



云广直流输电工程换流阀多重阀单元

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摘要: 云广±800 kV直流输电工程用换流阀是世界上第一个特高压直流输电用晶闸管换流阀, 其型式试验尚无成熟的具体规范和要求。与±500 kV及以下高压直流输电换流阀不一样, 这种特高压换流阀是由2个12脉动的换流阀组串联组成, 也不能简单地照搬前者的试验规范和要求。鉴此, 重点讨论多重阀单元(MVU)类型III(MVU连接在DC 600 kV与800 kV之间)的试验方法, 确定型式试验方案为: 选择短接试验法; 短接试验后再进行第二次双阀电压试验和3个MVU串联的试验。

关键词: 特高压直流输电; 换流阀; 型式试验; 多重阀单元

Study on the Multiple Valve Unit Test of Yunnan-Guangdong UHVDC Transmission Project

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Abstract: There are no maturely specification and claim on valve type test for Yunnan-Guangdong ±800 kV UHVDC transmission project as it is the first one in the world on so high voltage level, and it is impossible to simply copy the valve type test specification at ±500 kV as Yunnan-Guangdong ±800 kV UHVDC conveter valve consisting of two series connected 12-pulse bridges that is different from that at ±500 kV and lower voltage. This article principally discusses the valve type test method on multiple valve unit (MVU) style III (MVU 600 kV to 800 kV potential) with a type test scheme of following: a short circuit test, the second valve voltage withstanding test after short circuit test, and 3 MVU series connected test.

Key words: UHVDC; thyristor valve; dielectric test; multiple valve unit (MVU)

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