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Electrical Unit Terms

Volt - The units of electromotive force. The force required to send one ampere of current through a conductor of one ohm resistance.

Ohm - The unit of resistance. The resistance which limits the current to one ampere when impelled by one volt.

Ampere_- The unit of current. The current which flows through a conductor of one ohm resistance when one volt is applied across its terminals.

Coulomb A unit of quantity. The quantity of electricity passing through a conductor in one second at the rate of one ampere.

Ampere Hour - A unit of quantity. Equals 3600 coulombs or one ampere flowing for one hour.

Joule - A unit of work or energy. The work done by one waft in one second.

Watt Hour - A unit of work or energy. The work done by one waft in one hour.

Kilowatt Hour - A unit of work or energy. Equals 1000 waft hours.

Watt - The unit of electrical power. The power developed by one ampere of current flowing under a pressure of one volt.

Kilowatt - A unit of power, equal to 1000 watts.

Horsepower - A unit of power, equal to 746 watts, or the power required to raise 550 lbs. one foot in one second.

British Thermal Unit - Heat required to raise 1 lb. of water by 10 F. One K.W. hour equals 3.428 BTU

In the D.C. circuit such as a lamp, connecting line or rheostat, if the current flowing is in amperes, its resistance is in ohms, voltage across its terminals in volts and power used is in wafts, the following rules apply:

To find amperes, divide volts by ohms. To find volts, multiple amperes by ohms. To find ohms, divide volts by amperes. To find wafts, multiply volts by amperes. To find amperes, divided wafts by volts. To find volts, divide wafts by amperes. To find horsepower, divide wafts by 746. To find coulombs, multiply amperes by seconds. To find ampere-hours, divide coulombs by 3600 or multiply the amperes by hours.