Two Week :

Measuring Electric Current Using the Oscilloscope

Course Name: Electrical Circuits

Stage: One

Academic Year: 2024–2025

Assis.Lecturer. Zahraa Hazim Obaid

Saif Ali Abbas

Using the Oscilloscope to Measure Current

The second use of the oscilloscope is to graph the current as an electrical waveform. By using a *current probe*, the current signal of a specific part of the circuit can be displayed.

When the current probe is connected to a particular section of the circuit, it will visualize the current signal for that section only, as will be demonstrated in the following diagrams.

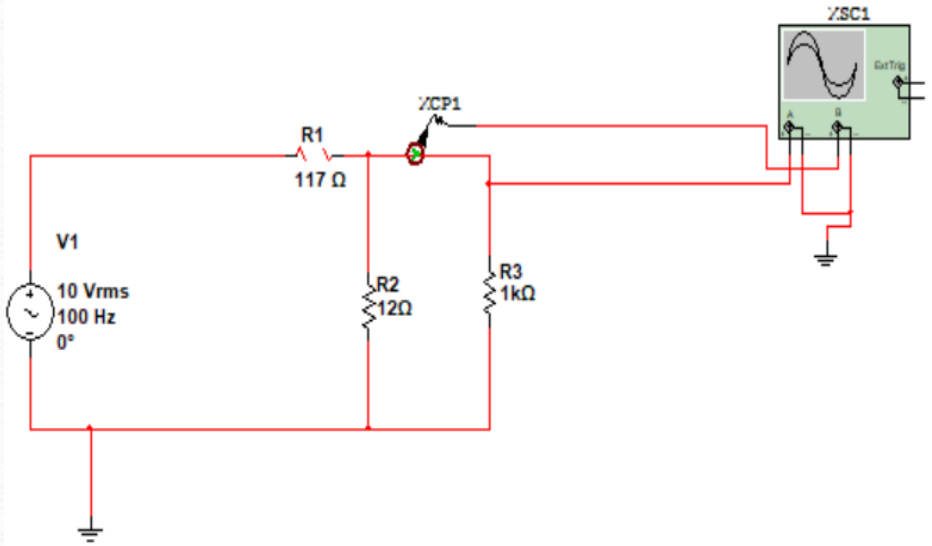

Fig 1 Connecting the Current Probe in an Electrical Circuit for Current Measurement Using an Oscilloscope

- **Channel A**: Displays the voltage signal.
- **Channel B**: Displays the current signal.
- ⟶ The direction of the current is also indicated.

