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(57) Abstract :
A system and method for automatically determining short-circuit in an electrical system, comprises an artificial intelligence neural network (ANN) in a server to determine trends or pattern of voltage and current rule based detection of changes of voltage and current, predict occurrence of short-circuit based on the rule based detection and analyzing the pattern and generate an audio, visual alert based on such prediction. The ANN based system uses machine learning algorithms to evaluate electrical system data and find patterns or anomalies that point to a short circuit. To do this, it is necessary to examine data on temperature, voltage levels, and power consumption in order to spot unusual behavior that might point to a short circuit. A short circuit could also be detected physically using picture or video data to detect sparks or smoke.

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