

Laboratory exercise

Measurement on RC network

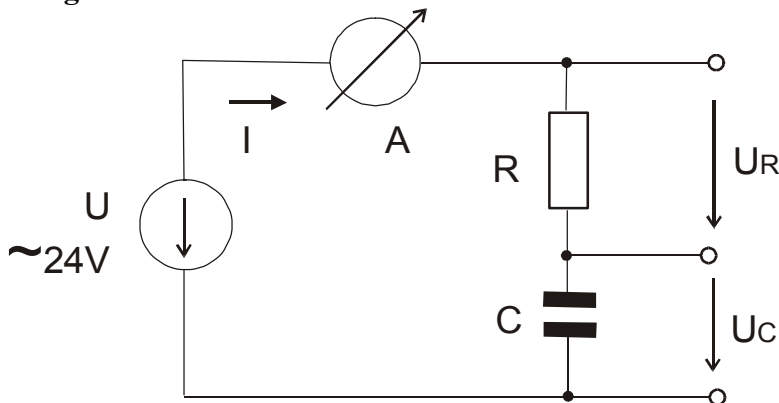
Instructions:

1. Connect the ammeter to the A1, A2 terminals of the measured circuit.
2. Connect the measured circuit (terminals K1, K4) to the sinusoidal voltage source. The amplitude should be 24 V and frequency 50 Hz.
3. Measure the current passing through the circuit.
4. Measure the voltage across the resistor R (terminals K2, K3), across the capacitor C (terminals K3, K5) and across series connection of the RC elements (terminals K2, K5).

Required elements for laboratory report:

1. Draw the topographic phasor diagram of all voltages and currents for the given circuit to scale.
2. Use measured values to compute value of the resistor R and the capacitor C.
3. Compute active power, reactive power, apparent power and power factor of the circuit.

Circuit diagram:



Measuring equipment:

