Introduction

This report presents the designing a rectifier circuit that will be used to operate a DC motor in 3 possible alternatives ways such that single or three phase thyristor rectifier or diode rectifier with buck convertor.

Design Alternatives

3- phase Thyristor Rectifier

This circuit offers us a more output average voltage and less ripple comparing to the other alternatives. However, it requires 6 thyristors and required gate signal driver circuit. Due to achive compactness and simplicity bonus, this topology is not apprapiate.