Abstract

This paper presents an artificial neural network based fault identification system for a five-level cascaded H-Bridge multi-level inverter (MLI). A Radial Basis Function (RBF) neural network is trained using radial basis function training algorithm to identify the location of the switch that is misfired at an instant prior to its actual firing time. The proposed fault diagnostic system identifies the fault with a greater accuracy and the results to various input patterns are presented in a tabular format for easy comprehension.

References

Diagnosis of Faults due to Misfiring of Switches of a Cascaded H-Bridge Multi-level Inverter using Artificial Neural Networks


Index Terms

Computer Science
Artificial Intelligence

Keywords

Artificial Neural Networks  Cascaded H-bridge Inverter  Multi-level Inverter  rbf  Radial Basis Function  Switch Misfiring
Diagnosis of Faults due to Misfiring of Switches of a Cascaded H-Bridge Multi-level Inverter using Artificial Neural Networks