Name	Value	Data Type	Scope
Balance_Linea	0	INT	MainProgram
Constant	No		
External Access:	Read/Write		
Balance_Linea - MainProgram	n/Control - *0(MOV), *1(MOV),	*2(MOV), *3(MOV), 1(EQU), 2(EQU),	3(EQU)
Banda_Estacion_A	0	BOOL	APMToyLabPLC
Constant	No		J
External Access:	Read/Write		
Banda_Estacion_A - MainProg			
Banda_Estacion_B	0	BOOL	APMToyLabPLC
Constant	No	BOOL	AFWIOyLauFLC
External Access:	Read/Write		
Banda_Estacion_B - MainProg			
		Do of	ADMENT A ADMIG
Banda_Estacion_C	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Banda_Estacion_C - MainProg	gram/Actuadores - *25(OTE)		
Banda_Inyectora_A	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Banda_Inyectora_A - MainPro	gram/Actuadores - *0(OTE)		
Banda_Inyectora_B	0	BOOL	APMToyLabPLC
Constant	No	BOOL	AI WIOYLAUI LC
External Access:	Read/Write		
Banda Inyectora B - MainPro			
		Do of	ADMENT A ADMIG
Banda_Inyectora_C	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Banda_Inyectora_C - MainPro	gram/Actuadores - *10(OTE)		
Banda_Principal	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Banda_Principal - MainProgra	am/Actuadores - *30(OTE)		
Banda_Principal_Disponible	0	BOOL	MainProgram
Constant	No	2002	1/14/111 108/44/11
External Access:	Read/Write		
	MainProgram/Estados - *48(O	TE), 52(XIC)	
Banda_Principal_On	0	BOOL	MainProgram
Constant	No	BOOL	Maiii Tografii
External Access:	Read/Write		
Banda Principal On - MainPr			
	ogram/Actuadores - 50(X1C) ogram/Control - 0(X1O), 1(X1C)) 2(YIC) 3(YIC)	
Banda Principal On - MainPr Banda Principal On - MainPr), 2(AIC), 3(AIC)	
	. , ,	P. 6.5.	
Banda_Salida	0	BOOL	APMToyLabPLC
Constant	No		
External Access: Banda Salida - MainProgram/	Read/Write		
Banaa_Sanaa - Maini Togram/.	Actuauores - 31(OIE)		
Celda_Disponible	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Celda_Disponible - MainProgr	am/Estados - *55(OTE), 59(XI	C), 60(XIC)	
Celda_On	0	BOOL	MainProgram
_			ĕ

Celda On (Continued) Constant No External Access: Read/Write Celda On - MainProgram/Estados - *56(OTE) Celda On - MainProgram/Rutina Celda - 0(XIC), 1(XIC), 2(XIC) Dilindro Estacion A INT APMToyLabPLC Constant No **External Access:** Read/Write Cilindro Estacion A - MainProgram/Actuadores - *18(MOV), *19(MOV) Cilindro_Estacion_B 0 **INT** APMToyLabPLC Constant No Read/Write External Access: Cilindro Estacion B - MainProgram/Actuadores - *23(MOV), *24(MOV) Cilindro_Estacion_C 0 INT APMToyLabPLC Constant No **External Access:** Read/Write Cilindro Estacion C - MainProgram/Actuadores - *28(MOV), *29(MOV) **INT** Description Compuerta Estacion A APMToyLabPLC No Constant Read/Write **External Access:** Compuerta Estacion A - MainProgram/Actuadores - *16(MOV), *17(MOV) Compuerta Estacion B 0 INT APMToyLabPLC Constant No **External Access:** Read/Write Compuerta Estacion B - MainProgram/Actuadores - *21(MOV), *22(MOV) Compuerta_Estacion_C 0 **INT** APMToyLabPLC Constant No **External Access:** Read/Write Compuerta Estacion C - MainProgram/Actuadores - *26(MOV), *27(MOV) Compuerta Inyectora A **INT** APMToyLabPLC Constant No Read/Write External Access: Compuerta Inyectora A - MainProgram/Actuadores - *1(MOV), *2(MOV) Compuerta_Inyectora_B 0 **INT** APMToyLabPLC Constant No Read/Write External Access: Compuerta Inyectora B - MainProgram/Actuadores - *6(MOV), *7(MOV) **■** Compuerta_Inyectora_C 0 INT APMToyLabPLC Constant No **External Access:** Read/Write Compuerta Inyectora C - MainProgram/Actuadores - *11(MOV), *12(MOV) Conexion Banda Principal **BOOL** APMToyLabPLC Constant No Read/Write External Access: Conexion Banda Principal - MainProgram/Estados - 48(XIC), 49(XIC), 50(XIC), 51(XIO), 52(XIC), 53(XIC), 54(XIC) Conexion_Celda 0 **BOOL** APMToyLabPLC Constant No **External Access:** Read/Write Conexion Celda - MainProgram/Estados - 55(XIC), 56(XIC), 57(XIC), 58(XIO), 59(XIC), 60(XIC), 61(XIC), 62(XIC) Conexion_Estacion_A 0 **BOOL** APMToyLabPLC Constant No Read/Write External Access:

Conexion_Estacion_A (Conting Conexion_Estacion_A - Main		XIC), 26(XIC), 27(XIO), 28(XIC), 29(2	XIC), 30(XIC), 31(XIC)
Conexion_Estacion_B Constant External Access:	0 No Read/Write	BOOL	APMToyLabPLC
		XIC), 34(XIC), 35(XIO), 36(XIC), 37(X	XIC), 38(XIC), 39(XIC)
Conexion_Estacion_C Constant	0 No	BOOL	APMToyLabPLC
External Access: Conexion_Estacion_C - Main	Read/Write nProgram/Estados - 40(XIC), 41(.	XIC), 42(XIC), 43(XIO), 44(XIC), 45(2	XIC), 46(XIC), 47(XIC)
Conexion_Inyectora_A	0	BOOL	APMToyLabPLC
Constant	No		
External Access: Conexion Invectora A - Man	Read/Write inProgram/Estados - 0(XIC), 1(X)	IC), 2(XIC), 3(XIO), 4(XIC), 5(XIC), 6	(XIC). 7(XIC)
conexion_inyeeioru_ii mai	10grum/Estados 0(2110), 1(211	c), 2(110), 3(110), 1(110), 3(110), 0	(2110), /(2110)
Conexion_Inyectora_B	0	BOOL	APMToyLabPLC
Constant	No Day 1/Waita		
External Access: Conexion_Inyectora_B - Man	Read/Write inProgram/Estados - 10(XIC), 11((XIO), 12(XIC), 13(XIC), 14(XIC), 15(XIC), 8(XIC), 9(XIC)
Conexion Inyectora C	0	BOOL	APMToyLabPLC
Constant	No		•
External Access:	Read/Write	(TTG) 10 (TTG) 10 (TTG) 10 (TTG) 11	ATTO A. ATTO A. ATTO
Conexion_Inyectora_C - Ma	inProgram/Estados - 16(XIC), 17	(XIC), 18(XIC), 19(XIO), 20(XIC), 21((XIC), 22(XIC), 23(XIC)
Contador_Celda	0	INT	APMToyLabPLC
Constant	No		
External Access: Contador_Celda - MainProg	Read/Write ram/Rutina_Celda - 6(EQU)		
Contador_Estacion_A	0	INT	APMToyLabPLC
Constant	No		,
External Access:	Read/Write		
Contador_Estacion_A - Mair	nProgram/Contadores - *9(MOV)		
Contador_Estacion_B	0	INT	APMToyLabPLC
Constant	No		
External Access: Contador Estacion B - Mais	Read/Write nProgram/Contadores - *10(MOV	7)	
	irogram, comadores 10(mo)		
Contador_Estacion_C	0	INT	APMToyLabPLC
Constant External Access:	No Read/Write		
	nProgram/Contadores - *11(MOV	7)	
Contador_Inyectora_A	0	INT	APMToyLabPLC
Constant	No	1111	711 WTOYLAGT DC
External Access:	Read/Write		
Contador_Inyectora_A - Mai	inProgram/Contadores - *6(MOV)	<i>(</i>)	
Contador_Inyectora_B	0	INT	APMToyLabPLC
Constant	No		
External Access: Contador_Inyectora_B - Man	Read/Write inProgram/Contadores - *7(MOV))	
Contador_Inyectora_C	0	INT	APMToyLabPLC
Constant	No	11/1	Al WildyLauf LC
External Access:	Read/Write		
Contador_Inyectora_C - Ma	inProgram/Contadores - *8(MOV)	7)	
Control_Estaciones	0	INT	MainProgram

D:\UNAL\APM\APMToylab\Ladder.ACD **Control Estaciones (Continued)** Constant No Read/Write External Access: Control Estaciones - MainProgram/Control - *4(MOV) Control Estaciones - MainProgram/Rutina Estaciones - 1(EQU), 13(EQU), 7(EQU) Control_Inyectora_A INT APMToyLabPLC Constant No External Access: Read/Write Control Inyectora A - MainProgram/Actuadores - *3(MOV), *4(MOV) Control_Inyectora_B 0 **INT** APMToyLabPLC Constant No Read/Write External Access: Control Inyectora B - MainProgram/Actuadores - *8(MOV), *9(MOV) Control_Inyectora_C 0 INT APMToyLabPLC Constant No Read/Write External Access: Control Inyectora C - MainProgram/Actuadores - *13(MOV), *14(MOV) **Control Invectoras** INT MainProgram Constant No Read/Write **External Access:** Control Invectoras - MainProgram/Control - *4(MOV) Control Inyectoras - MainProgram/Rutina Inyectoras - 14(EQU), 22(EQU), 6(EQU) Counter Celda In COUNTER MainProgram Constant No Read/Write External Access: Counter Celda In - MainProgram/Rutina Celda - *3(RES), *4(CTU) Counter Celda In.ACC DINT Counter Celda In.ACC - MainProgram/Rutina Celda - 1(EQU), 2(NEQ) Counter_Celda_Out **COUNTER** MainProgram Constant No External Access: Read/Write Counter Celda Out - MainProgram/Rutina Celda - *3(RES), *5(CTU) Counter Celda Out.ACC DINT Counter Celda Out.ACC - MainProgram/Rutina Celda - 1(EQU), 2(NEQ), 6(EQU) Counter Estacion A **COUNTER** MainProgram Constant No External Access: Read/Write Counter Estacion A - MainProgram/Contadores - *15(RES), *3(CTU) Counter_Estacion A.ACC DINT Counter Estacion A.ACC - MainProgram/Contadores - 9(MOV) Counter Estacion B COUNTER MainProgram Constant No **External Access:** Read/Write Counter Estacion B - MainProgram/Contadores - *15(RES), *4(CTU) Counter Estacion B.ACC DINT Counter Estacion B.ACC - MainProgram/Contadores - 10(MOV) Counter_Estacion_C **COUNTER** MainProgram Constant No **External Access:** Read/Write Counter Estacion C - MainProgram/Contadores - *15(RES), *5(CTU) Counter Estacion C.ACC DINT Counter Estacion C.ACC - MainProgram/Contadores - 11(MOV) **COUNTER** Counter_Inyectora_A MainProgram Constant No

