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***THE HASHMITE UNIVERSITY***

***ELECTRICAL ENGINEERING DEPARTMENT***

***ELECTRICAL MACHINES LAP***

*Lab Sheet*

**Induction Motor I.**

|  |  |
| --- | --- |
| **Group number: Students ID:** | |
| **1** |  |
| **2** |  |
| **3** |  |
| **4** |  |
| **5** |  |
| **6** |  |
| **7** |  |

**Induction Motor-I**

1. **Resistance Measurement**

By using ohmmeter measure the three winding resistances between:

,= ……………,=……………,=…………. 

1. **No Load Test**

Table (8.2)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| MEASURED VALUES | | | CALCULATED VALUES | | | | |
| V(v) | Il (A) | Pin (w) | cos |  |  |  |  |
|  |  |  |  |  |  |  |  |

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1. **Locked Rotor Test**

Table (8.3)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| "∆" Rated current ( )A | | | CALCULATED VALUES | | | | |
| **I1 (A)** | **V(v)** | **Pin(W)** |  |  |  |  |  |
| **4.8** |  |  |  |  |  |  |  |

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**Questions:**

1. Draw the equivalent circuit for the induction machine. Label the circuit parameters and the values obtained in the lab.
2. What information do you get from no load and locked rotor tests on an induction motor?

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**Conclusions:**

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