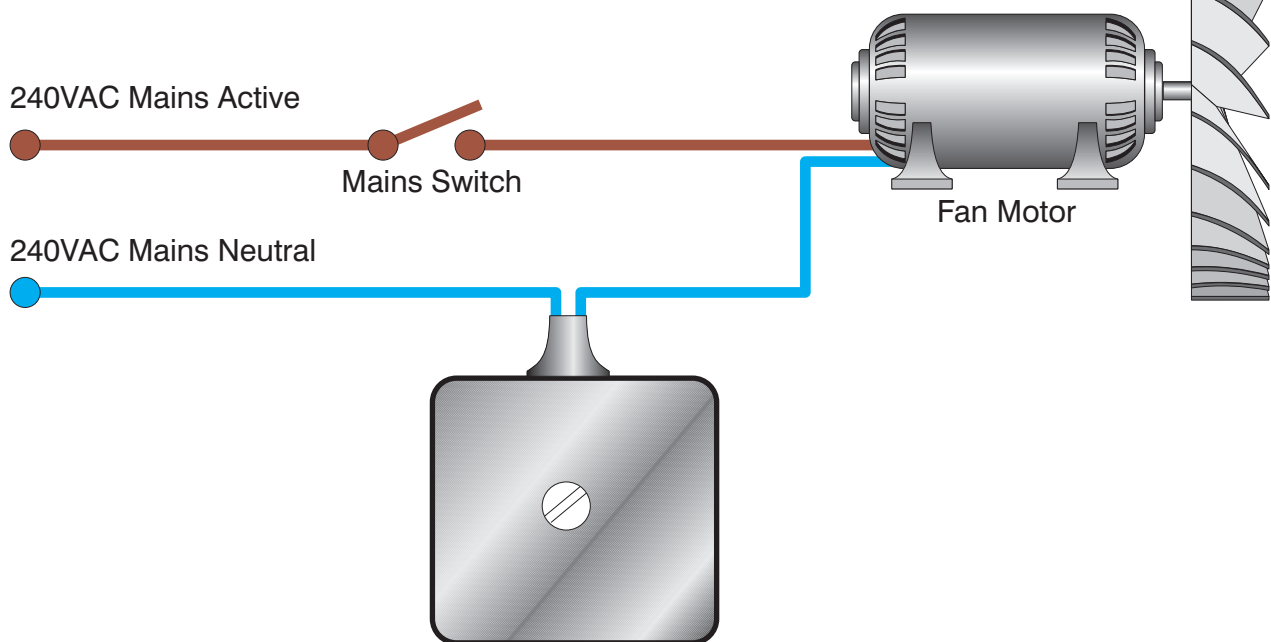


510E Speed Controller

Installation Diagram



Setting the "Minimum Speed Adjust Control"

With the front control (refer diagram) set to minimum (fully anti-clockwise) switch on the fan motor. Using a screw driver, adjust until motor is running at its lowest desirable speed. Keep the lowest speed above the fan stall speed to maintain adequate motor cooling.

The front control will then adjust from the set minimum to full speed.

Model 510E Motor Speed Controller

The 510E is a Phase controller intended to control motors driving fans or pumps where the reduced torque available from the motor is balanced by the fan power requirements providing a reduced fan speed. The controller will speed control Permanent Split Capacitor (PSC) motors and some Shaded Pole Motors driving fan or similar loads. This controller will not control an unloaded motor. It is not suitable for motors driving conveyor belts or any variable load. It is not suitable for motors with centrifugally switched capacitors.

The device has two wires that are connected in series with the load (either way round). It will operate correctly in either the Phase or Neutral line. In some applications the controller provides best results in series with the RUN winding only, leaving the START winding at full mains potential. This appears worth trying if magneto-strictive hum is a problem. For use with multi-speed motors, the controller will operate on any speed winding, but each situation may require selection to find the minimum magneto-strictive hum. The controller should be physically located close to the motor to minimise radiation of Electro Magnetic Interference EMI.

The minimum speed adjustment must be set with the main control fully anticlockwise (minimum speed) The motor must be able to start from rest at the minimum setting to eliminate the possibility of a stall situation where motors could burn out through stall and consequent lack of cooling air.

Specification

240VAC

4.5 Amps

Phase controller

Designed for motors up to 600 Watts driving fan loads.

Robust Diecast Alloy case

50 mm x 50 mm x 31mm

6.35mm dia. control shaft

Minimum speed adjustment screw

6.35mm Spade earth terminal

Flying leads V105 32/020 blue