Linear Systems **Ph/Fax: +91 22 25576002**

POSITION CONTROLLER

SPECIFICATION:

Supply volatge	:	230VAC + /- 10%, 50 Hz.
Power consumption	:	2VA.
Out Put	:	Potential free contacts Rated 3A Res. @ 230 VAC.
Permissaiable Operating Temperature	:	50C.
Switching hysteresis	:	2% of Transmitter Range.
Inputs (Transmitter & Feed Back)	:	Resistive Pot Meter Range 130 Ohms To 2K Ohms.
Weight	:	0.5 Kg (appx)
Diamension (L x B x H) in mm.	:	122 x 107 x 63

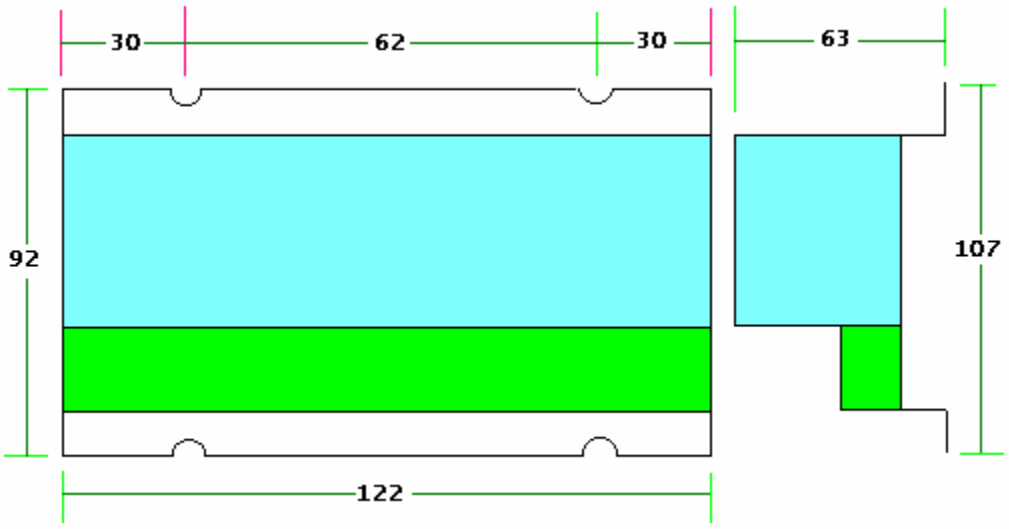
Application:

The Position Controller can be used for servo control of motor positioning with respect To transmitter pot meter or manual remote positioning of motor.

Construction:

Position controller is fully electronic circuitry housed in panel mounting type metal box. Rugged bottom entry terminal are provided for electrical connection. A dust cover to Protect the unit as well as the electrical connection.

Mounting Dimension :



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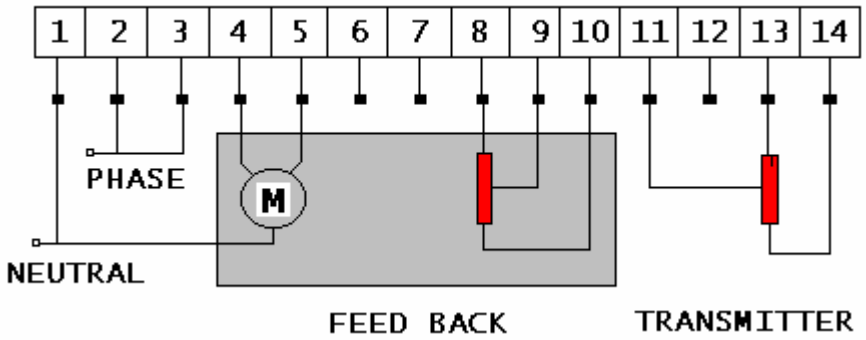
Operation:

Position controller is a P- Controller. The resistive quantity of Transmitter and feed back Pot meter which are driven by mechanical means e.g., motor or any other controller Converted to voltage signals. Then the signal from feed back pot meter is compared with Respect to signal from transmitter. When ever devition exits, out put is intiated Through relay contacts to drive the motor of the feed back pot meter so that deviation is Nullified. Thus achieving control over the motor.

Electrical connection:

Supply Voltage : 230 VAC, 50 Hz.
Inputs : 130 – 2000 Ohms. Range Pot meter.
Out put : Potential free contacts.
* 2 &3 internally shorted for 230 V AC out put.



Installation:

Mount the unit in dry location in any convenient position . Check for availability of Correct supply voltage before installation. Connect supply wire, Motor supply connection,
Feed back pot meter wire and Transmitter wire as shown in diagram. Check for The proper movement with respect transmitter.

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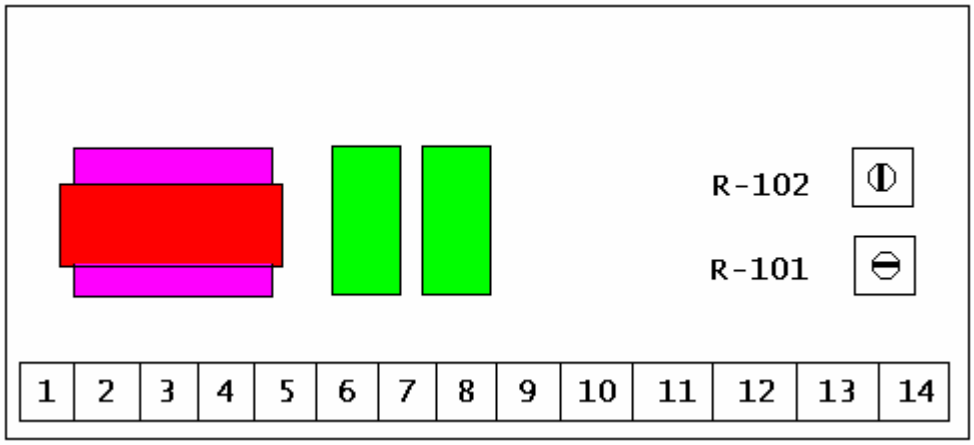
Check for the possibility of following errors in connection. It is convenient to connect a 130 Ohms pot meter at transmitter pot terminal while checking the operation.

- Follow-up drive runs correctly in one limit position. On counter order it remain in that position. In this case the connection to terminals 8 / 10 of the position controller have to be interchanged.
- The follow –up drives acts only on large off- set of the transmitter and then runs from One limit position to other. Interchange terminals 4 / 5 of the Position Controller.



Follow – up drive at transmitter position 0 or 100 % does not reach limit positon or Overshoot. e.g., when the nominal value of the transmitter and feed back potentiometer Differ greatly in values. (130 / 2000 ohms) in this case a calibration with potentiometer R 101 and 102 has to be made.

a) Connect measuring instrument on terminals 11 & 14 of the position controller (Range 0 –1 V)
b) Set Transmitter drive or test potentiometer to limit position in which the voltage reaches minimum value (appx 0V)
c) calibrate with R 102 until relays A and B drop off limit switch. Then change R 102 slowly until relay A just switches ON. The motor of the follow up drive must not run.
d) Set transmitter drive or test potentiometer to the other limits position.
e) Calibrate with R 101 until relays A and B drop off at switched off limit switch. Then change R101 slowly until relay B just switches ON. The motor of the follow up drive must not run.

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