

Speed Controller

Some AC motors judder badly at low speeds when controlled by triacs using phase control. This circuit gives very smooth operation with no RFI.

Q1 acts as a 'variable resistor' in

the mains supply, with diodes D5-8 ensuring unidirectional current flow through the transistor.

Bias to the transistor is supplied by the mains transformer and controlled by RV1. Q1 must be able to withstand peak mains voltage ($\sim 350\text{V}$).

