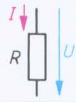
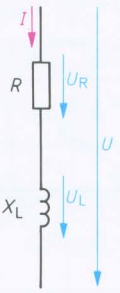
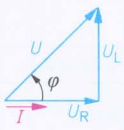
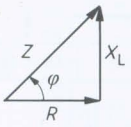
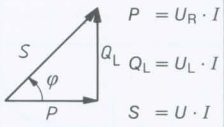
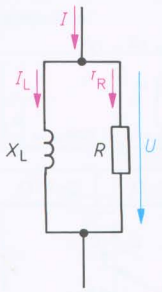
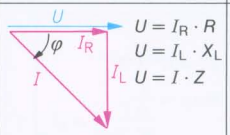
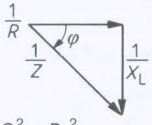
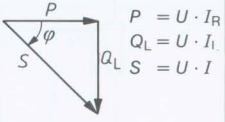
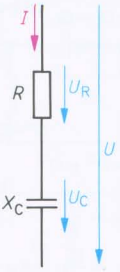
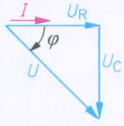
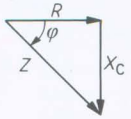
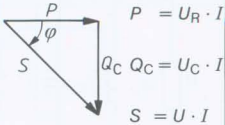
Upori v izmeničnem električnem tokokrogu

vezje	tok in napetost	upornost in prevodnost	moč
	 $I = \frac{U}{R}$ $\varphi = 0°$	$R = \frac{U}{I}$	$P = U \cdot I$ $P = I^2 \cdot R$ $P = \frac{U^2}{R}$
	 $I = \frac{U}{X_L}$ $\varphi = 90°$ (induktivni)	$X_L = 2\pi \cdot f \cdot L$ $X_L = \omega \cdot L$	$Q_L = U \cdot I$
	 $I = \frac{U}{X_C}$ $\varphi = 90°$ (kapacitivni)	$X_C = \frac{1}{2\pi \cdot f \cdot C}$ $X_C = \frac{1}{\omega \cdot C}$	$Q_C = U \cdot I$
	 $I = \frac{U_R}{R}$ $I = \frac{U_L}{X_L}$ $I = \frac{U}{Z}$ $U^2 = U_R^2 + U_L^2$ $\tan\varphi = \frac{U_L}{U_R}$ $\sin\varphi = \frac{U_L}{U}$; $\cos\varphi = \frac{U_R}{U}$	 $Z^2 = R^2 + X_L^2$ $\tan\varphi = \frac{X_L}{R}$ $\sin\varphi = \frac{X_L}{Z}$; $\cos\varphi = \frac{R}{Z}$	 $P = U_R \cdot I$ $Q_L = U_L \cdot I$ $S = U \cdot I$ $S^2 = P^2 + Q_L^2$ $\tan\varphi = \frac{Q_L}{P}$ $\sin\varphi = \frac{Q_L}{S}$; $\cos\varphi = \frac{P}{S}$
	 $U = I_R \cdot R$ $U = I_L \cdot X_L$ $U = I \cdot Z$ $I^2 = I_R^2 + I_L^2$ $\tan\varphi = \frac{I_L}{I_R}$ $\sin\varphi = \frac{I_L}{I}$; $\cos\varphi = \frac{I_R}{I}$	 $Y^2 = G^2 + B_L^2$ $\left(\frac{1}{Z}\right)^2 = \left(\frac{1}{R}\right)^2 + \left(\frac{1}{X_L}\right)^2$ $\tan\varphi = \frac{R}{X_L}$ $\sin\varphi = \frac{Z}{X_L}$; $\cos\varphi = \frac{Z}{R}$	 $P = U \cdot I_R$ $Q_L = U \cdot I_L$ $S = U \cdot I$ $S^2 = P^2 + Q_L^2$ $\tan\varphi = \frac{Q_L}{P}$ $\sin\varphi = \frac{Q_L}{S}$; $\cos\varphi = \frac{P}{S}$
	 $I = \frac{U_R}{R}$ $I = \frac{U_C}{X_C}$ $I = \frac{U}{Z}$ $U^2 = U_R^2 + U_C^2$ $\tan\varphi = \frac{U_C}{U_R}$ $\sin\varphi = \frac{U_C}{U}$; $\cos\varphi = \frac{U_R}{U}$	 $Z^2 = R^2 + X_C^2$ $\tan\varphi = \frac{X_C}{R}$ $\sin\varphi = \frac{X_C}{Z}$; $\cos\varphi = \frac{R}{Z}$	 $P = U_R \cdot I$ $Q_C = U_C \cdot I$ $S = U \cdot I$ $S^2 = P^2 + Q_C^2$ $\tan\varphi = \frac{Q_C}{P}$ $\sin\varphi = \frac{Q_C}{S}$; $\cos\varphi = \frac{P}{S}$