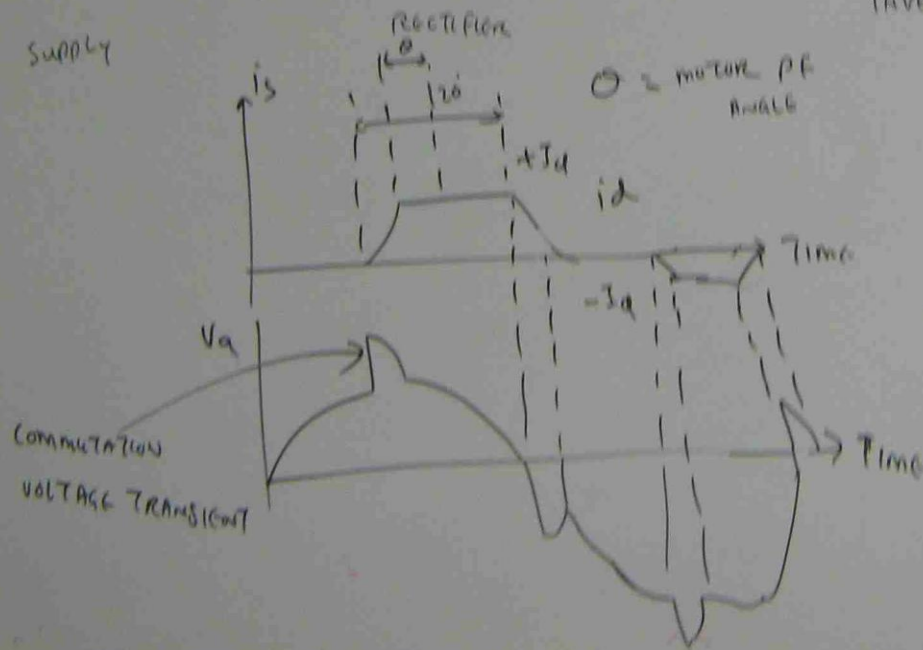
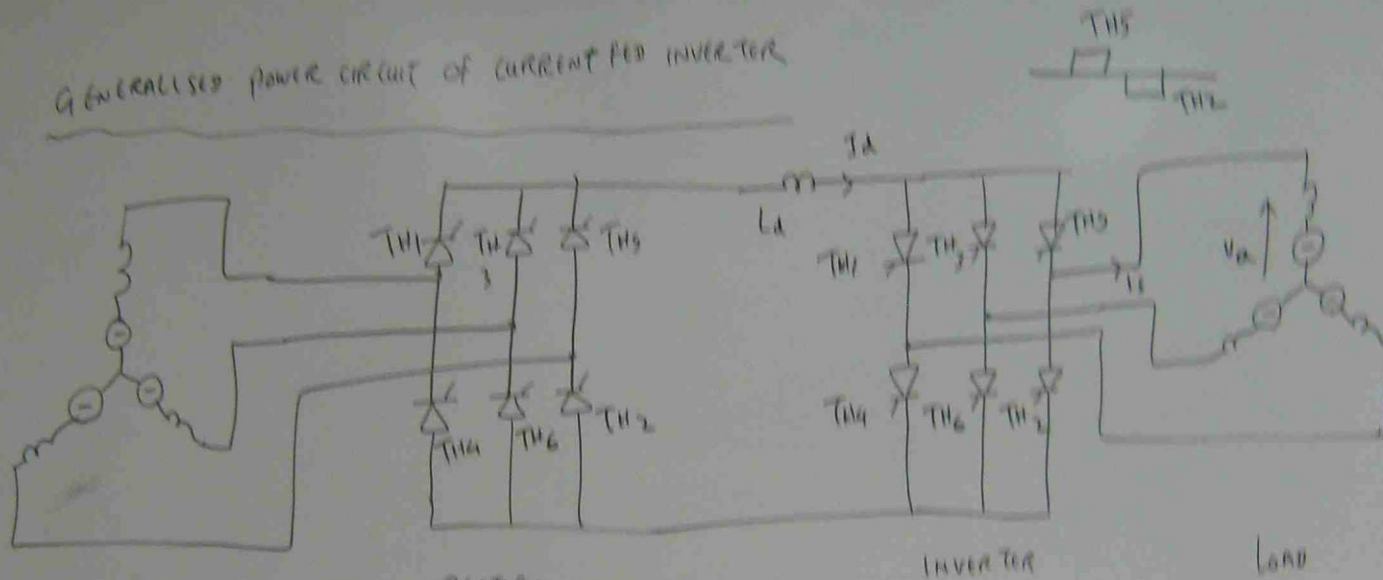


