EE568 - Selected Topics on Electrical Machines

Project - 2

Motor Winding Design & Analysis

Özgür Yazıcı

31.03.2020

# Integral Slot Winding Design

In this part, a 20 pole 120 slot machine winding is designed. In order to reduce harmonic distortion, 5/6 short pitched winding is used.

Winding diagram for 5/6 short pitched winding is shown in table 1.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A1 | A2 | -C1 | -C2 | B1 | B2 | -A3 | -A4 | C3 | C4 | -B3 | -B4 |
| A40 | -C39 | -C40 | B39 | B40 | -A1 | -A2 | C1 | C2 | -B1 | -B2 | A3 |

# Part2

# 2D FEA Modeling











