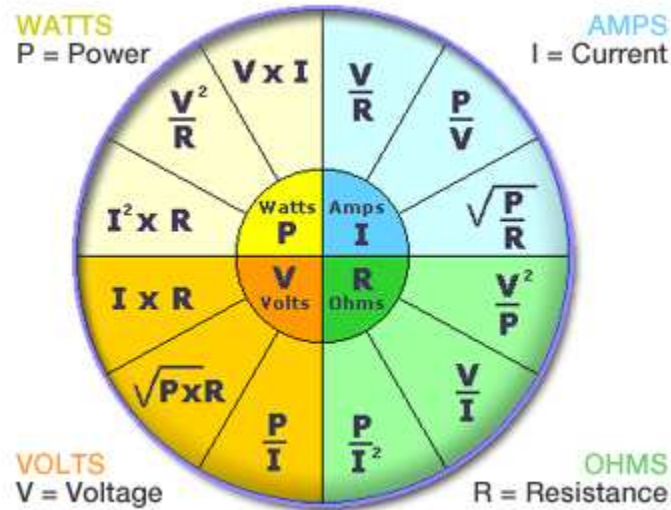


Hillsdale Terminal Standard Electrical Specification Terms

Electronics and Electricity, uses a wide range of terms to represent different kinds of measurement units. Many you have seen every day, and others from time to time in product specifications. These are all part of the International System of Units. Here is a short list of several common terms you will see in our products and their meanings:



Using This Chart You Can Easily Calculate
The Wattage, Current (Amps), Ohms, and Voltage For A Device!

WATT: In terms of mechanical energy, one watt (symbol: W or P) is a measure of energy used - this frequently results in heat, or as in the case of a light bulb, the heat creates a glow, thus more heat equals more light. Technically a Watt is the rate at which work is done when an object is moved at a speed of one meter per second against a force of one Newton. By the definitions of electric potential (volt) and current (ampere), work is done at a rate of one watt when one ampere flows through a potential difference of one volt - or simply $A \times V = W$

AMP (Ampere): In practical terms, the ampere (symbol: I) is the amount of electrical current passing through a conductor (a wire). Technically it is a measure of the amount of electric charge passing a point per unit time. Around 6.242×10^{18} electrons passing a given point each second constitutes one ampere. You can figure out the Amps being use by dividing the Wattage by Voltage. A 100W light, in a typical house (120V) uses 1.2A.

VOLT (Voltage): The volt (symbol: V) is the unit of electromotive force measurement, commonly called "voltage". Technically, the volt is defined as the value of the voltage across a conductor when a current of one ampere dissipates one watt of power in the conductor. For example, if you know a TV uses 295 Watts and uses 2.45 Amps, you can calculate the voltage is 120 Volts.

OHM: The ohm (symbol: Ω or R) is the unit of electrical impedance in AC, or, in the direct current case, electrical resistance. It is the resistance of material to electrical current. The higher the value, the higher the resistance, and the more voltage is required, and the more current used. Most home speakers are low resistance, just 8 ohm. Technically, the ohm is defined as the resistance between two points of a conductor when a constant of 1 volt is applied, and produces in a current of 1 ampere.