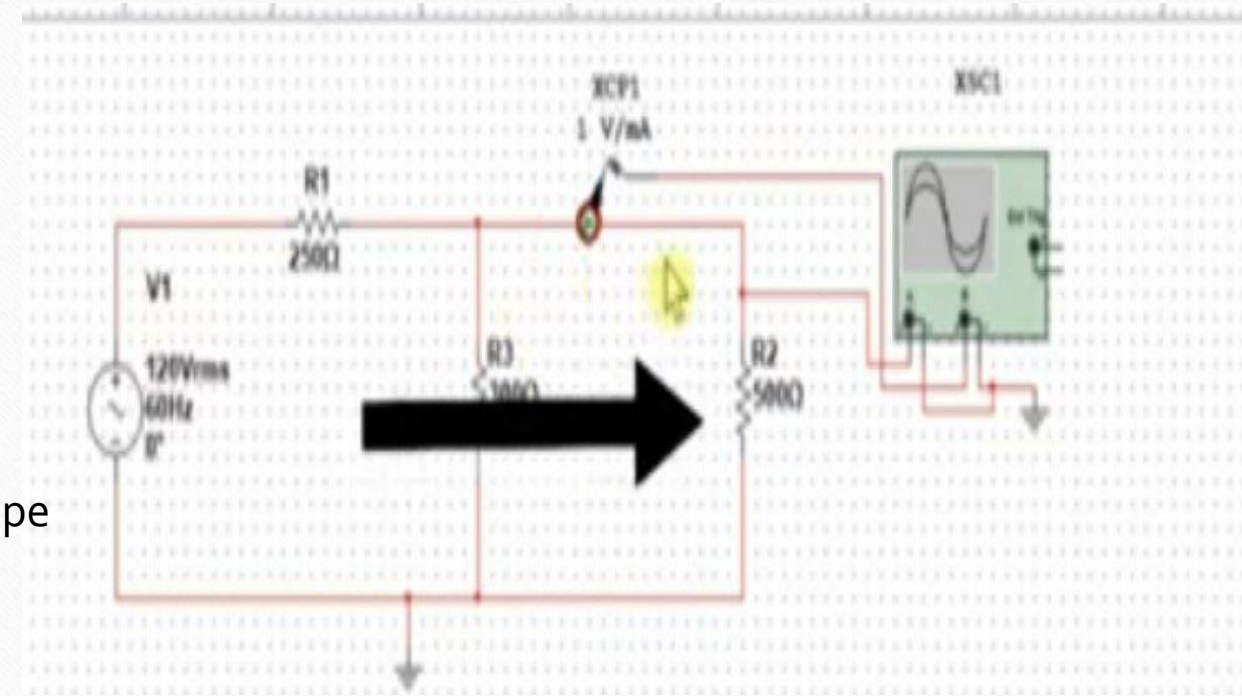

Fig 2 Connecting the Current Probe in an Electrical Circuit for Current Measurement Using an Oscilloscope

"In this electrical circuit, we changed the position of the current probe in order to measure the current specific to the part it was connected to only."

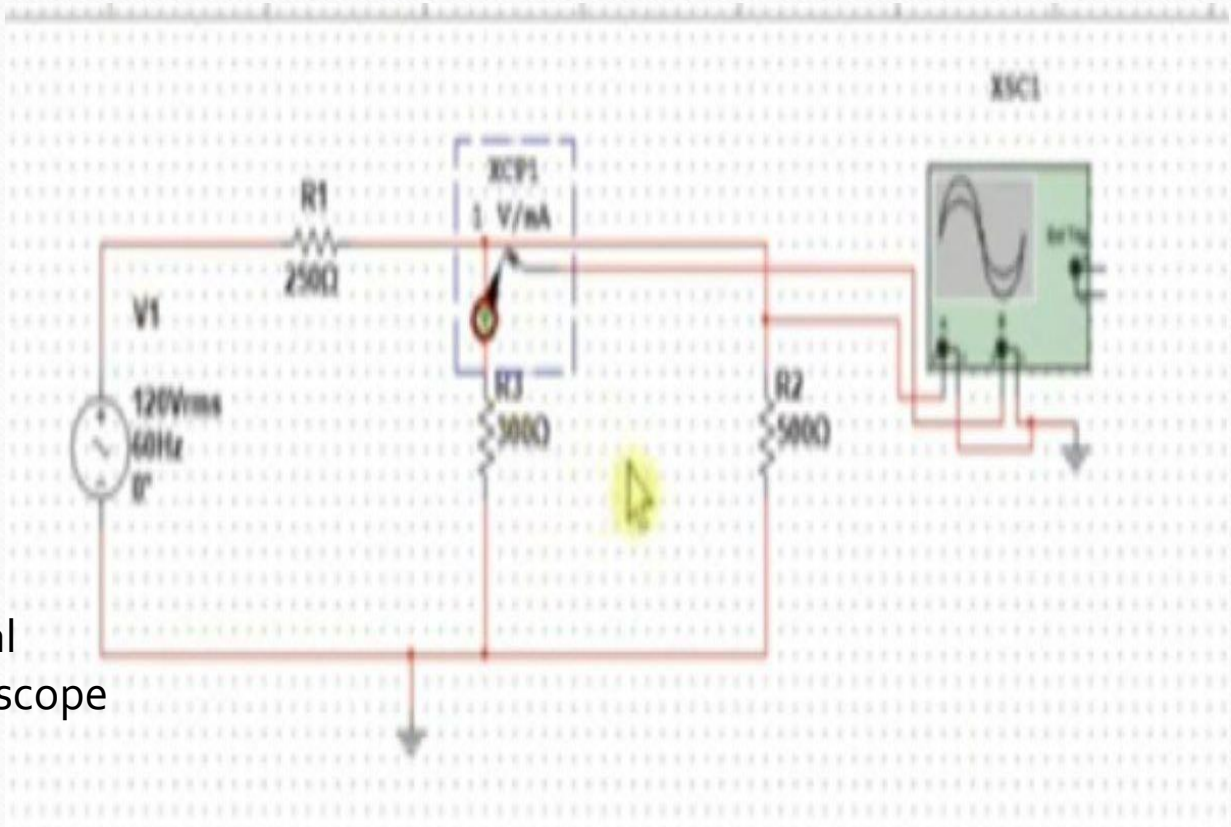

Fig 3 Connecting the Current Probe in an Electrical Circuit for Current Measurement Using an Oscilloscope

Thank you