



SINGLE PHASE INDUCTION MOTOR (SPIM) CONTROLLER

V_m = Voltage across main winding

V_s = Voltage across start winding

$$V_m = V_a - V_c$$

$$V_s = V_b - V_c$$

For the motor to rotate there must be 90 degree phase shift between V_m and V_s .

$$V_m - V_s = (V_a - V_c) - (V_b - V_c)$$

$$V_m - V_s = V_a - V_b$$

