

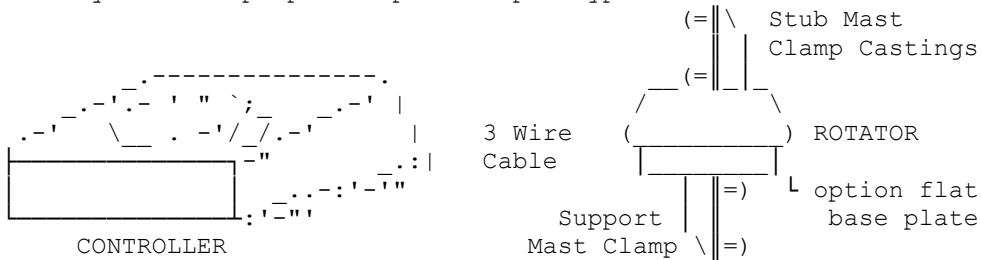
Rotator Yamato YB101 info

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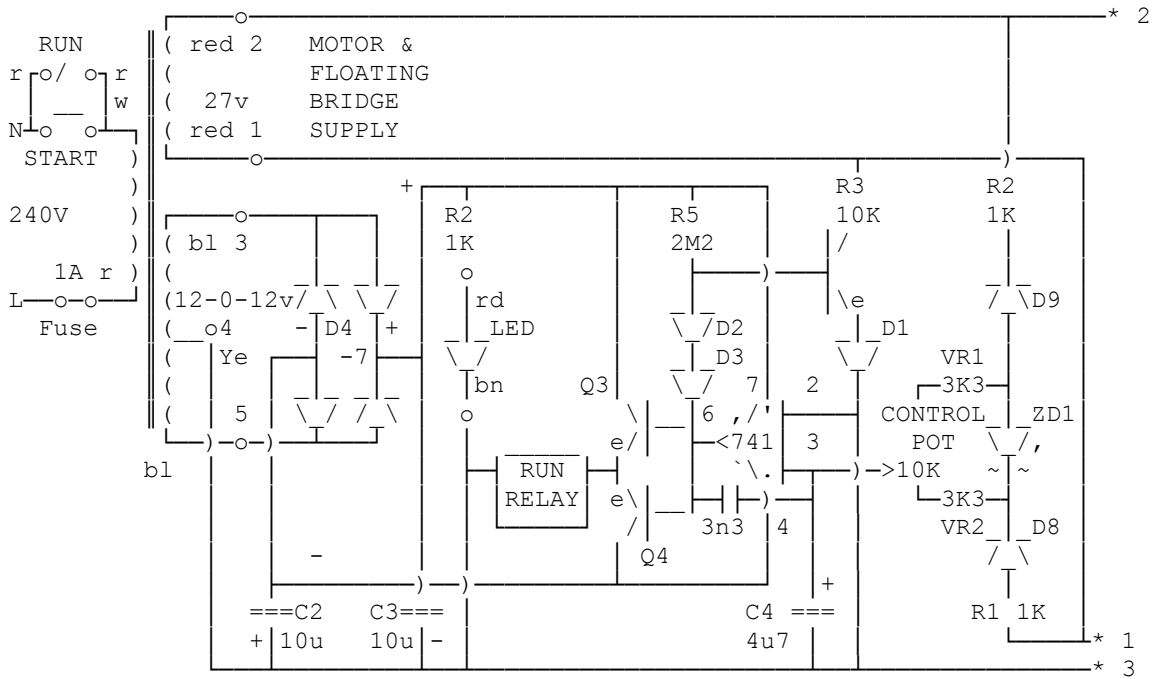
By G8MNY

(New Nov 05)

This is quite a complex circuit design with 2 relays & uniquely it is only a 3 wire system for proper comparison pot type controller.



DIAGRAM

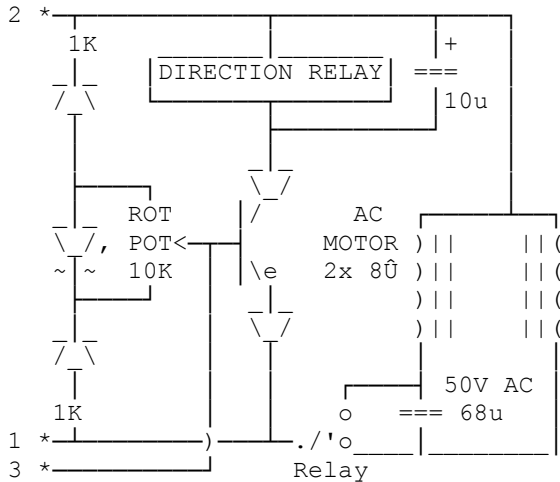


SU-2000A PCB

o = PCB Connection

* = External Connection

ROTATOR DIAGRAM



OPERATION

After rotating the HEADING pot to the desired direction & pressing the START button the LED is lit from the +ve rail & the RUN relay operates holding the mains on, as the bridge will be off balance & either + or - from the opamp will via Q2 or Q3 will hold the RUN relay on until a balance is reached.

When the op amp output is high Q1 is turned on putting some DC unbalance on the motor feed. This is sensed during the bridge un-powered half cycle in the motor head unit & turns on the transistor to operate the DIRECTION relay. The DIRECTION relay determines the AC phase & hence direction of rotation of the 2 pole AC motor.

Preset pots VR1 & VR2 set the end scale length for the control pot to match the rotator pot.

FAULTS

I have experienced the 4 white blob type diodes in the rotator head unit falling apart with corrosion, despite the rest of the circuit being in clean condition.

Why Don't U send an interesting Bulletin ?

73 de John G8MNY @ GB7CIP