

The Study on Current Limiting Characteristic Analysis of Magnetic Shielding Type Fault Current Limiter

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In this paper, we investigated the current limiting characteristic in the magnetic shielding type fault current limiter(MSFCL). The circuit analysis was executed by using finite differential method(FDM). This paper suggests that the current limiting performance can be achieved in two ways (resistive and inductive one), according to design parameter. By comparing current limiting characteristics in two ways and surveying the important parameters which determine the operational way after fault occurs in the design of MSFCL, it is shown that the magnetic shielding type fault current limiter can be operated in either resistive or inductive way.

keywords : current limiting characteristic, magnetic shielding type fault current limiter(MSFCL), finite differential method(FDM)