Counter Inyectora A (Continued) External Access: Read/Write Counter Invectora A - MainProgram/Contadores - *0(CTU), *15(RES) Counter Invectora A.ACC DINT Counter Inyectora A.ACC - MainProgram/Contadores - 6(MOV) Counter Invectora B COUNTER MainProgram Constant No External Access: Read/Write Counter Inyectora B - MainProgram/Contadores - *1(CTU), *15(RES) Counter Inyectora B.ACC DINT Counter Inyectora B.ACC - MainProgram/Contadores - 7(MOV) **COUNTER** Counter_Inyectora_C MainProgram Constant No External Access: Read/Write Counter Inyectora C - MainProgram/Contadores - *15(RES), *2(CTU) DINT Counter_Inyectora_C.ACC Counter Inyectora C.ACC - MainProgram/Contadores - 8(MOV) 0 **BOOL Estacion A Disponible** MainProgram Constant No Read/Write External Access: Estacion A Disponible - MainProgram/Estados - *24(OTE), 28(XIC), 29(XIC) **Estacion A On BOOL** MainProgram Constant No External Access: Read/Write Estacion A On - MainProgram/Estados - *25(OTE) Estacion A On - MainProgram/Rutina Estaciones - 0(XIC), 1(XIC), 2(XIC), 4(XIC), 5(XIC) Estacion B Disponible 0 **BOOL** MainProgram Constant No Read/Write External Access: Estacion B Disponible - MainProgram/Estados - *32(OTE), 36(XIC), 37(XIC) Estacion B On **BOOL** MainProgram Constant No External Access: Read/Write Estacion B On - MainProgram/Estados - *33(OTE) Estacion B On - MainProgram/Rutina Estaciones - 10(XIC), 11(XIC), 6(XIC), 7(XIC), 8(XIC) **Estacion C Disponible** 0 **BOOL** MainProgram Constant No External Access: Read/Write Estacion C Disponible - MainProgram/Estados - *40(OTE), 44(XIC), 45(XIC) **BOOL** MainProgram Estacion C On Constant No **External Access:** Read/Write Estacion C On - MainProgram/Estados - *41(OTE) Estacion C On - MainProgram/Rutina Estaciones - 12(XIC), 13(XIC), 14(XIC), 16(XIC), 17(XIC) 🛚 Estado Banda_Principal **INT** APMToyLabPLC Constant No **External Access:** Read/Write Estado Banda Principal - MainProgram/Estados - *50(MOV), *51(MOV), *52(MOV), *53(MOV), *54(MOV), 48(EQU), 49(EQU), 50(EQU) Estado Banda Principal - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU) Estado_Celda 0 INT APMToyLabPLC Constant No External Access: Read/Write Estado Celda - MainProgram/Estados - *57(MOV), *58(MOV), *59(MOV), *60(MOV), *61(MOV), *62(MOV), 55(EQU), 56(EQU), 57(EQU) Estado Celda - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU)

```
Estado Estacion A
                                  0
                                                                      INT
                                                                                                         APMToyLabPLC
   Constant
                                  No
                                  Read/Write
   External Access:
   Estado_Estacion_A - MainProgram/Estados - *26(MOV), *27(MOV), *28(MOV), *29(MOV), *30(MOV), *31(MOV), 24(EQU), 25(EQU),
   Estado Estacion A - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU)
Estado_Estacion_B
                                  0
                                                                      INT
                                                                                                         APMToyLabPLC
   Constant
                                  No
                                  Read/Write
   External Access:
   Estado Estacion B - MainProgram/Estados - *34(MOV), *35(MOV), *36(MOV), *37(MOV), *38(MOV), *39(MOV), 32(EQU), 33(EQU),
    34(EQU)
   Estado Estacion B - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU)
Estado Estacion C
                                  0
                                                                      INT
                                                                                                         APMToyLabPLC
   Constant
                                  No
                                  Read/Write
   External Access:
   Estado Estacion C - MainProgram/Estados - *42(MOV), *43(MOV), *44(MOV), *45(MOV), *46(MOV), *47(MOV), 40(EQU), 41(EQU),
    42(EQU)
   Estado Estacion C - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU)
🛚 Estado Invectora A
                                                                      INT
                                                                                                         APMToyLabPLC
   Constant
                                  No
                                  Read/Write
   External Access:
   Estado Invectora A - MainProgram/Estados - *2(MOV), *3(MOV), *4(MOV), *5(MOV), *6(MOV), *7(MOV), 0(EOU), 1(EOU), 2(EOU)
   Estado Inyectora A - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU)
Estado_Inyectora_B
                                  0
                                                                      INT
                                                                                                         APMToyLabPLC
   Constant
                                  No
   External Access:
                                  Read/Write
   Estado Inyectora B - MainProgram/Estados - *10(MOV), *11(MOV), *12(MOV), *13(MOV), *14(MOV), *15(MOV), 10(EQU), 8(EQU),
   Estado Inyectora B - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU)
                                                                      INT
Estado_Inyectora_C
                                                                                                         APMToyLabPLC
   Constant
                                  No
   External Access:
                                  Read/Write
   Estado Inyectora C - MainProgram/Estados - *18(MOV), *19(MOV), *20(MOV), *21(MOV), *23(MOV), *23(MOV), 16(EQU), 17(EQU),
   Estado Inyectora C - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU)
Falla Banda_Principal
                                  0
                                                                      BOOL
                                                                                                         APMToyLabPLC
   Constant
                                  No
   External Access:
                                  Read/Write
   Falla Banda Principal - MainProgram/Estados - 54(XIC)
Falla_Celda
                                  0
                                                                      BOOL
                                                                                                         APMToyLabPLC
   Constant
                                  No
   External Access:
                                  Read/Write
   Falla Celda - MainProgram/Estados - 62(XIC)
Falla Estacion A
                                                                      BOOL
                                                                                                         APMToyLabPLC
   Constant
                                  No
   External Access:
                                  Read/Write
   Falla Estacion A - MainProgram/Estados - 31(XIC)
Falla_Estacion_B
                                  0
                                                                      BOOL
                                                                                                         APMToyLabPLC
   Constant
                                  No
                                  Read/Write
   External Access:
   Falla Estacion B - MainProgram/Estados - 39(XIC)
Falla_Estacion_C
                                  0
                                                                      BOOL
                                                                                                         APMToyLabPLC
   Constant
                                  No
   External Access:
                                  Read/Write
```

Falla Estacion C (Continued) Falla Estacion C - MainProgram/Estados - 47(XIC) 🛘 Falla Inyectora A 0 **BOOL** APMToyLabPLC Constant No Read/Write **External Access:** Falla Invectora A - MainProgram/Estados - 7(XIC) 0 BOOL. APMToyLabPLC Falla Inyectora B No Constant **External Access:** Read/Write Falla Inyectora B - MainProgram/Estados - 15(XIC) Falla_Inyectora_C 0 **BOOL** APMToyLabPLC Constant No Read/Write **External Access:** Falla Inyectora C - MainProgram/Estados - 23(XIC) 0 **BOOL** MainProgram Inyectora A Disponible Constant No Read/Write External Access: Inyectora A Disponible - MainProgram/Estados - *0(OTE), 4(XIC), 5(XIC) Invectora A On **BOOL** MainProgram Constant No External Access: Read/Write Inyectora A On - MainProgram/Estados - *1(OTE) Inyectora A On - MainProgram/Rutina Inyectoras - 0(XIC), 1(XIC), 3(XIC), 4(XIC), 5(XIC), 6(XIC), 7(XIC) Inyectora B Disponible 0 **BOOL** MainProgram Constant No External Access: Read/Write Inyectora B Disponible - MainProgram/Estados - *8(OTE), 12(XIC), 13(XIC) **BOOL** Inyectora_B_On MainProgram Constant No External Access: Read/Write Inyectora B On - MainProgram/Estados - *9(OTE) Inyectora B On - MainProgram/Rutina Inyectoras - 11(XIC), 12(XIC), 13(XIC), 14(XIC), 15(XIC), 8(XIC), 9(XIC) Inyectora_C_Disponible **BOOL** MainProgram Constant No External Access: Read/Write Inyectora C Disponible - MainProgram/Estados - *16(OTE), 20(XIC), 21(XIC) Inyectora C On 0 **BOOL** MainProgram Constant No External Access: Read/Write Inyectora C On - MainProgram/Estados - *17(OTE) Inyectora C On - MainProgram/Rutina Inyectoras - 16(XIC), 17(XIC), 19(XIC), 20(XIC), 21(XIC), 22(XIC), 23(XIC) Linea Activa INT MainProgram Constant No Read/Write External Access: Linea_Activa - MainProgram/Control - *0(MOV), *1(MOV), *2(MOV), *3(MOV), 4(MOV) Mantenimiento Banda Principal **BOOL** APMToyLabPLC Constant No External Access: Read/Write Mantenimiento Banda Principal - MainProgram/Estados - 53(XIC) Mantenimiento_Celda 0 **BOOL** APMToyLabPLC Constant No Read/Write External Access:

Mantenimiento_Celda (Continu Mantenimiento_Celda - MainP			•
Mantenimiento_Estacion_A	0	BOOL	APMToyLabPLC
Constant	No		,
External Access:	Read/Write		
Mantenimiento_Estacion_A - M	MainProgram/Estados - 30(XIC)		
Mantenimiento_Estacion_B	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Mantenimiento_Estacion_B - N	MainProgram/Estados - 38(XIC)		
Mantenimiento_Estacion_C	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Mantenimiento_Estacion_C - N	1ainProgram/Estados - 46(XIC)		
Mantenimiento_Inyectora_A	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Mantenimiento_Inyectora_A - I	MainProgram/Estados - 6(XIC)		
Mantenimiento_Inyectora_B	0	BOOL	APMToyLabPLC
Constant	No		•
External Access:	Read/Write		
Mantenimiento_Inyectora_B - I	MainProgram/Estados - 14(XIC)		
Mantenimiento_Inyectora_C	0	BOOL	APMToyLabPLC
Constant	No		·
External Access:	Read/Write		
Mantenimiento_Inyectora_C - A	MainProgram/Estados - 22(XIC)		
Off_Celda	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Off_Celda - MainProgram/Esta	ados - 60(XIC)		
Off_Estacion_A	0	BOOL	APMToyLabPLC
Constant	No		-
External Access:	Read/Write		
Off_Estacion_A - MainProgram	n/Estados - 29(XIC)		
Off_Estacion_B	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Off_Estacion_B - MainProgram	n/Estados - 37(XIC)		
Off_Estacion_C	0	BOOL	APMToyLabPLC
Constant	No		Ž
External Access:	Read/Write		
Off_Estacion_C - MainProgram	n/Estados - 45(XIC)		
Off_Inyectora_A	0	BOOL	APMToyLabPLC
Constant	No		·
External Access:	Read/Write		
Off_Inyectora_A - MainProgra	m/Estados - 5(XIC)		
Off_Inyectora_B	0	BOOL	APMToyLabPLC
Constant	No		•
External Access:	Read/Write		
Off_Inyectora_B - MainProgra	m/Estados - 13(XIC)		
Off_Inyectora_C	0	BOOL	APMToyLabPLC
_			•

Off_Inyectora_C (Continued Constant	I) No		
External Access: Off_Inyectora_C - MainProg	Read/Write gram/Estados - 21(XIC)		
On_Celda Constant	0 No	BOOL	APMToyLabPLC
External Access: On Celda - MainProgram/E	Read/Write		
Don_Estacion_A	0	BOOL	APMToyLabPLC
Constant External Access: On_Estacion_A - MainProg	No Read/Write ram/Estados - 28(XIC)		
On_Estacion_B	0	BOOL	APMToyLabPLC
Constant	No		
External Access: On_Estacion_B - MainProg.	Read/Write ram/Estados - 36(XIC)		
On_Estacion_C	0	BOOL	APMToyLabPLC
Constant External Access:	No Read/Write		
On_Estacion_C - MainProg			
On_Inyectora_A	0 No	BOOL	APMToyLabPLC
Constant External Access:	Read/Write		
On_Inyectora_A - MainProg			
On_Inyectora_B Constant	0 No	BOOL	APMToyLabPLC
External Access:	Read/Write		
On_Inyectora_B - MainProg			
On_Inyectora_C Constant	0 No	BOOL	APMToyLabPLC
External Access:	Read/Write		
On_Inyectora_C - MainProg	gram/Estados - 20(XIC)		
Producir_Aviones Constant	0 No	BOOL	APMToyLabPLC
External Access:	Read/Write		
Producir_Aviones - MainPro	ogram/Contadores - 12(XIC) ogram/Setup - 0(XIC), 3(XIC), 4(XIC)		
Producir_Aviones_OSR	0	BOOL	MainProgram
Constant External Access:	No Read/Write		
	ainProgram/Contadores - *12(OSR)		
Producir_Aviones_Up	0	BOOL	MainProgram
Constant External Access:	No Read/Write		
	inProgram/Contadores - *12(OSR), 15(XIC	E)	
Producir_Carros	0 No	BOOL	APMToyLabPLC
Constant External Access:	No Read/Write		
Producir_Carros - MainPro	gram/Contadores - 14(XIC)		
	gram/Setup - 2(XIC), 3(XIC), 4(XIC)		
Producir_Carros_OSR Constant	0 No	BOOL	MainProgram
Constant	110		

