

Sample Power Formula Problems

Given the following information solve the problems using the power formula

$$W=VA$$

Gauge of Wire	10	12	14	16	18
Amps	25	20	15	6	3

You are circuiting a 2.4KW dimmer with 120VAC, what gauge wire should you use, so that it can carry the full wattage of the dimmer.

Your designer wants to put 3 – 525W instruments and 20 –60W instruments on a 2.4K, 120VAC dimmer with 14 gauge wire, will this work?

How many 750W instruments can you safely place on a 5KW, 220VAC circuit with 12 gauge wire?

You want to put 20 - 15W Christmas light strands on 120VAC power. What is the smallest gauge of wire you could use?