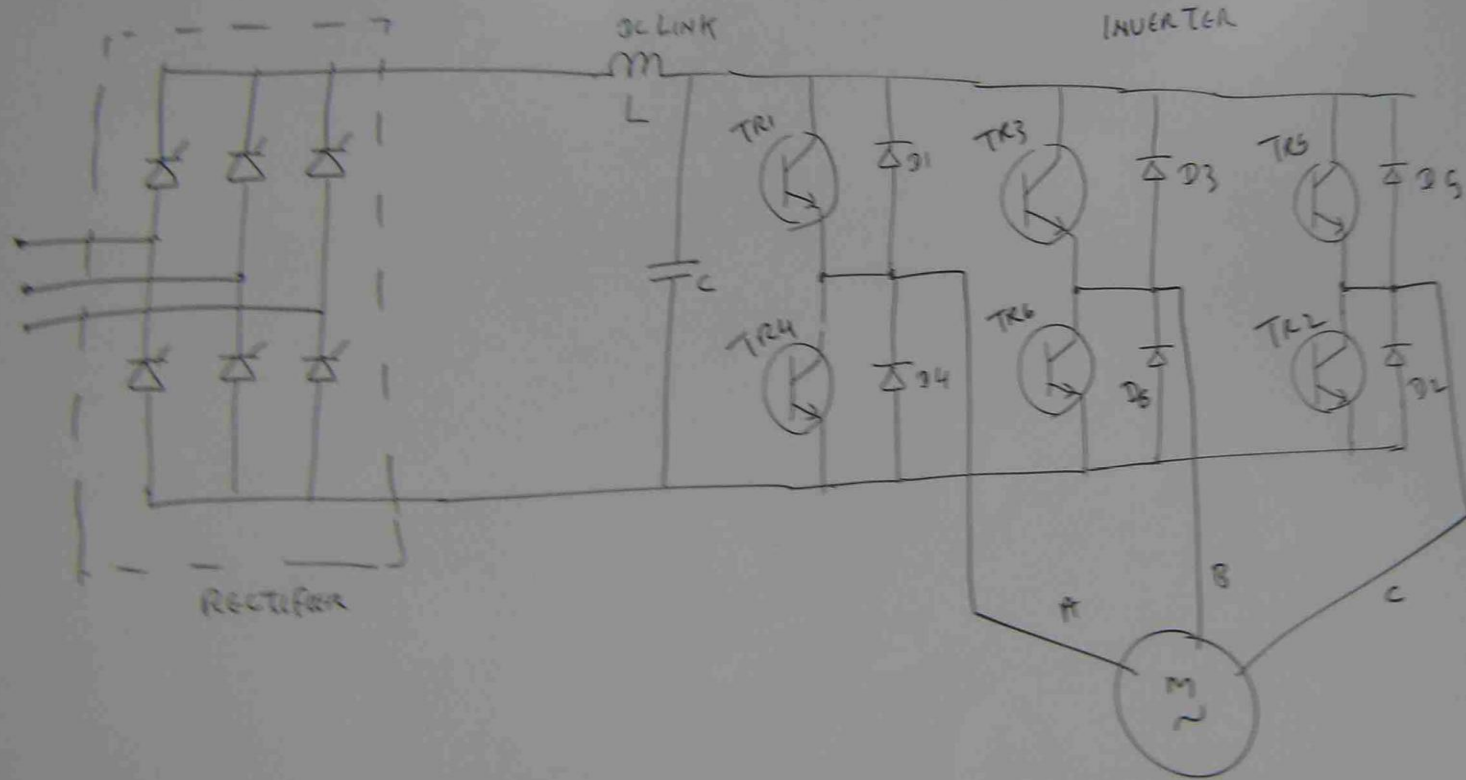
# Generalised power circuit of current fed inverter

