

DEVELOPMENT OF AN INTERNAL SOURCE

RESISTANCE METER

BY

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SUMMARY

In theory every voltage source is usually assumed to be ideal (no internal resistance). But in reality every source has an internal resistance the amount of which depends mostly on the nature and the construction of the source.

The purpose of this project is to design and construct a system that would be able to measure the internal resistance of any AC source.

The tasks of the I.S.R.M. are :

- (i) The open circuit voltage of the source is measured.
- (ii) A load is applied to the supply (generally a resistor by means of a thyristor).
- (iii) The subsequent depression in peak mains voltage is measured and used to deduce the source resistance.

Several adjustments were made during the design and construction of the I.S.R.M. since several practical problems were present.

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