

PLC-5 LADDER LOGISTICS - Rockwell Software Inc.
Revision v8.07

Project Name:AI5
Time/Date:15:27 10/23/08

PRINTER CONFIGURATION:

Printer Device Name...: ASCII
Printer Device Desc...: Print report to path/filename in Print Destination
Use IBM Graphics.....: No
Allows Enhanced Mode..: No
Paper Type (w/h).....: 8 \times 11
Normal Chars/Inch.....: 10
Compressed Chars/Inch: 16.6
Lines per Inch.....: 6
Print Initialize.....:
Compressed Print.....:
Normal Print.....:
Expanded Print.....:

REPORT CONFIGURATION:

Report Configuration File: C:\PLC5\PROGS\DEFAULT.RCF
SFC Report.....: No
Structured Text Report...: No
Ladder Report.....: Yes
Xref Report.....: No
Data Table Dump Report...: No
Data Table Usage Report..: No
Data Base Form.....: No
Unused Address Report....: No
Program File List Report.: No
Data File List Report....: No
Sequencer Data Report....: No
Processor Config Report...: No
Rack Description Report...: No
I/O Parts List Report....: No

Smart I/O Config Report...: No
Revision History.....: No
Table of Contents.....: No

LADDER REPORT CONFIGURATION:

Rung Print List.....: ALL
Ladder Print Mode.....: Raw Normal
Rung Desc. Print Mode....: No Compress
Box Rung Description.....: No
Chk Page on Vert Split...: No
Instruction Print Mode...: Normal
of Des Lines to print...: 5
Symbolic Mode.....: None
Show I/O Cards.....: Yes
Output Xref.....: None
Input Xref.....: No
Ladder Xref Print Mode...: Normal
Ignore Xref Disable Flg..: No
Force Addr on Side xref...: No
Side Xref Column Width...: 20
Print Right Power Rail...: No
Print MSG/PID Config.....: No


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-----
|Timers
|TON          TON          TON
|Timer with   Timer with   Timer with           TON
|0.01 time    0.01 time    0.01 time           Timer with
|base         base         base           0.01 time
|enable bit   timing bit   done bit         base
|   T4:0      T4:0        T4:0
0+-----] [-----] [-----] [-----+---TON-----+
|          EN          TT          DN          +Timer On Delay +- (EN)-
|          |          |          |          |Timer:      T4:0|
|          |          |          |          |Base (SEC):  0.01+- (DN)
|          |          |          |          |Preset:      999|
|          |          |          |          |Accum:       0|
|          |          |          |          +-----+
|          |          |          |          TOF
|          |          |          |          Timer with
|          |          |          |          1.0 time
|          |          |          |          base
|   T4:1      |          |          |          +---TOF-----+
1+---]/[-----+---Timer Off Delay +- (EN)-
|   DN          |          |          |Timer:      T4:1|
|          |          |          |Base (SEC):  1.0+- (DN)
|          |          |          |Preset:      999|
|          |          |          |Accum:       0|
|          |          |          |          +-----+
|RTO          RTO
|Retentive    Retentive
|Timer with   Timer with
|0.01 time    0.01 time
|base TT      base
|   T4:2      |          |          |          +---RTO-----+
2+----] [-----+Retentive Timer On+- (EN)-
|   TT          |          |          |Timer:      T4:2|
|          |          |          |Base (SEC):  0.01+- (DN)
|          |          |          |Preset:      32767|
|          |          |          |Accum:       0|
|          |          |          |          +-----+
3+-----] [-----+-----[END]--

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|Counters
|CTU
|Counter          CTU
|Up              Counter
|enable bit      Up
|   C5:5         +---CTU-----+
0+-----] [-----+Count Up      +- (CU) -
|   CU          |Counter:   C5:5|
|              |Preset:   32000+- (DN)
|              |Accum:     0|
|              +-----+
|CTD
|Counter          CTD
|Down            Counter
|enable bit      Down
|   C5:6         +---CTD-----+
1+-----] [-----+Count Down     +- (CD) -
|   CD          |Counter:   C5:6|
|              |Preset:    10+- (DN)
|              |Accum:     0|
|              +-----+
|CTD      CTD
|Counter   Counter   CTD          CTD
|over flow under flow Counter      Counter
|bit       bit       done bit      Down
|   C5:6   C5:6     C5:6          C5:6
2+-----] [-----] [-----] [-----] [RES]---
|   OV     UN      DN
3+-----] [-----] [-----] [-----] [END]---
    
