QUANTIFIABLE ELECTROMAGNETIC RELAY AND ELECTRONIC ENERGY METER

ABSTRACT

A quantifiable electromagnetic relay includes a housing, a PCB board, and two leading-out pieces extending from an inside to a first side of the housing and connected to a contact assembly inside the housing; one leading-out piece includes a plate-like sampling resistor piece made of high resistivity materials and conductive pieces connected at two ends of the sampling resistor piece, two sampling pins extending in the same direction are arranged at the two ends of the sampling resistor piece; the PCB board is connected to two sampling pins; a through-hole is provided in the sampling resistor piece. An induced current generated by a first closed loop formed by the through-hole offsets an induced current generated by a second closed loop formed by the sampling resistor piece, the sampling pins, and the PCB board in the external alternating magnetic field, thereby enhancing the relay's ability to resist interference in measurement of the alternating magnetic field.

（Fig. 14）