

TYPICAL CONFIGURATIONS SD250

**TWO WIRE START/STOP WITH PID SLEEP AND WAKE CONTROL USING
ANALOGUE INPUT FOR REFERENCE**



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Date: **17/04/13**

| PARAMETER | DEFAULT | DESCRIPTION | SET VALUE |
|---|---------|-------------------------|---|
| DRIVE GROUP (Note- rEF and Fbk are only displayed once H49 is selected to PID control mode) | | | |
| ACC | 5.0sec | Acceleration Time | Adjust accordingly |
| dEC | 10.0sec | Deceleration Time | Adjust accordingly |
| Drv | 1 | Drive Mode | 1:Start/stop by terminals FX-forward or Rx- reverse |
| Frq | 0 | Frequency Mode | 0: Keypad |
| rEF | 0 | PID Reference | 40.0 (Reference setting in % for PID control) |
| Fbk | 0 | PID Feedback | xx (It displays the feedback in % for PID control) |
| FUNCTION GROUP 1 (F) | | | |
| F21 | 50.00Hz | Maximum frequency | 50.00Hz Adjust if necessary |
| F22 | 50.00Hz | Base frequency | 50.00Hz Adjust if necessary |
| F23 | 0.50Hz | Start frequency | xx (Minimum speed at starting) |
| F24 | 0 | Frequency limits selec | 0:No (Limits established by max.freq and start freq) 1: YES (Limits established by Hi and Low freq limits) |
| F25 | 50.00Hz | High Frequency | 50.00Hz Set values required |
| F26 | 0.50Hz | Low frequency | 0.50 Hz Set values required |
| F27 | 0 | Torque boost selec | 0:Man torque 1:Auto torque |
| FUNCTION GROUP 2 (H) | | | |
| H30 | xx | Motor power setting | xxkW Set required kW rating |
| H31 | 4 | Number of motor poles | 4:1500rpm (set accordingly) |
| H33 | xx | Motor rated current | xx Amps Set required current motor nameplate |
| H49 | 0 | PID Control selection | 1: PID Control enabled |
| H50 | 0 | PID selec feedback | 0: I input (feedback by 0-20mA signal) 1: V1 input (feedback by 0-10V signal) |
| H51 | 300.0 | P gain for PID mode | Adjust if necessary |
| H52 | 1.0 | I gain for PID mode | Adjust if necessary |
| H53 | 0.0 | D gain for PID mode | Adjust if necessary |
| H54 | 0 | PID control mode selec | 0: Normal PID control 1: Process PID control |
| H55 | 50.00Hz | Hi limit of output PID | Adjust if necessary |
| H56 | 0.50Hz | Low limit of output PID | Adjust if necessary |
| H57 | 0 | PID Ref mode setting | 0: Keypad |
| H61 | 60 sec | Sleep delay time | xxsec Adjust if necessary |
| H62 | 0.00Hz | Sleep Frequency | xxHz Frequency stop condition is given |
| H63 | 2% | Wake up level in sleep | xx% (% of feedback to restart drive) |
| I/O GROUP (I) 0-10Volt Analogue | | | |
| I7 | 0V | Minimum voltage V1 | 0V (Adjust min voltage as necessary) |
| I8 | 0.00Hz | Min frequency for V1 | 0.00Hz (Adjust min freq as required) |



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| | | | |
|-----------------|---------|----------------------|--|
| I9 | 10.0V | Max voltage of V1 | 10V (Adjust max voltage as necessary) |
| I10 | 50.00Hz | Max frequency for V1 | 50.00Hz (Adjust max freq as required) |
| 0-20mA Analogue | | | |
| I12 | 4.0mA | Minimum current of I | 4.0mA (Adjust min current accordingly) |
| I13 | 0.00Hz | Min frequency for I | 0.00Hz (Adjust min freq as required) |
| I14 | 20.0mA | Maximum current of I | 20.0mA Adjust max current accordingly) |
| I15 | 50.0Hz | Max frequency for I | 50.0Hz (Adjust max freq as required) |
| I17 | 0 | Config Input P1 | 0: (FX Forward Run Command) |

Yellow background denotes minimum necessary adjustments.

Terminals C/M/P1: Run Command NO Status

Terminals I/CM: 4-20mA Analogue Input

Terminals VR/V1/CM: 0-10V Analogue Input

