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ADJUSTMENT OF THE MATLAB SURGE ARRESTER MODEL PARAMETERS

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Abstract

This article proposes a method for the parameters adjustment of the Matlab Simscape library Surge Arrester block. It is based on building of nonlinear V-I characteristic by approximation of residual voltage and impulse current obtained from manufacturer catalogs. Given parameters of the exponential function are checked by transient simulations under impact of standard current impulses on surge arresters. References 14, figure 1, tables 3.

Key words: zinc oxide surge arresters, parameters of mathematical model, residual voltage, impulse of current.

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