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ABSTRACT

The present disclosure provides a circuit protection device for automatically monitoring operation faults. The grounding fault protection unit includes a grounding fault detection circuit, an AC power channel, and an electromagnetic driving circuit. The self-fault monitoring unit includes a measurement and control circuit and a fault state holding circuit. The measurement and control circuit initiates a self-fault monitoring process at regular time and monitors the fault state signal feedback by the electromagnetic driving circuit to achieve self-fault monitoring. If there is a fault, an emergency interrupt signal is output to trigger an emergent disconnection of the grounding fault protection unit. The fault state holding circuit includes a reset circuit and a fault state triggering circuit. The reset circuit clears the fault state, and the fault state triggering circuit maintains the fault state signal output by the measurement and control circuit to generate effective alarming information.

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