

# The Research on Electrical Life Test Condition of Relay with Electromotor Load

Du Taihang, Jianguo Lu Geng Lihui, Zhigang Li

Electric and Information school of Hebei University of Technology

Tianjin P. R. China 300130

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Tel: 86-022-26564714

E-mail: thdu@mail.hebut.edu.cn

*Abstract*-This paper researches on the condition of voltage and current when the relay, loaded with the AC single-phase asynchronous motor (SPAYM), turns on and off. According to the arc model and equivalent model of SPAYM during its operating, the dynamic changing process of voltage across contacts and loop current (when the relay turns on and off) are theoretically analysed and simulated by means of the computer. Furthermore, the conclusions are compared with the actual measured results. The electrical life test condition of relay is consequently obtained from the foregoing stated. Finally, The computer control test device is presented.

