

Hand dryer: $P = 1500 \text{ W}$ $\Delta V = 120 \text{ V}$

$$P = \frac{\Delta V^2}{R}$$

$$R = \frac{\Delta V^2}{P} = \underline{9.6 \Omega}$$

And, Ohm's Law:

$$I = \frac{1}{R} \Delta V = \underline{12.5 \text{ A}}$$