

The invention relates to the field of electric measurements and may be used for automatic high-precision measurement of the impedance components.

The impedance meter comprises a signal generator (1) connected in series to a resistor (2), an impedance converter (5), having one output terminal (3) connected, together with the second terminal (4) of the generator (1), to the common wire, as well as two terminals for connection of the measured object, connected, respectively, to the free contact of the resistor (2) and to the second output terminal of the impedance converter (5). It additionally comprises an amplifier (6), having one input contact connected to the common point of the resistor (2) and of the terminal (3) for connection of the measured object, and the second input contact to the common wire, a phase shifter (7), having its input connected to the point of control of the impedance converter (5), the first (8), the second (9) and the third (10) comparators, having their inputs connected, respectively, to the output of the amplifier (6), to the point of comparison of the impedance converter (5) and to the output of the phase shifter (7), as well as a control unit (11) having the first, the second and the third inputs connected, respectively, to the outputs of the first (8), the second (9) and the third (10) comparators and two outputs connected to the inputs of the impedance converter (5).

In the capacity of impedance converter is used a converter providing control of the module and phase of the reproduced impedance. In the capacity of point of control of the converter is used the point of the converter circuit, wherein the voltage phase coincides with the phase of voltage drop across the reproduced impedance, and the phase shifter provides a phase shift of  $90^\circ$ .

Claims: 2

Fig.: 1

