

ABSTRACT

DC CURRENT SENSOR

It is an object of the present invention to provide a sensitive DC current sensor having a relatively simple configuration and a good detecting capability for a DC leakage breaker and the like, particularly, for a very small current variation, and capable of detecting an absolute value of a micro electric current as well as a directivity of the micro electric current, and capable of reducing a hysteresis of output characteristics and improving a detecting sensitivity in an ultra-micro electric current region, and furthermore, by disposing means for partly forming magnetic gaps periodically in the detecting core by the magnetic flux generated in a substantially perpendicular direction, against the magnetic flux generated in a circumferential direction in the detecting core by the DC current flowing through the wire being detected, in place of the mechanical magnetic switch, and realizing the operation substantially similar to the aforesaid magnetic switch.

