ABSTRACT

PROTOTYPE AUTOMATION SYSTEM RAISING THE VOLTAGE RISE TO REACH A VALUE OF BREAKDOWN VOLTAGE ON ELECTRICAL INSULATION

By
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Insulation of electrical equipment is essential for the protection of electrical equipment and we as engineers or consumers of electric shock is quite dangerous for our salvation. Insulation resistance testing (Insulation Resistance Test) was conducted to determine the condition of the insulation of electrical equipment for safe operation next tool.

As for damage to the insulation of electrical equipment and cause a lot of damage indication that we can see physically. Some indication of the cause of damage to the insulation of electrical equipment, among others, are, swelling, cracking, splitting, discoloration indicative of aging by heat (thermal), the incidence of contamination on the surface of the coil and the connection surface, the occurrence of abrasion or other mechanical pressure caused, evidence of the occurrence of partial discharge (partial discharge) and corona.

This research is centered on the manufacture of electrical insulation testing prototype tool with the increase of the voltage rise. With a voltage range between 0 range with 1 kV. By using air as the insulating medium to be measured, which then set the width of the gap distance between the electrode voltage conductors.

Keywords: insulation, partial discharge, instulation Resistance test, gap spacing, electrode, corona, thermal.