

The invention relates to electric and electronic measurements and can be used for high-precision measurement of impedance components.

The method consists in the formation of a series measuring circuit from the measured object, output contacts of an impedance reference converter with separate control of active and reactive components and a signal generator, formation of a non-equilibrium signal from the total voltage drop on the measured object and the output circuit of the converter, control of the first and second phase shifts between the non-equilibrium signal and voltage drops, respectively, to the active and reactive components of the reference impedance, equilibration of the measuring circuit by regulating the active and reactive components of the reference impedance up to the attainment of the first and second phase shifts of 180° or 0° , and determination of the measured impedance components from their known dependence on the reference impedance components in equilibrium state. The method further includes the calibration of the measuring circuit, which consists in the connection instead of the measured object of a two-terminal network with known impedance value, setting of the reference impedance value equal to the calculated value for the equilibrium state, adjustment of impedance converter to the equilibration of the measuring circuit and use upon calibration of the adjustment settings in the process of direct measurement of the impedance. Calibration of the measuring circuit is performed before the direct measurement of the impedance of the measuring object before a measurement cycle or during maintenance work.

Claims: 2

Fig.: 2