

ABSTRACT

A method and a system for controlling a medium voltage alternating current bus are provided. The method is applied to a high-speed multiple-unit train provided with multiple medium voltage alternating current sub-buses. In a case that a bus has a short-circuit fault, by
5 determining whether a traction auxiliary converter has an internal short-circuit fault and performing a short-circuit test on each of the multiple medium voltage alternating current sub-buses, the medium voltage alternating current sub-buses can be controlled differently under different operation conditions, so as to reduce the impact on the entire high-speed multiple-unit train due to a short-circuit fault in the bus. Therefore, the high-speed
10 multiple-unit train has to stop and wait for rescue only in an extreme condition, thereby improving operational stability of the high-speed multiple-unit train.