

Chapter 11, Problem 73.

A 240-V rms 60-Hz supply serves a load that is 10-kW (resistive), 15 kVAR (capacitive), and 22 kVAR (inductive). Find:

- (a) the apparent power
- (b) the current drawn from the supply
- (c) the kVAR rating and capacitance required to improve the power factor to 0.96 lagging
- (d) the current drawn from the supply under the new power-factor conditions