi)$$

$$y = \text{Im}(\bar{Z}) = Z \cdot \sin(\varphi)$$

$$Z = |\bar{Z}| = \sqrt{x^2 + y^2}$$

$$\varphi = \text{arc}(\bar{Z}) = \arctan(y/x)$$

