

The invention relates to the field of electrical measurements and can be used for measuring the impedance components. The method for measuring the impedance components consists in the formation of a resonance series measuring circuit from the measured object and the output terminals of an impedance converter with separate control and preset values of the module and phase of the reproduced impedance, equal to the maximum value of the control range and to 180° , respectively, supply of the resonance measuring circuit with a measuring signal, formation of disequilibrium and reference signals of the voltage drops at the resonance circuit and the impedance reproduced by the converter, respectively, equilibration of the measuring circuit by controlling the module to the attainment of zero value of the disequilibrium signal and simultaneously controlling the phase of the impedance reproduced by the converter to the attainment of the phase shift value between the disequilibrium and reference signals equal to 0° or 180° , and determination of components of the measured impedance from their known dependence on the input values of the converter. Depending on the nature of the impedance of the measuring object, control of phase of the impedance reproduced by the converter is performed in the value ranges: $180 \dots 270^\circ$ – for inductive, $90 \dots 180^\circ$ – for capacitive and 180° – for active impedances.

Claims: 1

Fig.: 3