

The invention relates to measurement technology and can be used for automatic high-accuracy measurement of impedance components in polar coordinates.

The impedance meter contains a signal generator (1) connected in series to a resistor (2), two terminals (3, 4) to connect the object to be measured, connected, respectively, to the free terminal of the resistor (2) and to one output of an impedance converter (5) in polar coordinates with predefined initial values of phase and modulus of the reproduced impedance equal respectively to 180° and the maximum value of the control range, an amplifier (6), having one input connected to the common point of the resistor (2) and terminal (3) and the output – to a comparator (7), a second comparator (8) having its input connected to the reference point of the converter (5), in which the signal has the same phase as the voltage drop in the impedance reproduced by the converter (5), as well as a control unit (9) with two outputs, connected respectively to the inputs of the converter (5) to control the modulus and phase, and with two inputs connected respectively to the outputs of the comparators (7, 8). One output terminal of the generator (1), the second output of the converter (5) and the second input of the amplifier (6) are connected to the common wire.

Claims: 1

Fig.: 1