Producir Carros OSR (Continued) Read/Write External Access: Producir Carros OSR - MainProgram/Contadores - *14(OSR) **BOOL** MainProgram **Producir Carros Up** No Constant Read/Write External Access: Producir Carros Up - MainProgram/Contadores - *14(OSR), 15(XIC) Producir_Submarinos 0 **BOOL** APMToyLabPLC Constant No External Access: Read/Write Producir Submarinos - MainProgram/Contadores - 13(XIC) Producir Submarinos - MainProgram/Setup - 1(XIC), 3(XIC), 4(XIC) 0 **BOOL** MainProgram Producir_Submarinos_OSR No Constant Read/Write External Access: Producir Submarinos OSR - MainProgram/Contadores - *13(OSR) 0 **BOOL** Producir Submarinos Up MainProgram Constant No Read/Write External Access: Producir Submarinos Up - MainProgram/Contadores - *13(OSR), 15(XIC) R Celda E0 **BOOL** MainProgram Constant No External Access: Read/Write R Celda E0 - MainProgram/Rutina Celda - *0(OTE), 1(XIC), 3(XIC) R Celda E1 0 **BOOL** MainProgram Constant No **External Access:** Read/Write R_Celda_E1 - MainProgram/Rutina_Celda - *1(OTE), 0(XIO), 1(XIC), 2(XIC), 2(XIO) R Celda E2 0 **BOOL** MainProgram Constant No External Access: Read/Write R Celda E2 - MainProgram/Actuadores - 31(XIC) R_Celda_E2 - MainProgram/Rutina_Celda - *2(OTE), 0(XIO), 1(XIC), 1(XIO), 2(XIC) R_Estacion_A_E0 **BOOL** MainProgram Constant No External Access: Read/Write R Estacion A E0 - MainProgram/Control - 1(XIC), 2(XIC), 3(XIC) R Estacion A E0 - MainProgram/Rutina Estaciones - *0(OTE), 1(XIC) **BOOL** MainProgram R Estacion A E1 Constant No **External Access:** Read/Write R Estacion A E1 - MainProgram/Actuadores - 16(XIC), 17(XIO) R Estacion A E1 - MainProgram/Rutina Estaciones - *1(OTE), 0(XIO), 1(XIC), 2(XIC), 5(XIO) R Estacion A E2 **BOOL** MainProgram Constant No **External Access:** Read/Write R Estacion A E2 - MainProgram/Actuadores - 15(XIC), 16(XIC), 17(XIO), 18(XIC), 19(XIO) R Estacion A E2 - MainProgram/Rutina Estaciones - *2(OTE), 0(XIO), 1(XIO), 2(XIC), 3(XIC), 4(XIC) 0 **BOOL** MainProgram R Estacion A E3 Constant No External Access: Read/Write R Estacion A E3 - MainProgram/Actuadores - 15(XIC) R Estacion A E3 - MainProgram/Rutina Estaciones - *4(OTE), 0(XIO), 2(XIO), 4(XIC), 5(XIC)

0 **BOOL** R Estacion A E4 MainProgram No Constant Read/Write External Access: R Estacion A E4 - MainProgram/Control - 1(XIC), 2(XIC), 3(XIC) R Estacion A E4 - MainProgram/Rutina Estaciones - *5(OTE), 0(XIO), 1(XIC), 4(XIO), 5(XIC) **BOOL** R Estacion B E0 MainProgram Constant No Read/Write External Access: R Estacion B E0 - MainProgram/Control - 1(XIC), 2(XIC), 3(XIC) R Estacion B E0 - MainProgram/Rutina Estaciones - *6(OTE), 7(XIC) 0 **BOOL** R Estacion B E1 MainProgram Constant No External Access: Read/Write R Estacion B E1 - MainProgram/Actuadores - 21(XIC), 22(XIO) R Estacion B E1 - MainProgram/Rutina Estaciones - *7(OTE), 11(XIO), 6(XIO), 7(XIC), 8(XIC) 0 **BOOL** R Estacion B E2 MainProgram Constant No External Access: Read/Write R Estacion B E2 - MainProgram/Actuadores - 20(XIC), 21(XIC), 22(XIO), 23(XIC), 24(XIO) R Estacion B E2 - MainProgram/Rutina Estaciones - *8(OTE), 10(XIC), 6(XIO), 7(XIO), 8(XIC), 9(XIC) R Estacion B E3 0 BOOL MainProgram Constant No External Access: Read/Write R Estacion B E3 - MainProgram/Actuadores - 20(XIC) R Estacion B E3 - MainProgram/Rutina Estaciones - *10(OTE), 10(XIC), 11(XIC), 6(XIO), 8(XIO) R Estacion B E4 0 **BOOL** MainProgram Constant No External Access: Read/Write R Estacion B E4 - MainProgram/Control - 1(XIC), 2(XIC), 3(XIC) R Estacion B E4 - MainProgram/Rutina Estaciones - *11(OTE), 10(XIO), 11(XIC), 6(XIO), 7(XIC) R_Estacion_C_E0 **BOOL** MainProgram Constant No Read/Write External Access: R_Estacion_C_E0 - MainProgram/Control - 1(XIC), 2(XIC), 3(XIC) R Estacion C E0 - MainProgram/Rutina Estaciones - *12(OTE), 13(XIC) 0 **BOOL** MainProgram R Estacion C E1 Constant No Read/Write External Access: R Estacion C E1 - MainProgram/Actuadores - 26(XIC), 27(XIO) R_Estacion_C_E1 - MainProgram/Rutina_Estaciones - *13(OTE), 12(XIO), 13(XIC), 14(XIC), 17(XIO) R Estacion C E2 0 **BOOL** MainProgram Constant No **External Access:** Read/Write R Estacion C E2 - MainProgram/Actuadores - 25(XIC), 26(XIC), 27(XIO), 28(XIC), 29(XIO) R Estacion C E2 - MainProgram/Rutina Estaciones - *14(OTE), 12(XIO), 13(XIO), 14(XIC), 15(XIC), 16(XIC) R_Estacion_C_E3 0 **BOOL** MainProgram Constant No **External Access:** Read/Write R Estacion C E3 - MainProgram/Actuadores - 25(XIC) R Estacion C E3 - MainProgram/Rutina Estaciones - *16(OTE), 12(XIO), 14(XIO), 16(XIC), 17(XIC) 0 R Estacion C E4 **BOOL** MainProgram Constant No Read/Write External Access: R Estacion C E4 - MainProgram/Control - 1(XIC), 2(XIC), 3(XIC)

D:\UNAL\APM\APMToylab\Ladder.ACD R Estacion C E4 (Continued) R Estacion C E4 - MainProgram/Rutina Estaciones - *17(OTE), 12(XIO), 13(XIC), 16(XIO), 17(XIC) 0 R Invectora A E0 **BOOL** MainProgram Constant No Read/Write **External Access:** R Invectora A E0 - MainProgram/Rutina Invectoras - *0(OTE), 1(XIC) 0 **BOOL** MainProgram R Inyectora A E1 Constant No **External Access:** Read/Write R Inyectora A E1 - MainProgram/Actuadores - 1(XIC), 2(XIO), 3(XIC), 4(XIO) R Inyectora A E1 - MainProgram/Rutina Inyectoras - *1(OTE), 0(XIO), 1(XIC), 2(XIC), 3(XIC), 7(XIO) 0 R Inyectora A E2 **BOOL** MainProgram Constant No **External Access:** Read/Write R Invectora A E2 - MainProgram/Actuadores - 1(XIC), 2(XIO) R Inyectora A E2 - MainProgram/Rutina Inyectoras - *3(OTE), 0(XIO), 1(XIO), 3(XIC), 4(XIC) 0 **BOOL** R Invectora A E3 MainProgram Constant No Read/Write External Access: R Invectora A E3 - MainProgram/Actuadores - 0(XIC), 1(XIC), 2(XIO) R Invectora A E3 - MainProgram/Rutina Invectoras - *4(OTE), 0(XIO), 3(XIO), 4(XIC), 5(XIC) R Inyectora A E4 0 **BOOL** MainProgram Constant No External Access: Read/Write R Invectora A E4 - MainProgram/Actuadores - 1(XIC), 2(XIO) R Inyectora A E4 - MainProgram/Control - 1(XIC), 2(XIC), 2(XIO), 3(XIC), 3(XIO) R Inyectora A E4 - MainProgram/Rutina Inyectoras - *5(OTE), 0(XIO), 4(XIO), 5(XIC), 6(XIC) 0 **BOOL** R_Inyectora_A_E5 MainProgram Constant No Read/Write **External Access:** R Inyectora A E5 - MainProgram/Actuadores - 0(XIC) R Inyectora A E5 - MainProgram/Rutina Inyectoras - *6(OTE), 0(XIO), 5(XIO), 6(XIC), 7(XIC) R Inyectora_A_E6 0 **BOOL** MainProgram Constant No Read/Write External Access: R Inyectora A E6 - MainProgram/Rutina Inyectoras - *7(OTE), 0(XIO), 1(XIC), 6(XIO), 7(XIC) R Inyectora B E0 0 **BOOL** MainProgram Constant No Read/Write External Access: R Inyectora B E0 - MainProgram/Rutina Inyectoras - *8(OTE), 9(XIC) R Inyectora B E1 0 **BOOL** MainProgram Constant No External Access: Read/Write R Inyectora B E1 - MainProgram/Actuadores - 6(XIC), 7(XIO), 8(XIC), 9(XIO) R Inyectora B E1 - MainProgram/Rutina Inyectoras - *9(OTE), 10(XIC), 11(XIC), 15(XIO), 8(XIO), 9(XIC) R_Inyectora_B_E2 0 **BOOL** MainProgram Constant No **External Access:** Read/Write R Invectora B E2 - MainProgram/Actuadores - 6(XIC), 7(XIO) R Inyectora B E2 - MainProgram/Rutina Inyectoras - *11(OTE), 11(XIC), 12(XIC), 8(XIO), 9(XIO) 0 R Invectora B E3 **BOOL** MainProgram Constant No External Access: Read/Write

```
R Inyectora B E3 (Continued)
   R Inyectora B E3 - MainProgram/Actuadores - 5(XIC), 6(XIC), 7(XIO)
   R Inyectora B E3 - MainProgram/Rutina Inyectoras - *12(OTE), 11(XIO), 12(XIC), 13(XIC), 8(XIO)
 R Inyectora B E4
                                                                        BOOL
                                                                                                             MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R Inyectora B E4 - MainProgram/Actuadores - 6(XIC), 7(XIO)
   R Inyectora B E4 - MainProgram/Control - 1(XIC), 1(XIO), 2(XIC), 3(XIC), 3(XIO)
   R Inyectora B E4 - MainProgram/Rutina Inyectoras - *13(OTE), 12(XIO), 13(XIC), 14(XIC), 8(XIO)
 R_Inyectora_B_E5
                                   0
                                                                        BOOL
                                                                                                             MainProgram
   Constant
                                   No
                                   Read/Write
   External Access:
   R Invectora B E5 - MainProgram/Actuadores - 5(XIC)
   R Inyectora B E5 - MainProgram/Rutina Inyectoras - *14(OTE), 13(XIO), 14(XIC), 15(XIC), 8(XIO)
 R_Inyectora_B_E6
                                                                        BOOL
                                                                                                             MainProgram
   Constant
                                   No
                                   Read/Write
   External Access:
   R Inyectora B E6 - MainProgram/Rutina Inyectoras - *15(OTE), 14(XIO), 15(XIC), 8(XIO), 9(XIC)
                                   0
                                                                        BOOL
 R Inyectora C E0
                                                                                                             MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R Inyectora C E0 - MainProgram/Rutina Inyectoras - *16(OTE), 17(XIC)
 R Inyectora C E1
                                   0
                                                                        BOOL
                                                                                                             MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R Inyectora C E1 - MainProgram/Actuadores - 11(XIC), 12(XIO), 13(XIC), 14(XIO)
   R_Inyectora_C_E1 - MainProgram/Rutina_Inyectoras - *17(OTE), 16(XIO), 17(XIC), 18(XIC), 19(XIC), 23(XIO)
                                   0
                                                                        BOOL
 R_Inyectora_C_E2
                                                                                                             MainProgram
   Constant
                                   No
                                   Read/Write
   External Access:
   R Inyectora C E2 - MainProgram/Actuadores - 11(XIC), 12(XIO)
   R Inyectora C E2 - MainProgram/Rutina Inyectoras - *19(OTE), 16(XIO), 17(XIO), 19(XIC), 20(XIC)
 R Inyectora C E3
                                   0
                                                                        BOOL
                                                                                                             MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R Inyectora C E3 - MainProgram/Actuadores - 10(XIC), 11(XIC), 12(XIO)
   R Inyectora C E3 - MainProgram/Rutina Inyectoras - *20(OTE), 16(XIO), 19(XIO), 20(XIC), 21(XIC)
 R Inyectora C E4
                                                                        BOOL
                                                                                                             MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R Inyectora C E4 - MainProgram/Actuadores - 11(XIC), 12(XIO)
   R Inyectora C E4 - MainProgram/Control - 1(XIC), 1(XIO), 2(XIC), 2(XIO), 3(XIC)
   R Inyectora C E4 - MainProgram/Rutina Inyectoras - *21(OTE), 16(XIO), 20(XIO), 21(XIC), 22(XIC)
 R Inyectora C E5
                                   0
                                                                        BOOL
                                                                                                             MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R_Inyectora_C_E5 - MainProgram/Actuadores - 10(XIC)
   R Inyectora C E5 - MainProgram/Rutina Inyectoras - *22(OTE), 16(XIO), 21(XIO), 22(XIC), 23(XIC)
                                                                        BOOL
                                                                                                             MainProgram
 R Inyectora C E6
   Constant
                                   No
                                   Read/Write
   External Access:
   R Inyectora C E6 - MainProgram/Rutina Inyectoras - *23(OTE), 16(XIO), 17(XIC), 22(XIO), 23(XIC)
🛚 Reset Celda
                                   0
                                                                        BOOL
                                                                                                             APMToyLabPLC
```

