

The invention relates to the electrical and electronic measurement technology and can be used for measuring the impedance components in Cartesian coordinates.

The impedance meter comprises an impedance converter (6) with two inputs for independent control of active and reactive components of the reproduced impedance and two output contacts, a signal generator (1), having one output contact connected together with one output contact of the converter (6) to the common wire, two terminals (4 and 5) for connection of the object to be measured, one of which (5) is connected to the second output contact of the converter (6), an amplifier (7), having one input contact connected to the second terminal (4) and the second input contact – to the common wire, the first resistor (3), having one pole connected to the second terminal (4), and a phase meter (8), having the signal input connected to the output of the amplifier (7) and the reference input – to the reference point of the converter (6), in which the phase of the signal coincides with the phase of the voltage drop across the reactive component of the reproduced impedance. The impedance meter also comprises a switch (2), having one movable contact connected to the second output terminal of the generator (1), a voltmeter (9), having one input terminal connected to the common wire and the second - to the reference point of the converter (6), and the second, third, ...,  $n$ -th resistors (3), all the  $n$  resistors being connected with one pole to the second terminal (4) and the second pole – respectively, to the fixed contacts of the switch (2). The number of  $n$  resistors (3) and the number of positions of the switch (2) are equal to the number of impedance measurement ranges.

Claims: 1

Fig.: 1