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|I/O instructions
|
|BTR          BTR          BTR          BTR
|enable bit   done bit    error bit   Control
|   N10:0     N10:0       N10:0       Block
|-----] / [-----] / [-----] / [-----] +---BTR-----+
0+-----] / [-----] / [-----] / [-----] +Block Transfer Read  +- (EN) -
|           15         13         12         |Mod Type:          |
|           |           |           |           |           +- (DN)
|           |Rack:          1|
|           |Group:        0+- (ER)
|           |Module:       0|
|           |Control Block: N10:0|
|           |Data File:    N7:0|
|           |Length:      13|
|           |Continuous:   N|
|           +-----+
|
|BTW          BTW          BTW          BTW
|enable bit   done bit    error bit   Control
|   N10:5     N10:5       N10:5       Block
|-----] / [-----] / [-----] / [-----] +---BTW-----+
1+-----] / [-----] / [-----] / [-----] +Block Transfer Write  +- (EN) -
|           15         13         12         |Mod Type:          |
|           |           |           |           |           +- (DN)
|           |Rack:          1|
|           |Group:        0+- (ER)
|           |Module:       0|
|           |Control Block: N10:5|
|           |Data File:    N7:20|
|           |Length:      37|
|           |Continuous:   N|
|           +-----+
|
|MSG          MSG          MSG          MSG
|enable bit   done bit    error bit   Control
|   N10:10    N10:10     N10:10     Block
|-----] / [-----] / [-----] / [-----] +---MSG-----+
2+-----] / [-----] / [-----] / [-----] +Send/Receive Message+- (EN) -
|           15         13         12         |Control:    N10:10+- (DN)
|           |           |           |           |           +- (ER)
|           +-----+
|
|-----+-----+-----+-----+-----+-----+-----+-----+-----+
3+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|
4+-----+-----+-----+-----+-----+-----+-----+-----+-----+
5+-----+-----+-----+-----+-----+-----+-----+-----+-----+
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-----+-----
|Compare and Compute instructions
|Compare
|+--CMP-----+
0++Compare +-----+Compute +--
||Expression: |
|| N11:0 < N11:1|
|+-----+
|
|
|Limit
|Test
|+--LIM-----+
1++Limit Test (Circ)+-----+Add +--
||Low Lim: 0|
||
||Test: N11:3|
|| 0|
||High Lim: 4095|
|+-----+
|
|+--MEQ-----+
2++Masked Equal +-----+Sub +--
||Source: B3:1|
|| 0|
||Mask: Offfh|
||
||Compare: B3:2|
|| 0|
|+-----+
|Equal
|+--EQU-----+
3++Equal (A=B) +-----+Mul +--
||A: N11:9|
|| 0|
||B: N11:10|
|| 0|
|+-----+
|
|Not Equal
|+--NEQ-----+
4++Not Equal (A<>B)+-----+Div +--
||A: N11:13|
|| 0|
||B: 0|
|+-----+
|
|Less Than
|+--LES-----+
5++Less Than (A<B) +-----+Square Root +--
||A: N11:17|
|| 0|
||B: N11:18|
|| 0|
|+-----+
|Greater
|Than
|+--GRT-----+
6++Greater Than (A>B)+-----+Negate +--
||A: N11:21|
|| 0|
|

