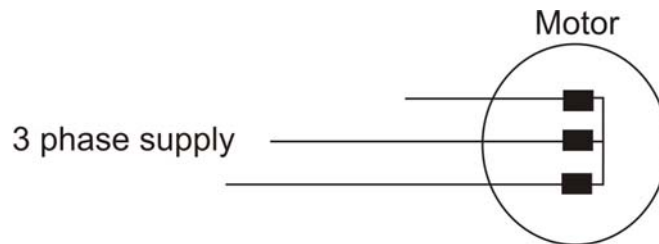


## Frequency Control

Variable frequency drives are a control method of AC induction motors. The AC mains input is converted to a DC line voltage and then converted back to an AC output via Pulse Width Modulation. This provides a means of varying the voltage magnitude and frequency.

Varying the supply frequency and voltage to an AC induction motor will change its rotational speed. A frequency Drive is used to vary the motor speed to meet the duty required. The speed of the motor can be increased beyond the synchronous speed with due consideration of the motor power capabilities.



Schematic diagram of an AC motor

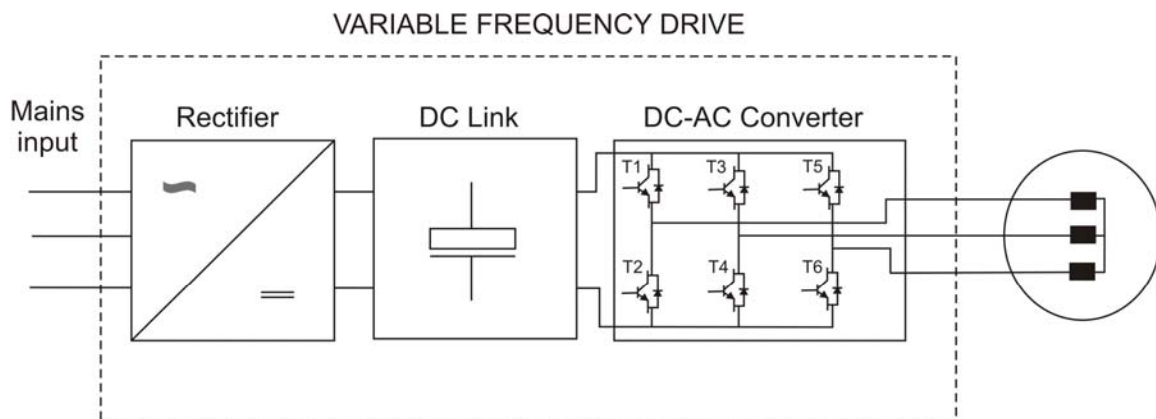


Diagram showing thyristor array in the DC-AC converter