

Chapter 11, Problem 49.

Find the complex power for the following cases:

(a) $P = 4 \text{ kW}$, $\text{pf} = 0.86$ (lagging)

(b) $S = 2 \text{ kVA}$, $P = 1.6 \text{ kW}$ (capacitive)

(c) $\mathbf{V}_{\text{rms}} = 208 \angle 20^\circ \text{ V}$, $\mathbf{I}_{\text{ms}} = 6.5 \angle -50^\circ \text{ A}$

(d) $\mathbf{V}_{\text{rms}} = 120 \angle 30^\circ \text{ V}$, $\mathbf{Z} = 40 + j60 \Omega$