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||B:          N11:22|          |Dest:    N11:24|
||              0|          |              0|
|+-----+          +-----+
|Less than
|or equal
|+--LEQ-----+          To BCD
7++Less Than or Equal (A<=B)+-----+To BCD +--
||A:          N11:25|          |Source:   N11:27|
||              0|          |              0|
||B:          N11:26|          |Dest:    O:022|
||              0|          |              0|
|+-----+          +-----+
|Greater
|than or
|equal
|+--GEQ-----+          From BCD
8++Grtr Than or Equal (A>=B)+-----+From BCD +--
||A:          N11:28|          |Source:   I:023|
||              0|          |              0|
||B:          N11:29|          |Dest:    N11:30|
||              0|          |              0|
|+-----+          +-----+
9+-----+-----[END]--

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|File instructions
|FAL with      FAL with      FAL with      FAL with
|mode: ALL     mode: ALL     mode: ALL     mode: ALL
|enable bit    done bit      error bit     mode: ALL
|   R6:2       R6:2       R6:2         +---FAL-----+
0+-----] [-----] [-----] [-----] +File Arithmetic/Logical+- (EN)-
|           EN           DN           ER           |Control:      R6:2|
|           |           |           |           |Length:       100+- (DN)
|           |           |           |           |Position      0|
|           |           |           |           |Mode:         ALL+- (ER)
|           |           |           |           |Dest:        #N13:0|
|           |           |           |           |              0|
|           |           |           |           |Expression:   |
|           |           |           |           |              #N14:0 + 32|
|           |           |           |           +-----+
|FAL with      FAL with      FAL with      FAL with
|mode: INC     mode: INC     mode: INC     mode: INC
|enable bit    done bit      error bit     mode: INC
|   R6:3       R6:3       R6:3         +---FAL-----+
1+-----] [-----] [-----] [-----] +File Arithmetic/Logical+- (EN)-
|           EN           DN           ER           |Control:      R6:3|
|           |           |           |           |Length:       150+- (DN)
|           |           |           |           |Position      4|
|           |           |           |           |Mode:         INCREMENTAL+- (ER)
|           |           |           |           |Dest:        N13:101|
|           |           |           |           |              0|
|           |           |           |           |Expression:   |
|           |           |           |           |              #N14:101 - #N13:0|
|           |           |           |           +-----+
|FAL with      FAL with      FAL with      FAL with
|mode: 50      mode: 50      mode: 50      mode: 50
|enable bit    done bit      error bit     mode: 50
|   R6:4       R6:4       R6:4         +---FAL-----+
2+-----] [-----] [-----] [-----] +File Arithmetic/Logical+- (EN)-
|           EN           DN           ER           |Control:      R6:4|
|           |           |           |           |Length:       200+- (DN)
|           |           |           |           |Position      0|
|           |           |           |           |Mode:         50+- (ER)
|           |           |           |           |Dest:        #N13:1|
|           |           |           |           |              0|
|           |           |           |           |Expression:   |
|           |           |           |           |              N14:101 * #N13:120|
|           |           |           |           +-----+
|FSC with      FSC with      FSC with      FSC with
|mode: ALL     mode: ALL     mode: ALL     mode: ALL
|enable bit    done bit      found bit     mode: ALL
|   R6:5       R6:5       R6:5         +---FSC-----+
3+-----] [-----] [-----] [-----] +File Search/Compare+- (EN)-
|           EN           DN           FD           |Control:      R6:5|
|           |           |           |           |Length:       30+- (DN)
|           |           |           |           |Position      0|
|           |           |           |           |Mode:         ALL+- (ER)
|           |           |           |           |Expression:   |
|           |           |           |           |              #N13:200 > 75|
|           |           |           |           +-----+
|FSC with      FSC with      FSC with      FSC with
|mode: INC     mode: INC     mode: INC     mode: INC
|enable bit    done bit      found bit     mode: INC
|   R6:6       R6:6       R6:6         +---FSC-----+
4+-----] [-----] [-----] [-----] +File Search/Compare+- (EN)-
|           EN           DN           FD           |Control:      R6:6|
|           |           |           |           |Length:       30+- (DN)
|           |           |           |           |Position      0|
|           |           |           |           |Mode:         INCREMENTAL+- (ER)
|           |           |           |           |Expression:   |

