

Improvement of Mechanical Characteristics of AC Section Insulator

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This paper describes improvement of mechanical characteristics of AC section insulator based on the structure of the existing type B section insulator. The authors devised a contact wire strain reduction method to be applied to the type B section insulator. It has been confirmed through a pantograph running test that this method is effective when the sliding surface level of sliders are not adjusted properly. The authors also devised a slider supporting structure which has the performance independent of train running direction and can reduce necessity of sliding surface level adjustment. The result of the pantograph running test indicates that high strain values are not generated at each part of the section insulator and that contact loss characteristic is comparable with that of the type B or another development type, provided that the section insulator is installed properly.