

KES

Volume Resistance Test of Insulating Oil

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1. Scope of Application

This shall regulate volume resistance of insulating oil (Hereinafter insulating oil).

2. Test meaning

Volume resistance of insulating oil shall be a measure of electric insulation. This shall decrease with other alien materials.

3. Test summary

Put 250 V / mm to oil and find volume resistance from current after 1 minutes.

4. Device

4.1 Circuit shall be as follows.

(1) For direct method, circuit shall be as figure 1.

Galvanometer shall be high sensitivity and used with jumper.

Standard resistance R shall be $\pm 10\%$ precision and manganin resistance of 10^6 or equal to this.

Control swing at jumper to measure resistance to $\pm 10\%$ precision.

(2) For DC amp, circuit shall be as figure 2.

This shall consist of insulating resistance of $\pm 10\%$ precision.

Ratio of insulating resistance (R_G) and standard resistance (R_S) should be more than 100 to minimize error.