

ELECTROMAGNETIC RELAY CAPABLE OF PERFORMING MEASUREMENT, AND ELECTRONIC ELECTRICITY METER COMPRISING SAME

ABSTRACT

An electromagnetic relay capable of performing measurement, comprising a housing (1), a PCB (2), and two lead-out sheets (33, 34), which extend from the inside of the housing (1) to the outside of a first side of the housing (1) and are connected to a contact component in the housing (1). One lead-out sheet (33) of the two lead-out sheets (33, 34) comprises a plate-shaped sampling resistor sheet (4) segment, which is made of high-resistivity material, and conductive sheets (6), which are connected to two ends of the sampling resistor sheet (4), and the lead-out sheet (33) is provided with two sampling pins (41), which are located at the two ends of the sampling resistor sheet (4) and extend in the same direction, so as to allow the inflow and outflow of a current. The PCB (2) is soldered to the two sampling pins (41) in a plug-in manner. The sampling resistor sheet (4) is provided with a through hole (42) in a thickness direction of a plate body, such that an induced current generated in an external alternating magnetic field by a first closed ring (S1) formed by the through hole (42) counteracts an induced current generated in the external alternating magnetic field by a second closed ring (S2) enclosed by the sampling resistor sheet (4), the sampling pins (41) and the PCB (2), thereby improving the anti-interference measurement capacity of the relay in the alternating magnetic field. Further provided is an electronic electricity meter, comprising the electromagnetic relay.

(Fig. 14)