## Induction Machines

## 1 Introduction

The induction machine was invented by NIKOLA TESLA in 1888. Right from its inception its ease of manufacture and its robustness have made it a very strong candidate for electromechanical energy conversion. It is available from fractional horsepower ratings to megawatt levels. It finds very wide usage in all various application areas. The induction machine is an AC electromechanical energy conversion device. The machine interfaces with the external world through two connections (ports) one mechanical and one electrical. The mechanical port is in the form of a rotating shaft and the electrical port is in the form of terminals where AC supply is connected. There are machines available to operate from three phase or single phase electrical input. In this module we will be discussing the three phase induction machine. Single phase machines are restricted to small power levels.