APMToyLabPLC

MainProgram

MainProgram

MainProgram

MainProgram

APMToyLabPLC

MainProgram

MainProgram

MainProgram

MainProgram

APMToyLabPLC

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BOOL

Reset Celda (Continued) Constant

No

Read/Write External Access: Reset Celda - MainProgram/Contadores - *15(OTE)

🛚 Sensor_Banda_Estacion_A 0

Constant No

Read/Write External Access:

Sensor Banda Estacion A - MainProgram/Rutina Estaciones - 2(XIC)

Sensor Banda Estacion A - MainProgram/Sensores - 12(XIC), 13(XIC)

Sensor_Banda_Estacion_A_Down 0 No Constant

Read/Write External Access:

Sensor Banda Estacion A Down - MainProgram/Sensores - *13(OSF)

0 Sensor_Banda_Estacion_A_OSF

Constant No

Read/Write External Access:

Sensor Banda Estacion A OSF - MainProgram/Sensores - *13(OSF)

Sensor Banda Estacion A OSR

Constant No

External Access: Read/Write

Sensor Banda Estacion A OSR - MainProgram/Sensores - *12(OSR)

Sensor Banda Estacion A Up 0

Constant No

External Access: Read/Write

Sensor_Banda_Estacion_A_Up - MainProgram/Sensores - *12(OSR)

Sensor_Banda_Estacion_B 0

Constant

No External Access: Read/Write

Sensor Banda Estacion B - MainProgram/Rutina Estaciones - 8(XIC)

Sensor Banda Estacion B - MainProgram/Sensores - 16(XIC), 17(XIC)

Sensor Banda Estacion B Down 0

Constant No

External Access: Read/Write

Sensor Banda Estacion B Down - MainProgram/Sensores - *17(OSF)

Sensor Banda Estacion B OSF 0

Constant No

External Access: Read/Write

Sensor Banda Estacion B OSF - MainProgram/Sensores - *17(OSF)

Sensor Banda Estacion B OSR

Constant No

External Access: Read/Write

Sensor Banda Estacion B OSR - MainProgram/Sensores - *16(OSR)

Sensor Banda Estacion B Up 0

Sensor_Banda_Estacion_C

No Constant

External Access: Read/Write

Sensor_Banda_Estacion_B_Up - MainProgram/Sensores - *16(OSR)

Constant No

External Access: Read/Write

Sensor Banda Estacion C - MainProgram/Rutina Estaciones - 14(XIC) Sensor Banda Estacion C - MainProgram/Sensores - 20(XIC), 21(XIC)

0

Sensor_Banda_Estacion_C_Down 0

BOOL

MainProgram

Sensor Banda Estacion C Down (Continued)

Constant

Read/Write External Access:

Sensor Banda Estacion C Down - MainProgram/Sensores - *21(OSF)

0 BOOL. Sensor Banda Estacion C OSF MainProgram

Constant No

Read/Write External Access:

Sensor Banda Estacion C OSF - MainProgram/Sensores - *21(OSF)

Sensor_Banda_Estacion_C_OSR **BOOL** MainProgram

Constant No

Read/Write External Access:

Sensor Banda Estacion C OSR - MainProgram/Sensores - *20(OSR)

0 **BOOL** MainProgram Sensor_Banda_Estacion_C_Up

Constant No

Read/Write External Access:

Sensor Banda Estacion C Up - MainProgram/Sensores - *20(OSR)

🛚 Sensor Banda_Principal_A 0 **BOOL** APMToyLabPLC

Constant No

Read/Write External Access:

Sensor Banda Principal A - MainProgram/Rutina Inyectoras - 5(XIC), 7(XIO)

Sensor Banda Principal A - MainProgram/Sensores - 2(XIC), 3(XIC)

Sensor Banda Principal A Down 0 BOOL. MainProgram

Constant

External Access: Read/Write

Sensor_Banda_Principal_A_Down - MainProgram/Sensores - *3(OSF)

Sensor Banda Principal A OSF 0 **BOOL** MainProgram

Constant

External Access: Read/Write

Sensor Banda Principal A OSF - MainProgram/Sensores - *3(OSF)

Sensor_Banda_Principal_A_OSR 0 **BOOL** MainProgram

Constant No

Read/Write External Access:

Sensor Banda Principal A OSR - MainProgram/Sensores - *2(OSR)

Sensor_Banda_Principal_A_Up 0 **BOOL** MainProgram

Constant No

External Access: Read/Write

Sensor Banda Principal A Up - MainProgram/Sensores - *2(OSR)

Sensor Banda_Principal_B 0 **BOOL** APMToyLabPLC

Constant No External Access: Read/Write

Sensor Banda Principal B - MainProgram/Rutina Inyectoras - 13(XIC), 15(XIO)

Sensor Banda Principal B - MainProgram/Sensores - 6(XIC), 7(XIC)

Sensor Banda Principal B Down 0 **BOOL** MainProgram

Constant No

Read/Write **External Access:**

Sensor_Banda_Principal_B_Down - MainProgram/Sensores - *7(OSF)

0 **BOOL** MainProgram Sensor Banda Principal B OSF

Constant

External Access: Read/Write

Sensor Banda Principal B OSF - MainProgram/Sensores - *7(OSF)

BOOL Sensor_Banda_Principal_B_OSR MainProgram

Constant No

External Access:

Sensor_Banda_Principal_B_OSR (Continued) Read/Write External Access: Sensor Banda Principal B OSR - MainProgram/Sensores - *6(OSR) **BOOL** MainProgram Sensor Banda Principal B Up No Constant Read/Write External Access: Sensor Banda Principal B Up - MainProgram/Sensores - *6(OSR) Sensor_Banda_Principal_C 0 BOOL APMToyLabPLC Constant No Read/Write External Access: Sensor Banda Principal C - MainProgram/Rutina Inyectoras - 21(XIC), 23(XIO) Sensor Banda Principal C - MainProgram/Sensores - 10(XIC), 11(XIC) Sensor_Banda_Principal_C_Down 0 **BOOL** MainProgram Constant No Read/Write External Access: Sensor Banda Principal C Down - MainProgram/Sensores - *11(OSF) Sensor_Banda_Principal C OSF **BOOL** 0 MainProgram Constant Read/Write External Access: Sensor Banda Principal C OSF - MainProgram/Sensores - *11(OSF) Sensor Banda Principal C OSR 0 **BOOL** MainProgram Constant No External Access: Read/Write Sensor Banda Principal C OSR - MainProgram/Sensores - *10(OSR) Sensor Banda Principal C Up 0 **BOOL** MainProgram Constant No Read/Write **External Access:** Sensor_Banda_Principal_C_Up - MainProgram/Sensores - *10(OSR) 🛚 Sensor_Banda_Salida 0 **BOOL** APMToyLabPLC Constant No External Access: Read/Write Sensor Banda Salida - MainProgram/Sensores - 24(XIC), 25(XIC) Sensor_Banda_Salida_Down **BOOL** MainProgram Constant No External Access: Read/Write Sensor Banda Salida Down - MainProgram/Sensores - *25(OSF) 0 **BOOL** MainProgram Sensor Banda Salida OSF No Constant Read/Write External Access: Sensor Banda Salida OSF - MainProgram/Sensores - *25(OSF) Sensor Banda Salida OSR 0 **BOOL** MainProgram Constant No External Access: Read/Write Sensor Banda Salida OSR - MainProgram/Sensores - *24(OSR) Sensor_Banda_Salida_Up 0 **BOOL** MainProgram Constant No Read/Write External Access: Sensor Banda Salida Up - MainProgram/Rutina Celda - 4(XIC) Sensor Banda Salida Up - MainProgram/Sensores - *24(OSR) Sensor Celda 0 **BOOL** APMToyLabPLC Constant No Read/Write

APMToyLabPLC - Tag Listing Page 17 APMToyLabPLC (Controller) D:\UNAL\APM\APMToylab\Ladder.ACD Sensor Celda (Continued) Sensor Celda - MainProgram/Sensores - 26(XIC), 27(XIC) Sensor Celda Down 0 **BOOL** MainProgram Constant No **External Access:** Read/Write Sensor Celda Down - MainProgram/Rutina Celda - 5(XIC), 7(XIC) Sensor Celda Down - MainProgram/Sensores - *27(OSF) 0 **BOOL** Sensor_Celda_OSF MainProgram Constant No **External Access:** Read/Write Sensor Celda OSF - MainProgram/Sensores - *27(OSF) 0 **BOOL** MainProgram Sensor_Celda_OSR Constant No Read/Write External Access: Sensor Celda OSR - MainProgram/Sensores - *26(OSR) **BOOL** MainProgram Sensor Celda Up No Constant Read/Write External Access: Sensor Celda Up - MainProgram/Sensores - *26(OSR) Sensor_Estacion_A 0 **BOOL** APMToyLabPLC Constant No External Access: Read/Write Sensor Estacion A - MainProgram/Rutina Estaciones - 5(XIO) Sensor Estacion A - MainProgram/Sensores - 14(XIC), 15(XIC) Sensor Estacion A Down **BOOL** MainProgram Constant No

Read/Write **External Access:** Sensor Estacion A Down - MainProgram/Sensores - *15(OSF)

0 **BOOL** Sensor_Estacion_A_OSF MainProgram

Constant No **External Access:** Read/Write

Sensor Estacion A OSF - MainProgram/Sensores - *15(OSF)

Sensor_Estacion_A_OSR **BOOL** MainProgram

Constant No Read/Write External Access:

Sensor Estacion A OSR - MainProgram/Sensores - *14(OSR)

0 **BOOL** MainProgram Sensor Estacion A Up

No Constant

External Access: Read/Write

Sensor Estacion A Up - MainProgram/Contadores - 3(XIC)

Sensor Estacion B - MainProgram/Rutina Estaciones - 11(XIO)

Sensor Estacion A Up - MainProgram/Sensores - *14(OSR)

Sensor_Estacion_B **BOOL** APMToyLabPLC Constant No

Read/Write External Access:

Sensor_Estacion_B - MainProgram/Sensores - 18(XIC), 19(XIC)

0 **BOOL** MainProgram Sensor Estacion B Down

Constant No

External Access: Read/Write Sensor Estacion B Down - MainProgram/Sensores - *19(OSF)

