

Hall Effect Voltage Transducers

Operation Principle



A very small current limited by a series resistor is taken from the voltage to be measured and is driven through the primary coil. The magnetic flux created by the primary current I_P is balanced by a complementary flux produced by driving a current through the secondary windings. A hall device and associated electronic circuit are used to generate the secondary (compensating) current that is an exact representation of the primary voltage (or current). The primary resistor (R1) can be incorporated in the transducer.

Features:

- Measurement of high voltages
- Safety isolation
- Good overall accuracy
- Low temperature drift
- Excellent linearity