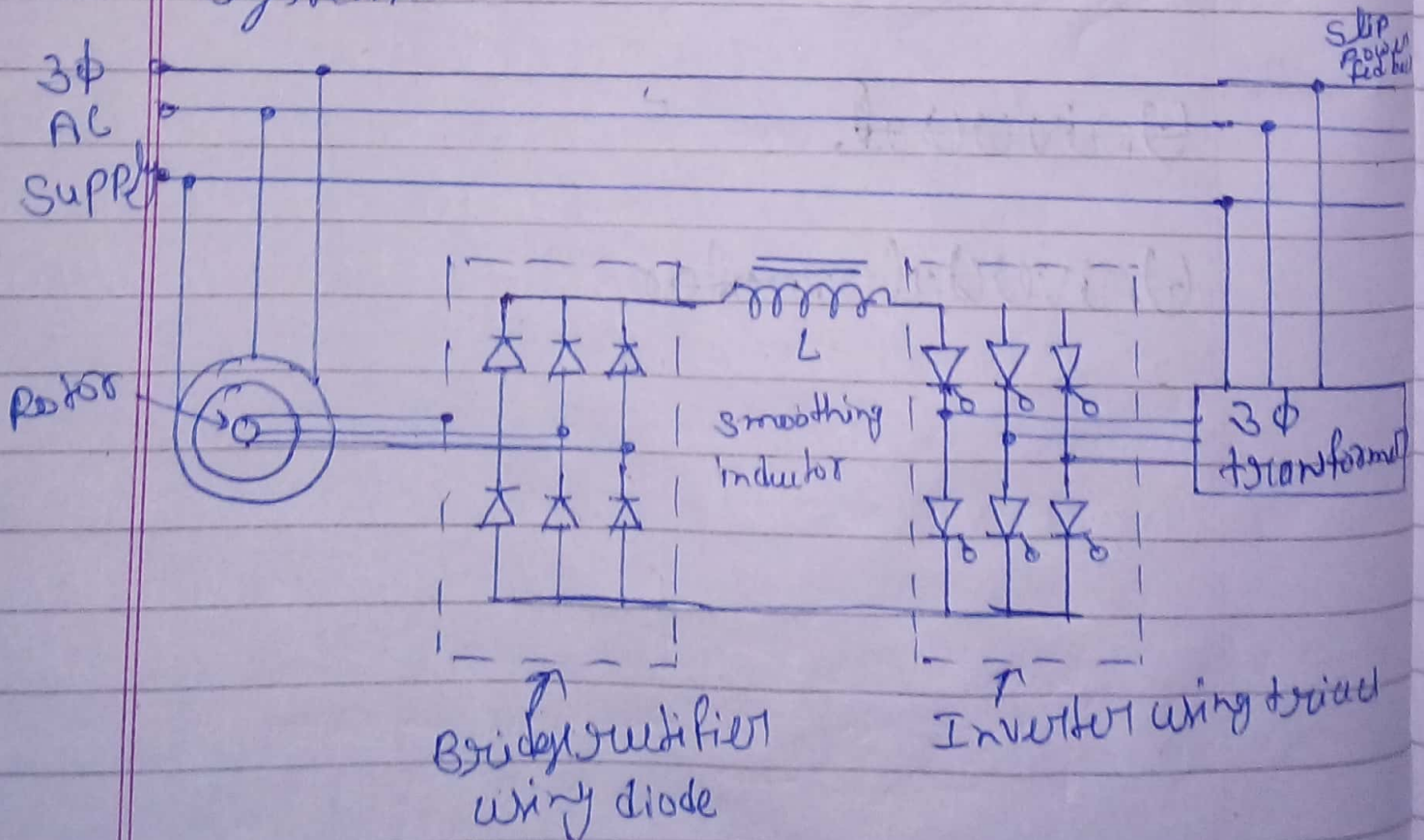


③ The slip power  $SP_g$  for an induction motor is positive for sub-synchronous speed, because slip  $s$  is positive; but it is negative for super-synchronous speed. Various schemes have been invented for recovering the slip-freq<sup>n</sup> power.

It is possible to recover the slip power from the motor & fed back to the supply using static devices.

Such a method is called slip power recovery scheme of controlling the speed of the T.M. It is also called static Scherbius system.



This DC O/P of rectifier is given as the i/P to a line commutated inverter using triacs. The inverter converts DC power to the AC power.

As the slip power flow only in one direction, this method offers speed control below  $s_{yn}^n$  speed only. This method provides a constt torque control.

This drive is more popular for adjustable speed drive because it provides a constt torque control.

Application - It is used in large power fan & pump driven which require speed control in narrow range.

