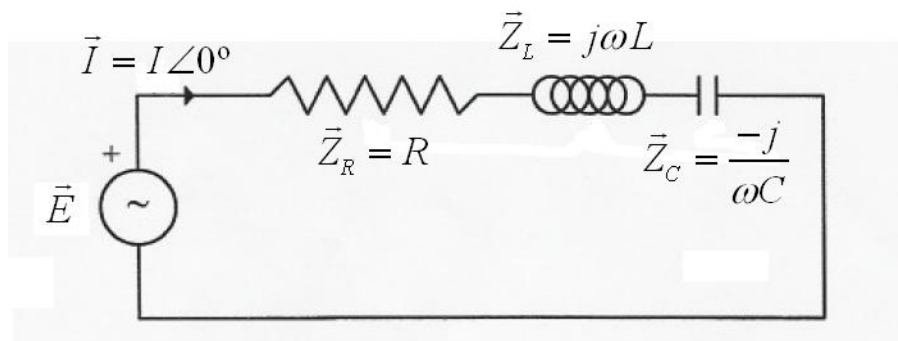




CIRCUITO SERIE

$$\begin{aligned}
 \vec{E} &= \vec{Z}_R \vec{I} + \vec{Z}_L \vec{I} + \vec{Z}_C \vec{I} \\
 &= (\vec{Z}_R + \vec{Z}_L + \vec{Z}_C) \vec{I} \\
 &= \left(R + j\omega L - \frac{j}{\omega C} \right) \vec{I}
 \end{aligned}$$

ORIGEN DE FASES

$$\vec{I} = I \angle 0^\circ = 10 \angle 0^\circ \text{ A}$$

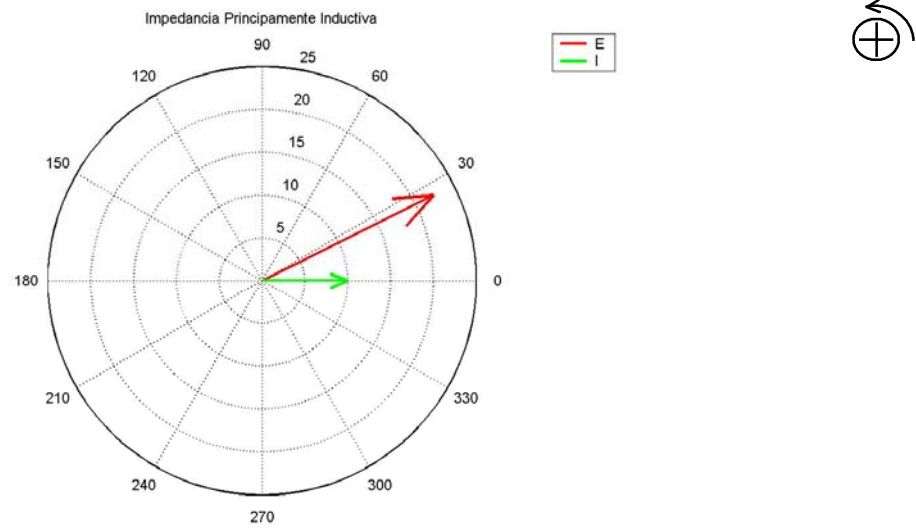
DATOS

Carga Principalmente Inductiva	Carga Principalmente Capacitiva
$R = 2 \Omega$	$R = 2 \Omega$
$X_L = 3 \Omega$	$X_L = 3 \Omega$
$X_C = -2 \Omega$	$X_C = -4 \Omega$
TENSIÓN DE LA FUENTE	
$\vec{E} = 22,36 \angle 26,56^\circ \text{ V}$	$\vec{E} = 22,36 \angle -26,56^\circ \text{ V}$

DOMINIO TEMPORAL

$i(t) = \sqrt{2} I \cos(\omega t) = \sqrt{2} \cdot 10 \cdot \cos(2\pi 50 \cdot t)$	
$e(t) = \sqrt{2} E \cos(\omega t + \text{fase}(\vec{E}))$ $= \sqrt{2} \cdot 22,36 \cdot \cos(2\pi 50 \cdot t + 26,56^\circ)$	$e(t) = \sqrt{2} E \cos(\omega t + \text{fase}(\vec{E}))$ $= \sqrt{2} \cdot 22,36 \cdot \cos(2\pi 50 \cdot t - 26,56^\circ)$

DIAGRAMA FASORIAL



REPRESENTACIÓN TEMPORAL

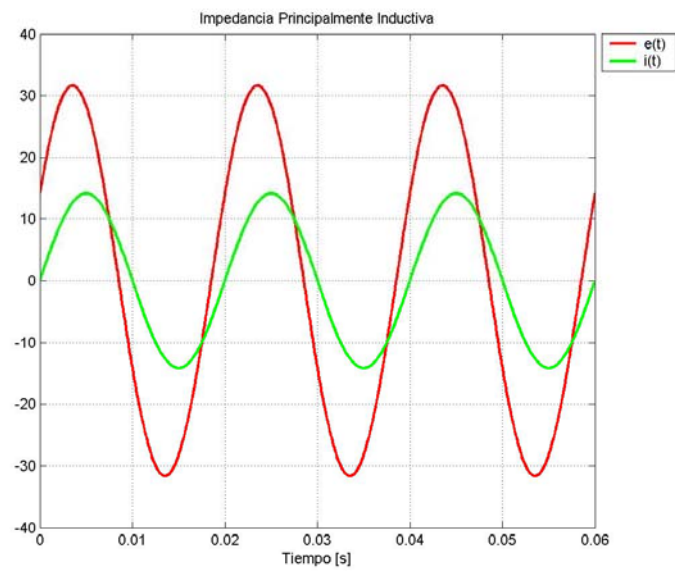
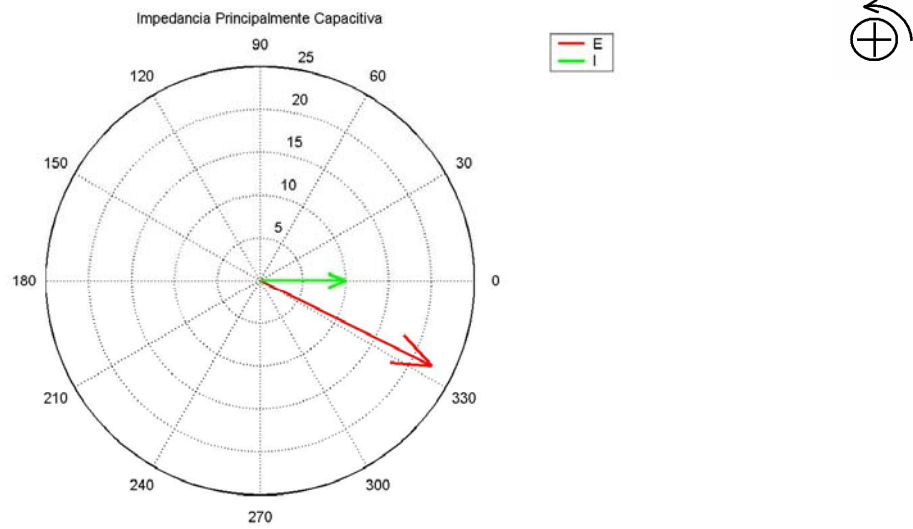


DIAGRAMA FASORIAL



REPRESENTACIÓN TEMPORAL

