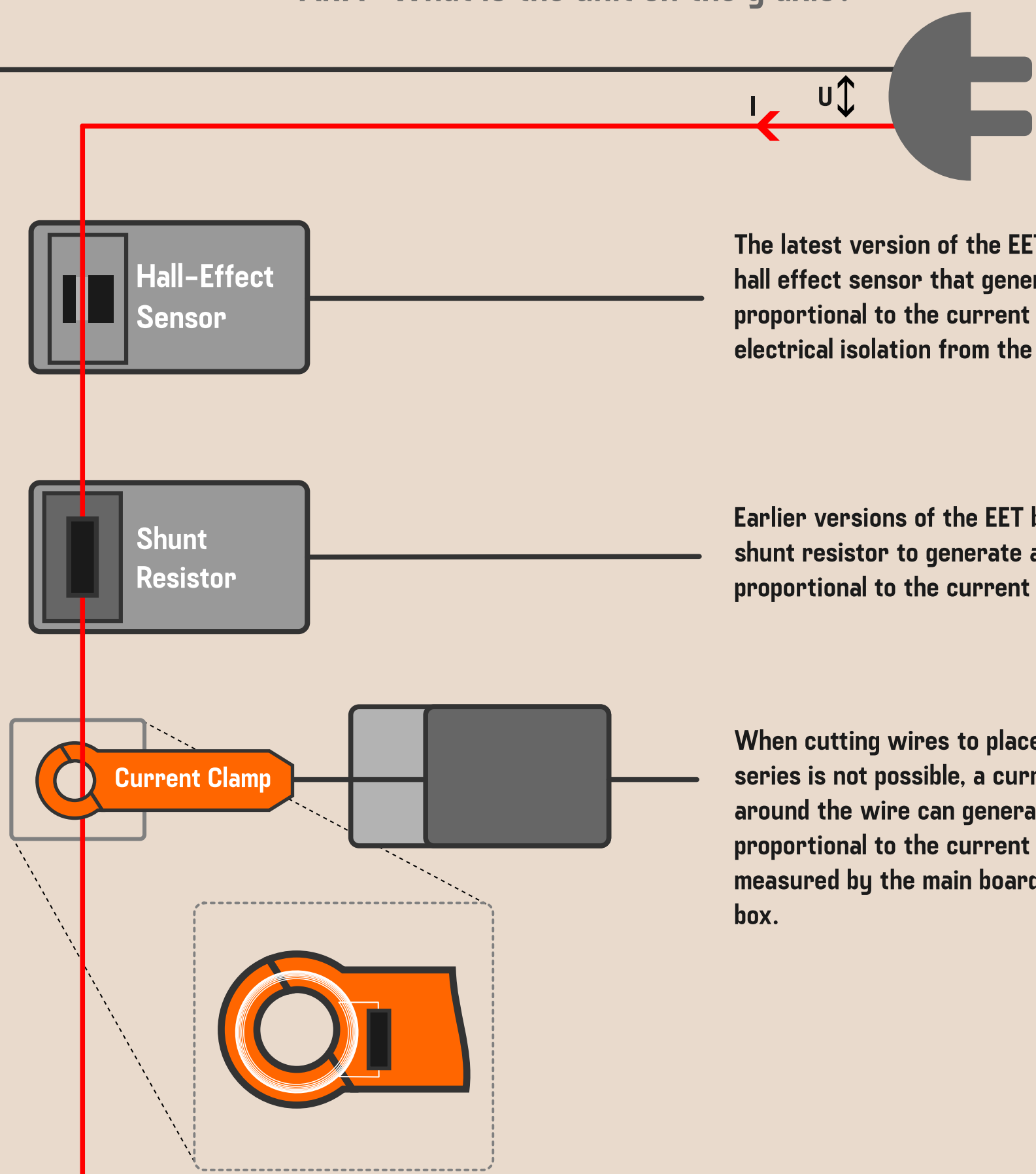
What Am I Measuring!?

AkA "What is the unit on the y axis?



The latest version of the EET box uses a hall effect sensor that generates a voltage proportional to the current while ensuring electrical isolation from the wire.

Earlier versions of the EET box used a shunt resistor to generate a voltage drop proportional to the current in the wire.

When cutting wires to place an EET box in series is not possible, a current clamp around the wire can generate a tension proportional to the current that is then measured by the main board of the EET box.

Y

What is the unit of my Y axis?

The measured value is proportional to a tension which is proportional to a current. Knowing this current and the approximately constant tension across Vdd and ground, the measured tension is also proportional to a power.
However, none of the conversion factors are known because the actual value is of little interest compared to the pattern.
In the end, the Y axis represents a value proportional to the power drawn by the machine.

$Y \propto T \propto I \sim \propto W$