

Basic Study on Length and Dynamic Behavior of Breaking Arc between Contact Wire and Contact Strips

Kyoko IKURA Takamasa HAYASAKA Toru IWAO

A long arc occurring between contact wire and contact strips could lead to have an impact on safeness of overhead contact line. Therefore, authors conducted experiments on breaking arc between contact wire and contact strips travelling in the longitudinal direction to investigate arc length characteristics with 3-dimensional image measurement. Furthermore, authors also developed numerical simulation method of 3-dimensional electromagnetic thermal fluid to analyze dynamic behavior of the arc. This paper shows the experimental and calculated results with some discussion.