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(57) **ABSTRACT**

A system for a wind turbine that includes a protection system interfaced to a circuit breaker system and a sensing system. The protection system is configured to determine an operational mode of the wind turbine by monitoring at least two parameters determine a parameter set comprising a plurality of operational parameters based on a determined operational mode, and an associated set of expected values corresponding to the parameter set, determine actual values corresponding to the determined parameter set, identify a fault condition in the event that the determined set of actual values of the operational parameters do not correspond to the determined set of expected values of the operational parameters, and implement a protection action based on the identified fault condition.

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