11 Electric Power

11.2 An oscilloscope displays a peak-to-peak AC voltage of 308 Volts using the screen graduations. What would a hand held digital voltmeter read?

11.3 A hand held digital voltmeter read 100Vac rms across a 60-cycle test circuit. Sketch the picture an oscilloscope would display with the time and voltage divisions correctly labeled.

11.9 Draw an elementary circuit containing a series connection of:

a.) A 3ϕ main breaker having both load and ground fault protection.

b.) A 3ϕ, 220Vac input circuit converted into a 1ϕ, 100Vac circuit.

c.) A 1ϕ, 100Vac input circuit converted into a +5V, 12, 15 and +24Vdc output circuit. Add fuses to both the inputs and outputs and add a circuit for detecting blown fuses.