BOOL Sensor_Estacion_B_OSF MainProgram No Constant

Sensor_Estacion_B_OSF (Conti External Access: Sensor_Estacion_B_OSF - Mai	Read/Write		
Sensor_Estacion_B_OSR Constant External Access: Sensor_Estacion_B_OSR - Mai	0 No Read/Write nProgram/Sensores - *18(OSR)	BOOL	MainProgram
Sensor_Estacion_B_Up Constant External Access: Sensor_Estacion_B_Up - Main. Sensor_Estacion_B_Up - Main.		BOOL	MainProgram
	0 No Read/Write gram/Rutina_Estaciones - 17(XIO) gram/Sensores - 22(XIC), 23(XIC)	BOOL	APMToyLabPLC
Sensor_Estacion_C_Down Constant External Access: Sensor_Estacion_C_Down - Mo	0 No Read/Write ainProgram/Sensores - *23(OSF)	BOOL	MainProgram
Sensor_Estacion_C_OSF Constant External Access: Sensor_Estacion_C_OSF - Mai	0 No Read/Write inProgram/Sensores - *23(OSF)	BOOL	MainProgram
Sensor_Estacion_C_OSR Constant External Access: Sensor_Estacion_C_OSR - Mai	0 No Read/Write inProgram/Sensores - *22(OSR)	BOOL	MainProgram
Sensor_Estacion_C_Up Constant External Access: Sensor_Estacion_C_Up - Main. Sensor_Estacion_C_Up - Main.		BOOL	MainProgram
Sensor_Inyectora_A Constant External Access: Sensor_Inyectora_A - MainProgrammers Sensor_Inyectora_A - MainProgrammers	0 No Read/Write gram/Rutina_Inyectoras - 4(XIC) gram/Sensores - 0(XIC), 1(XIC)	BOOL	APMToyLabPLC
Sensor_Inyectora_A_Down Constant External Access: Sensor_Inyectora_A_Down - M	0 No Read/Write JainProgram/Sensores - *1(OSF)	BOOL	MainProgram
Sensor_Inyectora_A_OSF Constant External Access: Sensor_Inyectora_A_OSF - Ma	0 No Read/Write inProgram/Sensores - *1(OSF)	BOOL	MainProgram
Sensor_Inyectora_A_OSR Constant External Access: Sensor_Inyectora_A_OSR - Ma	0 No Read/Write inProgram/Sensores - *0(OSR)	BOOL	MainProgram
Sensor_Inyectora_A_Up	0	BOOL	MainProgram

Sensor Inyectora A Up (Continued) Constant Read/Write External Access: Sensor Inyectora A Up - MainProgram/Contadores - 0(XIC) Sensor Inyectora A Up - MainProgram/Sensores - *0(OSR) Sensor Inyectora B BOOL APMToyLabPLC Constant No **External Access:** Read/Write Sensor Inyectora B - MainProgram/Rutina Inyectoras - 12(XIC) Sensor Inyectora B - MainProgram/Sensores - 4(XIC), 5(XIC) Sensor_Inyectora_B_Down **BOOL** MainProgram Constant No Read/Write External Access: Sensor Inyectora B Down - MainProgram/Sensores - *5(OSF) Sensor_Inyectora_B_OSF **BOOL** MainProgram No Constant Read/Write External Access: Sensor Inyectora B OSF - MainProgram/Sensores - *5(OSF) 0 **BOOL** Sensor Inyectora B OSR MainProgram Constant No External Access: Read/Write Sensor Inyectora B OSR - MainProgram/Sensores - *4(OSR) Sensor Inyectora B Up 0 **BOOL** MainProgram Constant No External Access: Read/Write Sensor Inyectora B Up - MainProgram/Contadores - 1(XIC) Sensor Inyectora B Up - MainProgram/Sensores - *4(OSR) Sensor_Inyectora_C 0 **BOOL** APMToyLabPLC Constant No External Access: Read/Write Sensor Inyectora C - MainProgram/Rutina Inyectoras - 20(XIC) Sensor Inyectora C - MainProgram/Sensores - 8(XIC), 9(XIC) Sensor Inyectora C Down **BOOL** MainProgram Constant No External Access: Read/Write Sensor Inyectora C Down - MainProgram/Sensores - *9(OSF) 0 **BOOL** MainProgram Sensor Inyectora C OSF No Constant Read/Write External Access: Sensor Inyectora C OSF - MainProgram/Sensores - *9(OSF) Sensor Inyectora C OSR **BOOL** MainProgram Constant No **External Access:** Read/Write Sensor_Inyectora_C_OSR - MainProgram/Sensores - *8(OSR) Sensor_Inyectora_C_Up **BOOL** MainProgram Constant No **External Access:** Read/Write Sensor Inyectora C Up - MainProgram/Contadores - 2(XIC) Sensor Inyectora C Up - MainProgram/Sensores - *8(OSR) Start_Celda 0 **BOOL** APMToyLabPLC Constant No

Read/Write

Start Celda - MainProgram/Rutina Celda - *7(OTE)

External Access:

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Stop Celda 0 **BOOL** APMToyLabPLC Constant No Read/Write External Access: Stop Celda - MainProgram/Rutina Celda - *6(OTE) **TIMER** Timer R Estacion A MainProgram Constant No Read/Write External Access: Timer R Estacion A - MainProgram/Rutina Estaciones - *3(TON) Timer R Estacion A.DN **BOOL** Timer R Estacion A.DN - MainProgram/Rutina Estaciones - 4(XIC) **TIMER** MainProgram Timer R Estacion B Constant No External Access: Read/Write Timer R Estacion B - MainProgram/Rutina Estaciones - *9(TON) Timer R Estacion B.DN **BOOL** Timer R Estacion B.DN - MainProgram/Rutina Estaciones - 10(XIC) Timer R Estacion C **TIMER** MainProgram Constant No External Access: Read/Write Timer R Estacion C - MainProgram/Rutina Estaciones - *15(TON) Timer R Estacion C.DN **BOOL** Timer R Estacion C.DN - MainProgram/Rutina Estaciones - 16(XIC) Timer R Inyectora A **TIMER** MainProgram Constant No External Access: Read/Write Timer R Inyectora A - MainProgram/Rutina Inyectoras - *2(TON) Timer R Inyectora A.DN **BOOL** Timer R Inyectora A.DN - MainProgram/Rutina Inyectoras - 3(XIC) Timer_R_Inyectora_B **TIMER** MainProgram Constant No External Access: Read/Write Timer R Inyectora B - MainProgram/Rutina Inyectoras - *10(TON) Timer R Inyectora B.DN **BOOL** Timer R Invectora B.DN - MainProgram/Rutina Invectoras - 11(XIC) MainProgram Timer R Inyectora C **TIMER** Constant No External Access: Read/Write Timer R Invectora C - MainProgram/Rutina Invectoras - *18(TON) Timer R Inyectora C.DN BOOL. Timer R Inyectora C.DN - MainProgram/Rutina Inyectoras - 19(XIC) MainProgram Timer Setup Aviones TIMER Constant Nο **External Access:** Read/Write Timer Setup Aviones - MainProgram/Setup - *0(TON) Timer Setup Aviones.DN **BOOL** Timer Setup Aviones.DN - MainProgram/Setup - 3(XIO), 4(XIC) Timer_Setup_Carros **TIMER** MainProgram Constant No **External Access:** Read/Write Timer Setup Carros - MainProgram/Setup - *2(TON) Timer Setup Carros.DN **BOOL** Timer Setup Carros.DN - MainProgram/Setup - 3(XIO), 4(XIC) **TIMER** Timer Setup Submarinos MainProgram Constant No

Read/Write

External Access:

Timer_Setup_Submarinos (Continued)

Timer_Setup_Submarinos - MainProgram/Setup - *1(TON)

Timer_Setup_Submarinos.DN 0

Timer_Setup_Submarinos.DN - MainProgram/Setup - 3(XIO), 4(XIC)

BOOL

Max: Min:

Task overlap count: 0

MainProgram - Program Properties Listing APMToyLabPLC:MainTask

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General

Configuration

Main: Fault: MainRoutine

None

Inhibit program:

Synchroni

ze redundanc y data

after execution

Yes

No

Monitor

Scan Times(Execution Time)

Max:

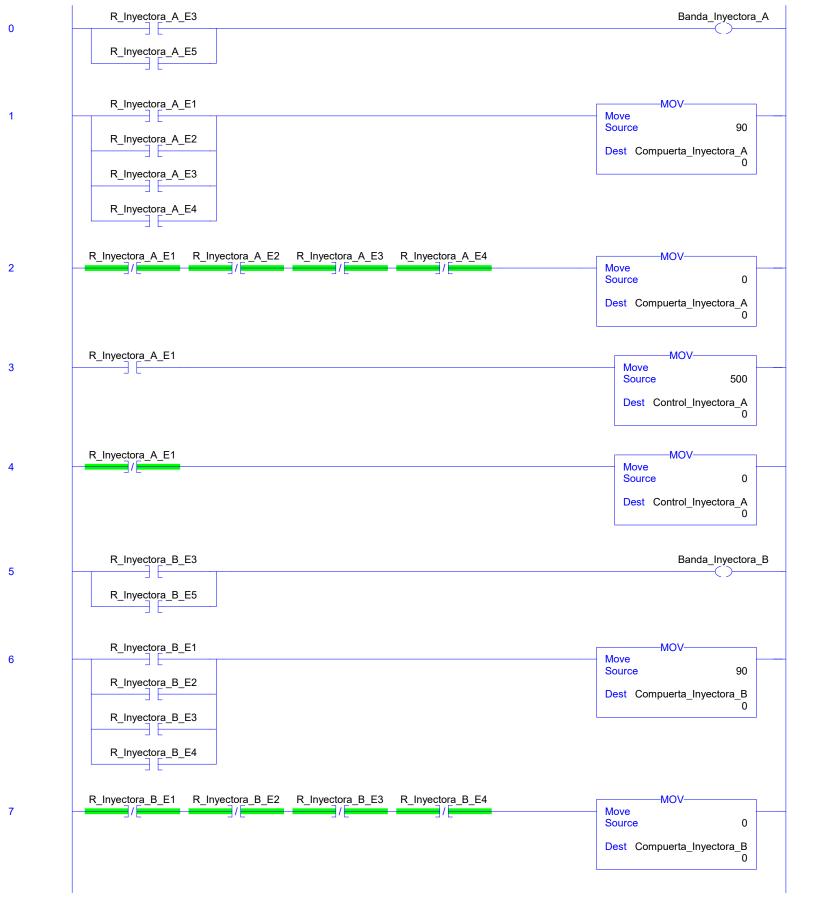
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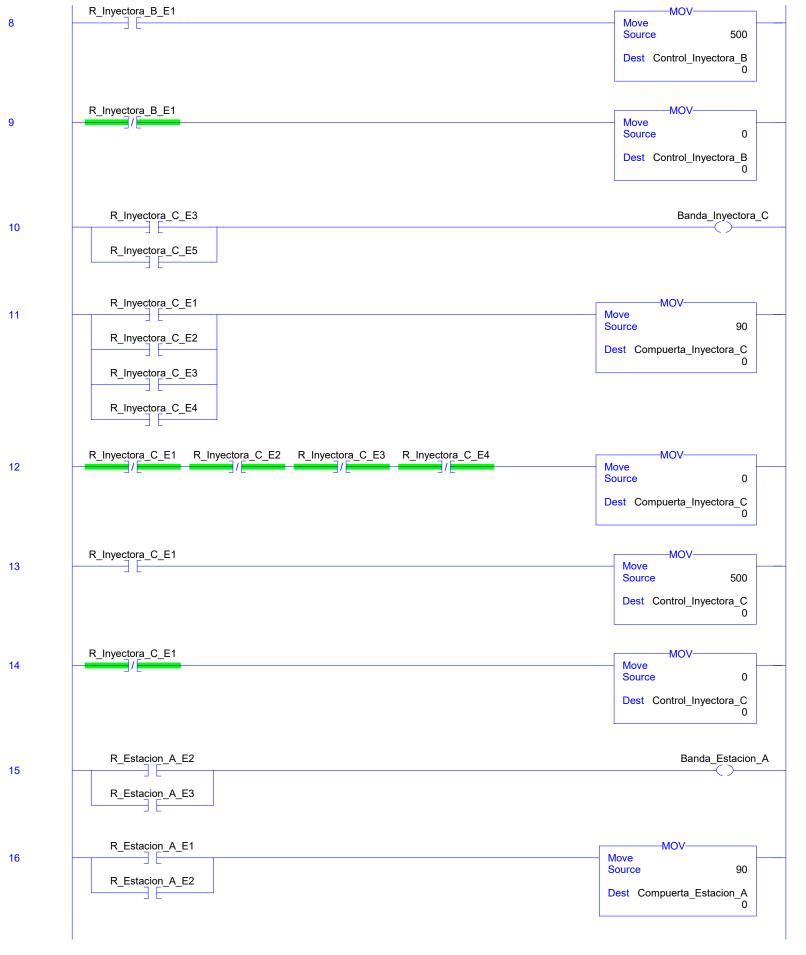
D:\UNAL\APM\APMToylab\Ladder.ACD

