

This Sheet Has Been Replaced



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ABSTRACT OF THE DISCLOSURE

POWER SEMICONDUCTOR PROTECTION APPARATUS FOR ELEVATOR AND PROTECTION METHOD THEREOF

An improved power semiconductor protection apparatus for an elevator and a protection method thereof which include a multi-step temperature detector for detecting the temperature of a radiator in a method of a multi-step; a temperature controller for judging whether the temperature detected by the multi-step temperature detector reaches a corresponding level and for setting a step-by cooling time of the radiator; an operation controller for controlling an operation of an elevator in accordance a judgement of the temperature controller and a previously set cooling time; an elevator operation state display unit for displaying the operation state of the elevator based on a result of the multi-step temperature detection in accordance with a control of the temperature controller; a driving unit for controlling an induction motor in accordance with a control of the operation controller; an error processing unit for processing an error of the elevator in accordance with a control of the operation controller; and an error display unit for displaying errors of the elevator in accordance with a control of the error processing unit, thus advantageously detecting the temperature of the radiator in a method of a multi-step and of providing a proper cooling time when the detected temperature reaches to a corresponding temperature step, thus preventing the power semiconductor from heat damages caused by the over-heating of the radiator when the elevator runs for long time.

Figure 4 - to accompany abstract when published