

高电压技术

山区输电线路雷电绕击跳闸率的计算

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摘要: 摘要: 准确评估山区输电线路的绕击跳闸率对于防雷措施的合理选用起重要作用。基于输电线路位于山脉的典型位置, 推导了其绕击跳闸率计算公式, 以220 kV双避雷线输电线路为例, 计算了输电线路处于山脉不同位置时的最大绕击雷电流和绕击跳闸率随地面倾角的变化, 可为山区输电线路雷击防护提供参考。

关键词:

Calculation of Shielding Failure Trip-Out Rate for Transmission Lines in Mountain Areas

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Abstract: ABSTRACT: It is very important to accurately assess shielding failure tripout rate of transmission lines in mountain areas for the selection and usage of lightning protection measures. Based on the typical positions of transmission line located at mountain range, calculation formulae for corresponding shielding failure tripout rates are derived. Taking 220 kV transmission line with two overhead ground wires for example, both maximum shielding failure lightning current of transmission line located at different positions of the mountain range and the variation of shielding failure tripout rate with the dip angle of ground are calculated, and the calculation results are available for reference to lightning protection of transmission lines in mountain areas.

Keywords:

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