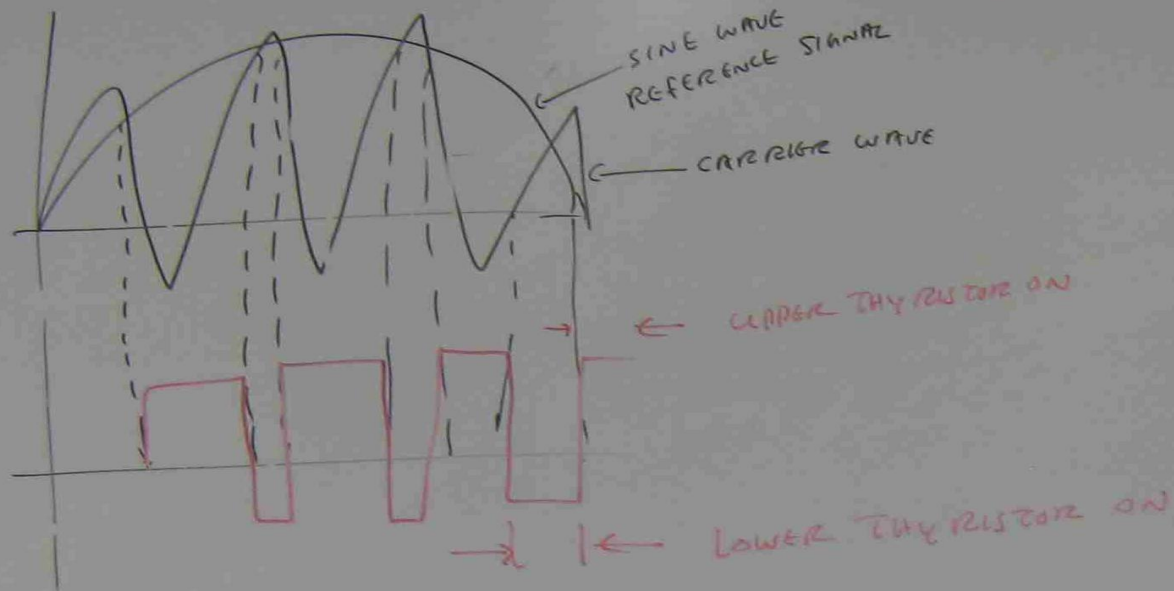


$\theta = \text{motor PF angle}$

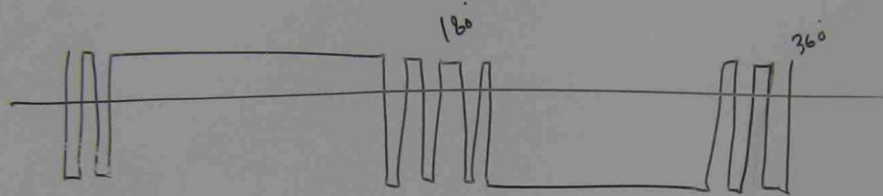
MACHINE PHASE  
VOLTAGE & CURRENT  
WAVEFORMS.

# VOLTAGE FED SQUARE WAVE DRIVE CIRCUIT





# 5<sup>th</sup> & 7<sup>th</sup> HARMONIC ELIMINATION



ANALYSIS OF WAVE FORM SHOWING  
THE ESTIMATION OF 5<sup>th</sup> & 7<sup>th</sup> HARMONIC

| ORDER OF HARMONIC | ABSOLUTE VALUE<br>OF HARMONIC<br>COEFFICIENT | ABSOLUTE VALUE OF<br>HARMONIC AS % OF<br>FUNDAMENTAL |
|-------------------|--|--|
| 1                 | 1.1897                                       | 100  |
| 3                 | 0.2070                                       | 17.43  |
| 5                 | 0  | 0  |
| 7                 | 0.0001                                       | 0.01   |
| 9                 | 0.1086                                       | 9.14   |
| 13                | 0.3223                                       | 27.13  |
| 17                | 0.2030                                       | 17.09  |
| 19                | 0.0514                                       | 4.33   |
| 21                | 0.0825                                       | 6.94   |