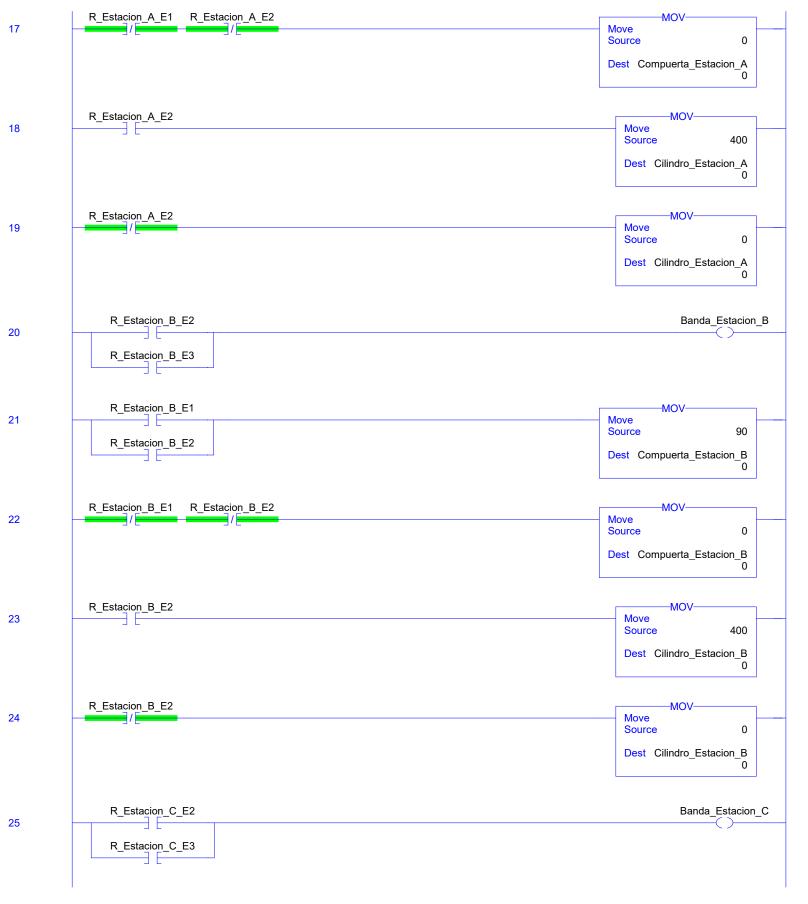
APMToyLabPLC:MainTask:MainProgram Total number of rungs in routine: 32



APMToyLabPLC:MainTask:MainProgram Total number of rungs in routine: 32

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APMToyLabPLC:MainTask:MainProgram Total number of rungs in routine: 32



Name	Value	Data Type	Scope
[₿] Banda_Estacion_A	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Banda_Estacion_A - Mainl	Program/Actuadores - *15(OTE)		
Banda_Estacion_B	0	BOOL	APMToyLabPLC
Constant	No		J
External Access:	Read/Write		
	Program/Actuadores - *20(OTE)		
Banda_Estacion_C	0	BOOL	APMToyLabPLC
Constant	No	BOOL	TH WITOYLAUT LC
External Access:	Read/Write		
	Program/Actuadores - *25(OTE)		
A Danda Investore A	0	ROOL	ADMTovi obDLC
Banda_Inyectora_A Constant	0 No	BOOL	APMToyLabPLC
External Access:	Read/Write		
Banaa_Inyeciora_A - Main	Program/Actuadores - *0(OTE)		
Banda_Inyectora_B	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Banda_Inyectora_B - Main	Program/Actuadores - *5(OTE)		
Banda_Inyectora_C	0	BOOL	APMToyLabPLC
Constant	No		, —
External Access:	Read/Write		
	Program/Actuadores - *10(OTE)		
[¶] Banda_Principal	0	BOOL	APMToyLabPLC
Constant	No	BOOL	Al WioyLaul LC
External Access:	Read/Write		
	ogram/Actuadores - *30(OTE)		
	_		
Banda_Principal_On	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
	inProgram/Actuadores - 30(XIC)	2/VIC) 2/VIC)	
	inProgram/Control - 0(XIO), 1(XIC), inProgram/Estados - *49(OTE)	2(XIC), 3(XIC)	
	, ,		
[₿] Banda_Salida	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Banda_Salida - MainProgr	am/Actuadores - *31(OTE)		
Cilindro_Estacion_A	0	INT	APMToyLabPLC
Constant	No		•
External Access:	Read/Write		
	nProgram/Actuadores - *18(MOV), *	19(MOV)	
Cilindro_Estacion_B	0	INT	APMToyLabPLC
Constant	No	1111	741 WTOYLAGI LC
External Access:	Read/Write		
	nProgram/Actuadores - *23(MOV), *	24(MOV)	
A Cilindro Estacia C	0	INIT	ADMTovi abdi C
Cilindro_Estacion_C Constant	0 No	INT	APMToyLabPLC
External Access:	Read/Write		
	nProgram/Actuadores - *28(MOV), *	29(MOV)	
	, ,		ADMT I IDIO
Compuerta_Estacion_A	0	INT	APMToyLabPLC

Compuerta_Estacion_A (Continuous Constant External Access: Compuerta_Estacion_A - Main	No Read/Write	MOV), *17(MOV)	
Compuerta_Estacion_B Constant External Access: Compuerta_Estacion_B - Mail	0 No Read/Write nProgram/Actuadores - *21(1	INT MOV), *22(MOV)	APMToyLabPLC
Compuerta_Estacion_C Constant External Access: Compuerta Estacion C - Mai	0 No Read/Write	INT MOV) *27(MOV)	APMToyLabPLC
Compuerta_Inyectora_A Constant External Access: Compuerta_Inyectora_A - Ma	0 No Read/Write	INT	APMToyLabPLC
Compuerta_Inyectora_B Constant External Access: Compuerta_Inyectora_B - Ma	0 No Read/Write inProgram/Actuadores - *6(N	INT 40V), *7(MOV)	APMToyLabPLC
Compuerta_Inyectora_C Constant External Access: Compuerta Inyectora C - Ma	0 No Read/Write inProgram/Actuadores - *11(INT (MOV), *12(MOV)	APMToyLabPLC
Control_Inyectora_A Constant External Access: Control_Inyectora_A - MainPa	0 No Read/Write	INT	APMToyLabPLC
Control_Inyectora_B Constant External Access: Control_Inyectora_B - MainPa	0 No Read/Write rogram/Actuadores - *8(MO)	INT V), *9(MOV)	APMToyLabPLC
Control_Inyectora_C Constant External Access: Control_Inyectora_C - MainP	0 No Read/Write rogram/Actuadores - *13(MC	INT DV), *14(MOV)	APMToyLabPLC
R_Celda_E2 Constant External Access: R_Celda_E2 - MainProgram/A R_Celda_E2 - MainProgram/A		BOOL IO), 1(XIC), 1(XIO), 2(XIC)	MainProgram
R_Estacion_A_E1 Constant External Access: R_Estacion_A_E1 - MainProg R_Estacion_A_E1 - MainProg		BOOL 7(XIO) OTE), 0(XIO), 1(XIC), 2(XIC), 5(XIO)	MainProgram
		BOOL 6(XIC), 17(XIO), 18(XIC), 19(XIO) OTE), 0(XIO), 1(XIO), 2(XIC), 3(XIC), 4(XIC)	MainProgram
R_Estacion_A_E3	0	BOOL	MainProgram

Actuadores - Routine Tag Listing APMToyLabPLC:MainTask:MainProgram

R_Estacion_A_E3 (Continued			
Constant	No		
External Access:	Read/Write		
R_Estacion_A_E3 - MainProg		A(OTE) A(VIO) 2(VIO) A(VIO) 5 (VIO)	
R_Estacion_A_E3 - MainProg	gram/Rutina_Estaciones - *4	4(OTE), 0(XIO), 2(XIO), 4(XIC), 5(XIC)	
R Estacion B E1	0	BOOL	MainDragram
	0 No	BOOL	MainProgram
Constant			
External Access:	Read/Write	22 (17(0)	
R_Estacion_B_E1 - MainProg			
R_Estacion_B_E1 - MainProg	gram/Rutina_Estaciones - */	7(OTE), 11(XIO), 6(XIO), 7(XIC), 8(XIC)	
R_Estacion_B_E2	0	BOOL	MainProgram
Constant	No	BOOL	Walin Togram
External Access:	Read/Write		
		21/VIC) 22/VIC) 22/VIC) 24/VIC)	
		21(XIC), 22(XIO), 23(XIC), 24(XIO) 8(OTE), 10(XIC), 6(XIO), 7(XIO), 8(XIC), 9(XIC)	
K_Estacton_B_E2 - Maint 108	gram/Ratina_Estaciones = 0	S(OTE), $TO(AIC)$, $O(AIO)$, $T(AIO)$, $O(AIC)$, $S(AIC)$	
R_Estacion_B_E3	0	BOOL	MainProgram
Constant	No		8
External Access:	Read/Write		
R Estacion B E3 - MainProg			
		10(OTE), 10(XIC), 11(XIC), 6(XIO), 8(XIO)	
R_Estacion_B_Bs main rog	gramma_Dstactories	10(012), 10(110), 11(110), 0(110)	
R Estacion C E1	0	BOOL	MainProgram
Constant	No		ε
External Access:	Read/Write		
R Estacion C El - MainPros		27(XIO)	
		13(OTE), 12(XIO), 13(XIC), 14(XIC), 17(XIO)	
K_Estacton_C_E1 = Main1 108	gram/Ranna_Estaciones	15(012), 12(200), 15(200), 14(200), 17(200)	
R_Estacion_C_E2	0	BOOL	MainProgram
Constant	No		2
External Access:	Read/Write		
		26(XIC), 27(XIO), 28(XIC), 29(XIO)	
		14(OTE), 12(XIO), 13(XIO), 14(XIC), 15(XIC), 16(XIC)	
`	_		
R_Estacion_C_E3	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
R_Estacion_C_E3 - MainProg			
R_Estacion_C_E3 - MainProg	gram/Rutina_Estaciones - *.	16(OTE), 12(XIO), 14(XIO), 16(XIC), 17(XIC)	
D. I	0	DOOL	M ' D
R_Inyectora_A_E1	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
R_Inyectora_A_E1 - MainPro			
R_Inyectora_A_E1 - MainPro	ogram/Rutina_Inyectoras - *	1(OTE), 0(XIO), 1(XIC), 2(XIC), 3(XIC), 7(XIO)	
D Investors A E2	0	BOOL	MainDragram
R_Inyectora_A_E2 Constant	0 No	DOOL	MainProgram
Constant External Access:	No Read/Write		
		2/1/10)	
R_Inyectora_A_E2 - MainPro			
R_Inyectora_A_E2 - MainPro	ogram/Rutina_Inyectoras - *	3(OTE), 0(XIO), 1(XIO), 3(XIC), 4(XIC)	
R_Inyectora_A_E3	0	BOOL	MainProgram
Constant	No	DOOL	Traini Tograni
External Access:	Read/Write		
R Inyectora A E3 - MainPro		1(YIC) 2(YIO)	
		1(AIC), 2(AIO) 4(OTE), 0(XIO), 3(XIO), 4(XIC), 5(XIC)	
111.yee.oru_1_1_13 - 11111111 10	.S. wiin Itanina_Inyeciorus =	((012), ((MO), 3(MO), T(MO), 3(MC)	
R_Inyectora_A_E4	0	BOOL	MainProgram
Constant	No		-
External Access:	Read/Write		
R Inyectora A E4 - MainPro		2(XIO)	

