



Hi-tech Marketing <hitech.surat@gmail.com>

PID 500 manual PID value

1 message

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To: viki desai <vikidesai163@yahoo.co.in>

Dear Kamal ji,

Please check the following procedure to find out manual PID values :

- 1) RESET the PID500 through Level 4
- 2) Set input type 'PT100' & SET POINT '30'
- 3 Switch the control mode to ON-OFF from PID
- 4) Controller will go on giving you overshoots & undershoots (note these overshoots & undershoots)
For Example : Set Point : 30C
First overshoot : 45C
First undershoot : 22C
Second overshoot : 38C
Second undershoot : 25C
- 5) Ignore first overshoot which is 45C
- 6) See the time taken by controller for first undershoot & second overshoot (from start of first undershoot & completion of second overshoot)
- 7) Note this time. This is to be feed as Integral (I) value
- 8) Derivative (D) value will be (Integral / 4)
- 9) Cycle time will be (Integral / 10)
- 10) proportional will be (2 X amplitude of first undershoot & second overshoot)
For Example :
First undershoot : 22C
Second overshoot : 38C
Then amplitude will be $(30-22) 8 + (38-30) 8 = 16$
- 11) RESET the unit. Set input & SET POINT
- 12) Make control mode as PID
- 13) Feed all the above PID, cycle time values in the controller
- 14) Observe the control action

This is the only possible way to fasten the control process but this is not the better option than tuning as in this process you may get some overshoots & undershoots in the system which may / may not be acceptable by the process.

Decision of implementation can be taken after trial.

Kindly revert in case of any query.

With Best Regards,

Ms. Harshada Pilankar

Selec Controls Pvt. Ltd.

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