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|Shift instructions
|BSL          BSL          BSL          BSL
|enable bit  done bit  Unload bit  Control
|   R6:10    R6:10    R6:10          +---BSL-----+
0+----] [-----] [-----] [-----] +Bit Shift Left  +- (EN) -
|         EN         DN         UL         |Array:      #B15:0|
|         |         |         |         |Control:    R6:10+- (DN)
|         |         |         |         |Bit Address: I:007/01|
|         |         |         |         |Length:     64|
|         |         |         |         +-----+
|BSR          BSR          BSR          BSR
|enable bit  done bit  unload bit  Control
|   R6:11    R6:11    R6:11          +---BSR-----+
1+----] [-----] [-----] [-----] +Bit Shift Right +- (EN) -
|         EN         DN         UL         |Array:      #B15:5|
|         |         |         |         |Control:    R6:11+- (DN)
|         |         |         |         |Bit Address: I:007/02|
|         |         |         |         |Length:     64|
|         |         |         |         +-----+
|FFL          FFL          FFL          FFL
|enable bit  done bit  empty bit  Control
|   R6:12    R6:12    R6:12          +---FFL-----+
2+----] [-----] [-----] [-----] +FIFO Load      +- (EN) -
|         EN         DN         EM         |Source:    B15:20|
|         |         |         |         |FIFO:     #B15:10+- (DN)
|         |         |         |         |Control:   R6:12|
|         |         |         |         |Length:    10+- (EM)
|         |         |         |         |Position   0|
|         |         |         |         +-----+
|FFU          FFU          FFU          FFU
|enable bit  done bit  empty bit  Control
|   R6:13    R6:13    R6:13          +---FFU-----+
3+----] [-----] [-----] [-----] +FIFO Unload    +- (EU) -
|         EU         DN         EM         |FIFO:     #B15:10|
|         |         |         |         |Dest:     B15:21+- (DN)
|         |         |         |         |Control:   R6:13|
|         |         |         |         |Length:    10+- (EM)
|         |         |         |         |Position   0|
|         |         |         |         +-----+
4+----] [-----] [-----] [-----] +-----+
-----[END]-----

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|Special instructions
|
|FBC          FBC          FBC          FBC          FBC
|enable bit   done bit    found bit   inhibit   error bit
|   R6:30     R6:30       R6:30       R6:30     R6:30
0+-----]/[-----]/[-----]/[-----]/[-----]/[-----]>
|           EN           DN           FD           IN           ER
|
|                                     <+--FBC-----+
|                                     <+File Bit Comparison +- (EN)-
| <|Source:           #B18:0+- (DN)
| |Reference:        #B18:20+- (FD)
| |Result:           #N19:21+- (IN)
| |Cmp Control:      R6:30+- (ER)
| |Length:           9|
| |Position          0|
| |Result Control:   R6:31|
| |Length:           9|
| |Position          0|
|                                     +-----+
|
|          DDT          DDT          DDT          DDT
|enable bit   done bit    found bit   inhibit   error bit
|   R6:32     R6:32       R6:32       R6:32     R6:32
1+-----]/[-----]/[-----]/[-----]/[-----]/[-----]>
|           EN           DN           FD           IN           ER
|
|                                     <+--DDT-----+
|                                     <+Diagnostic Detect +- (EN)-
| <|Source:           #B18:0+- (DN)
| |Reference:        #B18:20+- (FD)
| |Result:           #N19:22+- (IN)
| |Cmp Control:      R6:32+- (ER)
| |Length:           9|
| |Position          0|
| |Result Control:   R6:33|
| |Length:           9|
| |Position          0|
|                                     +-----+
|
|          PID          PID          PID          PID
|enable bit   Set Output  mode       Control
|   N20:0     Mode        mode       block
|   15        4           1
2+-----] [-----] [-----] [-----]+PID-----+
|           15          4           1
|
|                                     |Control:           N20:0|
|                                     |Process Variable:  N7:4|
|                                     |Tieback:          0|
|                                     |Control Variable:  N7:235|
|                                     +-----+
3+-----] [-----] [-----] [-----]+PID-----+ [END]--

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