APMToyLabPLC:MainTask:MainProgram R Inyectora A E4 (Continued) R Inyectora A E4 - MainProgram/Control - 1(XIC), 2(XIC), 2(XIO), 3(XIO), 3(XIO) R Inyectora A E4 - MainProgram/Rutina Inyectoras - *5(OTE), 0(XIO), 4(XIO), 5(XIC), 6(XIC) R Inyectora A E5 **BOOL** MainProgram Constant No External Access: Read/Write R Invectora A E5 - MainProgram/Actuadores - 0(XIC) R Inyectora A E5 - MainProgram/Rutina Inyectoras - *6(OTE), 0(XIO), 5(XIO), 6(XIC), 7(XIC) R Inyectora B E1 **BOOL** MainProgram Constant No **External Access:** Read/Write R Inyectora B E1 - MainProgram/Actuadores - 6(XIC), 7(XIO), 8(XIC), 9(XIO) R Inyectora B E1 - MainProgram/Rutina Inyectoras - *9(OTE), 10(XIC), 11(XIC), 15(XIO), 8(XIO), 9(XIC) 0 **BOOL** R_Inyectora_B_E2 MainProgram Constant No External Access: Read/Write R Invectora B E2 - MainProgram/Actuadores - 6(XIC), 7(XIO) R Inyectora B E2 - MainProgram/Rutina Inyectoras - *11(OTE), 11(XIC), 12(XIC), 8(XIO), 9(XIO) 0 **BOOL** R Inyectora B E3 MainProgram Constant No External Access: Read/Write R Invectora B E3 - MainProgram/Actuadores - 5(XIC), 6(XIC), 7(XIO) R Inyectora B E3 - MainProgram/Rutina Inyectoras - *12(OTE), 11(XIO), 12(XIC), 13(XIC), 8(XIO) R Inyectora B E4 0 **BOOL** MainProgram Constant No External Access: Read/Write R Inyectora B E4 - MainProgram/Actuadores - 6(XIC), 7(XIO) R Inyectora B E4 - MainProgram/Control - 1(XIC), 1(XIO), 2(XIC), 3(XIC), 3(XIO) R_Inyectora_B_E4 - MainProgram/Rutina_Inyectoras - *13(OTE), 12(XIO), 13(XIC), 14(XIC), 8(XIO) 0 **BOOL** R Inyectora B E5 MainProgram Constant No External Access: Read/Write R Invectora B E5 - MainProgram/Actuadores - 5(XIC) R Inyectora B E5 - MainProgram/Rutina Inyectoras - *14(OTE), 13(XIO), 14(XIC), 15(XIC), 8(XIO) R Inyectora C E1 0 **BOOL** MainProgram Constant No External Access: Read/Write R Inyectora C E1 - MainProgram/Actuadores - 11(XIC), 12(XIO), 13(XIC), 14(XIO) R Inyectora C E1 - MainProgram/Rutina Inyectoras - *17(OTE), 16(XIO), 17(XIC), 18(XIC), 19(XIC), 23(XIO) R Inyectora C E2 **BOOL** MainProgram Constant No External Access: Read/Write R Invectora C E2 - MainProgram/Actuadores - 11(XIC), 12(XIO) R Inyectora C E2 - MainProgram/Rutina Inyectoras - *19(OTE), 16(XIO), 17(XIO), 19(XIC), 20(XIC) R Inyectora C E3 **BOOL** MainProgram Constant No **External Access:** Read/Write R_Inyectora_C_E3 - MainProgram/Actuadores - 10(XIC), 11(XIC), 12(XIO) R Inyectora C E3 - MainProgram/Rutina Inyectoras - *20(OTE), 16(XIO), 19(XIO), 20(XIC), 21(XIC) R Inyectora C E4 0 **BOOL** MainProgram Constant No External Access: Read/Write R Inyectora C E4 - MainProgram/Actuadores - 11(XIC), 12(XIO) R Inyectora C E4 - MainProgram/Control - 1(XIC), 1(XIO), 2(XIC), 2(XIO), 3(XIC)

Actuadores - Routine Tag Listing

APMToyLabPLC:MainTask:MainProgram

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R_Inyectora_C_E4 (Continued)

R_Inyectora_C_E4 - MainProgram/Rutina_Inyectoras - *21(OTE), 16(XIO), 20(XIO), 21(XIC), 22(XIC)

R_Inyectora_C_E5 0 BOOL MainProgram

Constant No

External Access: Read/Write

R Inyectora C E5 - MainProgram/Actuadores - 10(XIC)

R_Inyectora_C_E5 - MainProgram/Rutina_Inyectoras - *22(OTE), 16(XIO), 21(XIO), 22(XIC), 23(XIC)

Actuadores - Routine Properties Listing APMToyLabPLC:MainTask:MainProgram

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General

■Ladder Diagram

MainProgram Type: In Program:

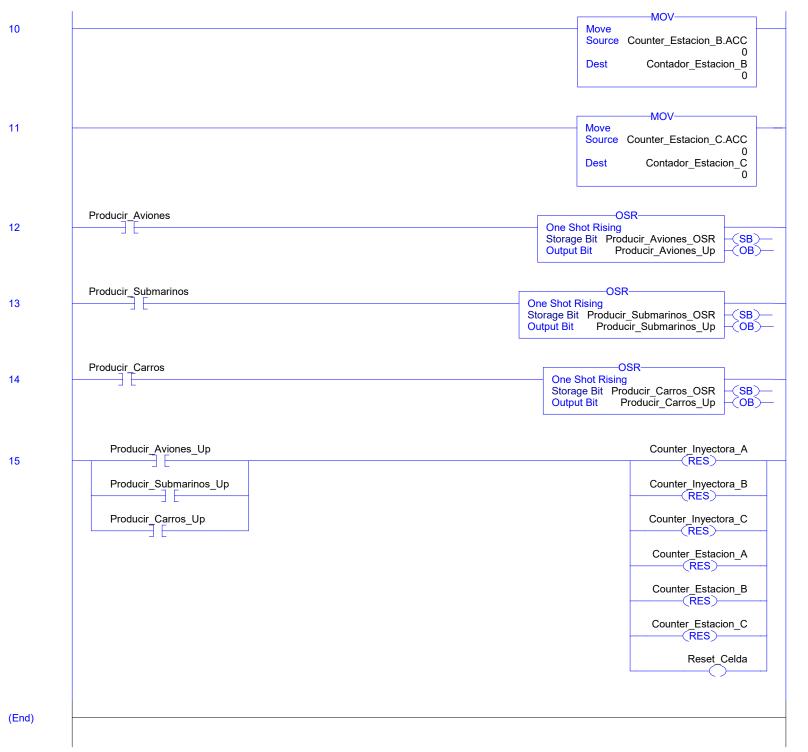
Number of Rungs:

32

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Name	Value	Data Type	Scope
Contador_Estacion_A	0	INT	APMToyLabPLC
Constant	No		,
External Access:	Read/Write		
Contador_Estacion_A - Main	Program/Contadores - *9(MOV)		
Contador_Estacion_B	0	INT	APMToyLabPLC
Constant	No		- ,
External Access:	Read/Write		
Contador_Estacion_B - Main	Program/Contadores - *10(MOV)		
Contador_Estacion_C	0	INT	APMToyLabPLC
Constant	No		,
External Access:	Read/Write		
Contador_Estacion_C - Main	Program/Contadores - *11(MOV)		
Contador_Inyectora_A	0	INT	APMToyLabPLC
Constant	No		,
External Access:	Read/Write		
Contador_Inyectora_A - Mai	nProgram/Contadores - *6(MOV)		
Contador_Inyectora_B	0	INT	APMToyLabPLC
Constant	No		,
External Access:	Read/Write		
Contador_Inyectora_B - Mai	nProgram/Contadores - *7(MOV)		
Contador_Inyectora_C	0	INT	APMToyLabPLC
Constant	No	11.11	111 1111 by 21 101 20
External Access:	Read/Write		
Contador_Inyectora_C - Mai	nProgram/Contadores - *8(MOV)		
Counter_Estacion_A		COUNTER	MainProgram
Constant	No	o o o o o o o o o o o o o o o o o o o	1.10.111 1.081.0111
External Access:	Read/Write		
Counter Estacion A - MainF	Program/Contadores - *15(RES), *3(CTU)		
Counter_Estacion_A.ACC	0	DINT	
Counter_Estacion_A.ACC - N	MainProgram/Contadores - 9(MOV)		
Counter_Estacion_B		COUNTER	MainProgram
Constant	No		_
External Access:	Read/Write		
	Program/Contadores - *15(RES), *4(CTU)		
Counter_Estacion_B.ACC	0	DINT	
Counter_Estacion_B.ACC - N	MainProgram/Contadores - 10(MOV)		
Counter_Estacion_C		COUNTER	MainProgram
Constant	No		
External Access:	Read/Write		
	Program/Contadores - *15(RES), *5(CTU)	DDIT	
Counter_Estacion_C.ACC	0	DINT	
Counter_Estacion_C.ACC - N	MainProgram/Contadores - 11(MOV)		
Counter_Inyectora_A		COUNTER	MainProgram
Constant	No		
External Access:	Read/Write		
	Program/Contadores - *0(CTU), *15(RES) 0	DINT	
Counter_Inyectora_A.ACC Counter_Inyectora_A.ACC	0 MainProgram/Contadores - 6(MOV)	DINT	
	- , , ,	COLDITED	M · D
Counter_Inyectora_B	No	COUNTER	MainProgram
Constant External Access:	No Read/Write		
	Read/Write Program/Contadores - *1(CTU), *15(RES)		
Counter Invectora B.ACC	0	DINT	
	-		

Counter Inyectora B (Continued) Counter Inyectora B.ACC - MainProgram/Contadores - 7(MOV) COUNTER MainProgram Counter Invectora C Constant No **External Access:** Read/Write Counter Invectora C - MainProgram/Contadores - *15(RES), *2(CTU) DINT Counter_Inyectora_C.ACC Counter Inyectora C.ACC - MainProgram/Contadores - 8(MOV) Producir Aviones **BOOL** APMToyLabPLC Constant No **External Access:** Read/Write Producir Aviones - MainProgram/Contadores - 12(XIC) Producir Aviones - MainProgram/Setup - 0(XIC), 3(XIC), 4(XIC) 0 **BOOL** Producir_Aviones_OSR MainProgram Constant No Read/Write External Access: Producir Aviones OSR - MainProgram/Contadores - *12(OSR) **Producir Aviones Up BOOL** MainProgram Constant No Read/Write External Access: Producir Aviones Up - MainProgram/Contadores - *12(OSR), 15(XIC) Producir Carros 0 BOOL. APMToyLabPLC Constant No External Access: Read/Write Producir Carros - MainProgram/Contadores - 14(XIC) Producir Carros - MainProgram/Setup - 2(XIC), 3(XIC), 4(XIC) Producir_Carros_OSR **BOOL** MainProgram Constant No Read/Write **External Access:** Producir Carros OSR - MainProgram/Contadores - *14(OSR) Producir Carros Up 0 **BOOL** MainProgram Constant No External Access: Read/Write Producir Carros Up - MainProgram/Contadores - *14(OSR), 15(XIC) **Producir Submarinos** 0 **BOOL** APMToyLabPLC Constant No External Access: Read/Write Producir Submarinos - MainProgram/Contadores - 13(XIC) Producir Submarinos - MainProgram/Setup - 1(XIC), 3(XIC), 4(XIC) **Producir Submarinos OSR** 0 **BOOL** MainProgram Constant No **External Access:** Read/Write Producir Submarinos OSR - MainProgram/Contadores - *13(OSR) Producir Submarinos Up **BOOL** MainProgram Constant No **External Access:** Read/Write Producir Submarinos Up - MainProgram/Contadores - *13(OSR), 15(XIC) Reset Celda 0 **BOOL** APMToyLabPLC Constant No Read/Write External Access: Reset Celda - MainProgram/Contadores - *15(OTE) **BOOL** Sensor_Estacion_A_Up 0 MainProgram

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MainProgram

MainProgram

MainProgram

MainProgram

MainProgram

BOOL

BOOL

BOOL

BOOL

BOOL

Sensor Estacion A Up (Continued)

Constant No

Read/Write External Access:

Sensor Estacion A Up - MainProgram/Contadores - 3(XIC) Sensor Estacion A Up - MainProgram/Sensores - *14(OSR)

Sensor Estacion B Up Constant No

External Access: Read/Write

Sensor Estacion B Up - MainProgram/Contadores - 4(XIC)

Sensor Estacion B Up - MainProgram/Sensores - *18(OSR)

Sensor_Estacion_C_Up 0

Constant No

External Access: Read/Write

Sensor Estacion C Up - MainProgram/Contadores - 5(XIC)

