An Experimental Investigation of Heating in Induction Motor under Open Phase Fault

Authors

Mahdi Atig, Mustapha Bouheraoua, Arezki Fekik

Publication date

2018/6/1

Journal

International Journal of Electrical and Computer Engineering

Volume

8

Issue

3

Pages

1288

Publisher

IAES Institute of Advanced Engineering and Science

Description

Although a three–phase squirrel cage induction motor is known by its qualities of robustness and low cost of construction. However, this machine can be affected by potential defects that affect the production, safety, quality of service and profitability of installations. However, to show the behavior of induction motor in different operating modes, the studying of this machine is very important. This paper presented the results of an experimental investigation to see the impact of the open phase fault on the thermal behavior in the 2.2 kW three phase squirrel cage induction motor, and to display the stator current waveforms with healthy and faulty conditions under different loads.

To