## MOTORTRONICS / PHASETRONICS

## Technical Note: MT Series PID Setup

- Set-point from Keypad
- Start / Stop from Terminals
- Feedback Al2 Input: 4-20mA (Scaling 0 150 PSI)
- System Set-Point Example: 100 PSI

With power-off wire your feedback transducer device (4-20mA) to input AI2 and common and start and Stop switch using connection between L1 and 24V, see quick start manual for user terminals.

- 1. Power up drive
- 2. Select "English" (Only at first time power up)
- 3. From the "Main Menu" Select "Drive Menu" and press rotating knob when done.
- 4. From the Drive Menu select "1. 1 Simply Start" press rotating knob when done.
- 5. Select "Macro Configuration" press rotating knob when done.
- 6. Select PID Regulation, Press and hold Rotating Knob until display changes back to PID Regul.
- 7. Select "**Motor Frequency**" (e.g. 60Hz) press rotating knob, select frequency and press rotating knob
- 8. Select "**Motor Power**" (HP) press rotating knob, enter HP and press rotating knob when done.
- 9. Select "**Motor Voltage**" (V) press rotating knob, enter voltage and press rotating knob when done.
- 10. Select "**Motor Current**" (A) press rotating knob, enter current and press rotating knob when done.

11. Press ESC

- 12. From the "Drive Menu" select "1. 5 Input / Output" press rotating knob when done.
- 13. Select "Al2 Configuration" press rotating knob when done.
- 14. Select "AI2 Min Value" press rotating knob, enter 4mA and press rotating knob when done.
- 15. Press ESC twice
- 16. From the "**Drive Menu**" select "**1.7 Application Function**" press rotating knob when done.
- 17. Scroll down to "PID Regulator" press rotating knob when done.
- 18. Scroll to "**Act. Internal PID Ref**" press enter and select "**Yes**" and press rotating knob when done.
- 19. Scroll to "**Min PID Feedback**" and enter 0 PSI for minimum feedback level (4mA), press rotating knob when done.
- 20. Scroll to "**Max PID Feedback**" and enter 150 PSI for maximum feedback level (20mA), press rotating knob when done.
- 21. Scroll to "**Min PID Reference**" and enter 0 PSI for minimum system set-point allowed, press rotating knob when done.
- 22. Scroll to "**Max PID Reference**" and enter 150 PSI maximum system set-point allowed, press rotating knob when done.
- 23. Press ESC Key 2 times to go back to the "Drive Menu"
- 24. From the "Drive Menu" scroll to "1. 2 Monitoring" and press rotating knob
- 25. Scroll to "**Internal PID Ref**" press rotating know and enter the system set-point (e.g. 100PSI), press rotating knob when done.
- 26. Press ESC until display shows "Frequency Ref." in Hz

PID Regulator Adjustments can be made using the "PID Prop Gain" and "PID Integral Gain" located in the "PID Regulator" menu under "1.7 Application Menu"