Testing of Low-Current Contacts Quality and Reliability by Using Third Harmonic Distortion

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Abstract—The paper shows a new possibility for quality and reliability testing of low-current contacts by their non-linearity measurement. A common THD tester cannot be used for low impedance elements. Therefore a special variant of the THD tester was developed. It was used for a set of relay contacts testing. The results of the testing proved applicability of the method proposed.

Keywords - third harmonic distortion; THD-meter, contact; reliability