



Create a 61131-3 function block diagram in ASCII art. It shall contain an analog input, a timer block, and a PID block as well as an analog output. The analog input feeds both the timer and the PID block. Only the PID block is connected to the analog output. Provide typical input and output signals for each function block and show them inside each block.



Here's a simple ASCII art representation of a 61131-3 function block diagram containing an analog input, a timer block, a PID block, and an analog output. Please note that ASCII art has its limitations and may not be as clear as a graphical representation.

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Copy code

```
+-----+ +-----+ +-----+ +-----+
| Analog |-->| Timer   | | PID     |-->| Analog |
| Input  |  | Block   | | Block   |  | Output  |
|        |-->|        |-->|        |-->|        |
| In: 0-10V | | In: 0-10V | | In: 0-10V | | Out: 0-10V |
+-----+ +-----+ +-----+ +-----+
              | T: 0-10s |
              +-----+
```

In this diagram:

- The Analog Input receives an input signal within the range of 0-10V.
- The Timer Block takes the input signal from the Analog Input and has a timing range of 0-10s.
- The PID Block is connected to both the Analog Input and the Timer Block, receiving input signals within the range of 0-10V.
- The Analog Output is connected to the PID Block and provides an output signal within the range of 0-10V.