Sensor Estacion C Up - MainProgram/Sensores - *22(OSR)

0 Sensor_Inyectora_A_Up

Constant No

Read/Write **External Access:**

Sensor Inyectora A Up - MainProgram/Contadores - 0(XIC)

0

Sensor Inyectora A Up - MainProgram/Sensores - *0(OSR)

Sensor Inyectora B Up

Constant No

External Access: Read/Write

Sensor Inyectora B Up - MainProgram/Contadores - 1(XIC)

Sensor Inyectora B Up - MainProgram/Sensores - *4(OSR)

Sensor_Inyectora_C_Up 0

Constant No Read/Write **External Access:**

 $Sensor_Inyectora_C_Up - MainProgram/Contadores - 2(XIC)$

Sensor_Inyectora_C_Up - MainProgram/Sensores - *8(OSR)

Contadores - Routine Properties Listing APMToyLabPLC:MainTask:MainProgram

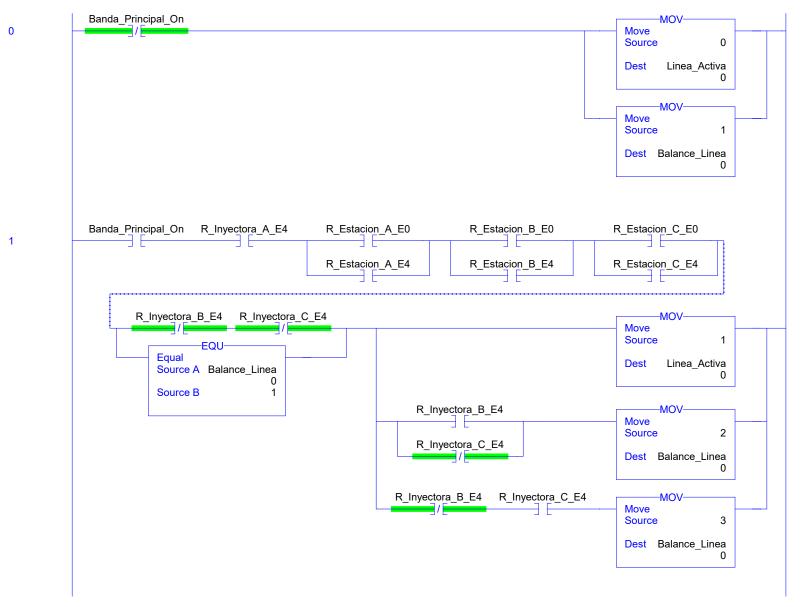
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General

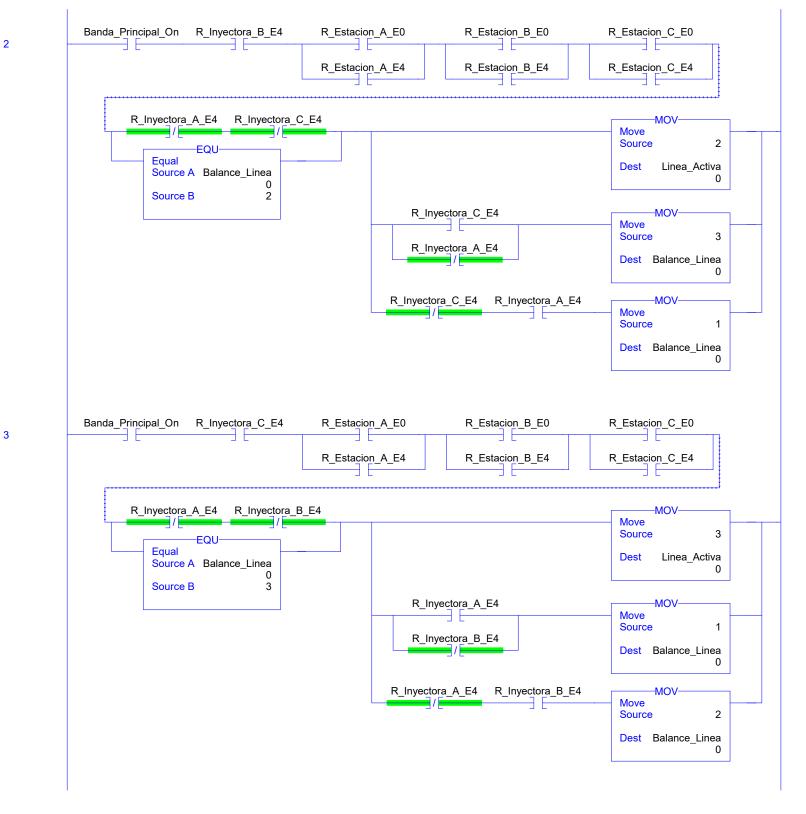
■Ladder Diagram

MainProgram Type: In Program:

Number of Rungs:



Total number of rungs in routine: 5



Control - Ladder Diagram

APMToyLabPLC:MainTask:MainProgram Total number of rungs in routine: 5

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Name	Value	Data Tuna	Scope
Balance_Linea	()	Data Type INT	MainProgram
Constant	No	1111	Walli Togram
External Access:	Read/Write		
		OV), *2(MOV), *3(MOV), 1(EQU), 2(EQU), 3	B(EQU)
			· · · ·
Banda_Principal_On	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Banda_Principal_On - Main	aProgram/Actuadores - 30(XIC	C)	
	nProgram/Control - 0(XIO), 1(
Banda_Principal_On - Main	nProgram/Estados - *49(OTE)		
Control_Estaciones	0	INT	MainProgram
Constant	No	1111	Walli Togram
External Access:	Read/Write		
Control_Estaciones - MainP			
Control Estaciones - MainP	rogram/Rutina Estaciones - I	(EOU). 13(EOU). 7(EOU)	
	8		
Control_Inyectoras	0	INT	MainProgram
Constant	No		
External Access:	Read/Write		
Control_Inyectoras - MainPi			
Control_Inyectoras - MainPi	rogram/Rutina_Inyectoras - 1	4(EQU), 22(EQU), 6(EQU)	
Timos Astivo	0	INT	MainDuagnana
Linea_Activa Constant	0 No	11/1	MainProgram
External Access:	Read/Write		
		V), *2(MOV), *3(MOV), 4(MOV)	
Linea_Activa - Maini Togran		7), 2(MOV), 3(MOV), 4(MOV)	
R_Estacion_A_E0	0	BOOL	MainProgram
Constant	No		_
External Access:	Read/Write		
	ogram/Control - 1(XIC), 2(XIC		
$R_Estacion_A_E0$ - $MainPro$	ogram/Rutina_Estaciones - *0	(OTE), 1(XIC)	
D Estacion A E4	0	BOOL	MainProgram
R_Estacion_A_E4 Constant	No	BOOL	Maiii Iograiii
External Access:	Read/Write		
	ogram/Control - 1(XIC), 2(XIC	C) 3(YIC)	
		(OTE), 0(XIO), 1(XIC), 4(XIO), 5(XIC)	
	0 _		
R_Estacion_B_E0	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
	ogram/Control - 1(XIC), 2(XIC		
R_Estacion_B_E0 - MainPro	ogram/Rutina_Estaciones - *6	(OTE), 7(XIC)	
R_Estacion_B_E4	0	BOOL	MainProgram
Constant	No	BOOL	Walli Togram
External Access:	Read/Write		
	ogram/Control - 1(XIC), 2(XIC	C), 3(XIC)	
		1(OTE), 10(XIO), 11(XIC), 6(XIO), 7(XIC)	
	0 _		
R_Estacion_C_E0	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
	ogram/Control - 1(XIC), 2(XIC		
R_Estacion_C_E0 - MainPro	ogram/Rutina_Estaciones - *I	2(OTE), 13(XIC)	
R_Estacion_C_E4	0	BOOL	MainProgram
Constant	No	DOOL	Maini 10graili
External Access:	Read/Write		
	ogram/Control - 1(XIC), 2(XIC	C). 3(XIC)	
T_DStation_C_DT - Muilli 10	5. www. comion 1 (200), 2 (200)	-,, -,,	

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R Estacion C E4 (Continued)

 \overline{R} Estacion \overline{C} $\overline{E4}$ - MainProgram/Rutina Estaciones - *17(OTE), 12(XIO), 13(XIC), 16(XIO), 17(XIC)

0 R Invectora A E4 **BOOL** MainProgram

Constant No

External Access: Read/Write

R Invectora A E4 - MainProgram/Actuadores - 1(XIC), 2(XIO)

R Inyectora A E4 - MainProgram/Control - 1(XIC), 2(XIC), 2(XIO), 3(XIC), 3(XIO)

R Inyectora A E4 - MainProgram/Rutina Inyectoras - *5(OTE), 0(XIO), 4(XIO), 5(XIC), 6(XIC)

R Inyectora B E4 **BOOL** MainProgram

Constant No **External Access:** Read/Write

R Inyectora B E4 - MainProgram/Actuadores - 6(XIC), 7(XIO)

R Inyectora B E4 - MainProgram/Control - 1(XIC), 1(XIO), 2(XIC), 3(XIC), 3(XIO)

R Inyectora B E4 - MainProgram/Rutina Inyectoras - *13(OTE), 12(XIO), 13(XIC), 14(XIC), 8(XIO)

R_Inyectora_C_E4 **BOOL** MainProgram

Constant No

Read/Write **External Access:**

R Invectora C E4 - MainProgram/Actuadores - 11(XIC), 12(XIO)

R Inyectora C E4 - MainProgram/Control - 1(XIC), 1(XIO), 2(XIC), 2(XIO), 3(XIC)

R Inyectora C E4 - MainProgram/Rutina Inyectoras - *21(OTE), 16(XIO), 20(XIO), 21(XIC), 22(XIC)

Control - Routine Properties Listing APMToyLabPLC:MainTask:MainProgram

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General

■Ladder Diagram

MainProgram Type: In Program:

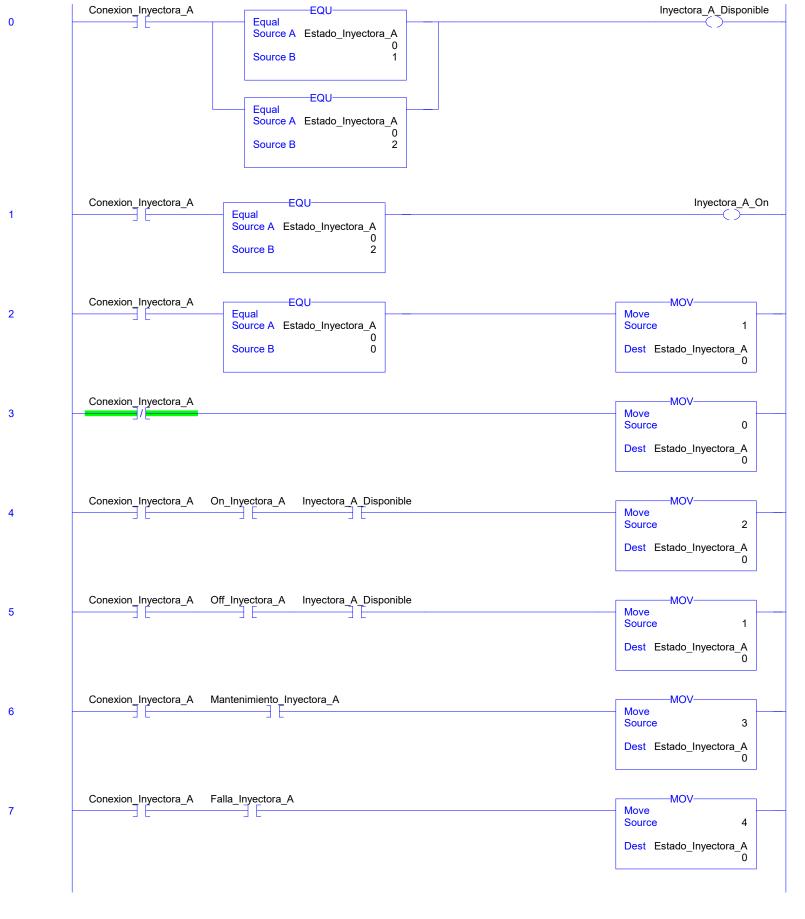
Number of Rungs:

APMToyLabPLC:MainTask:MainProgram

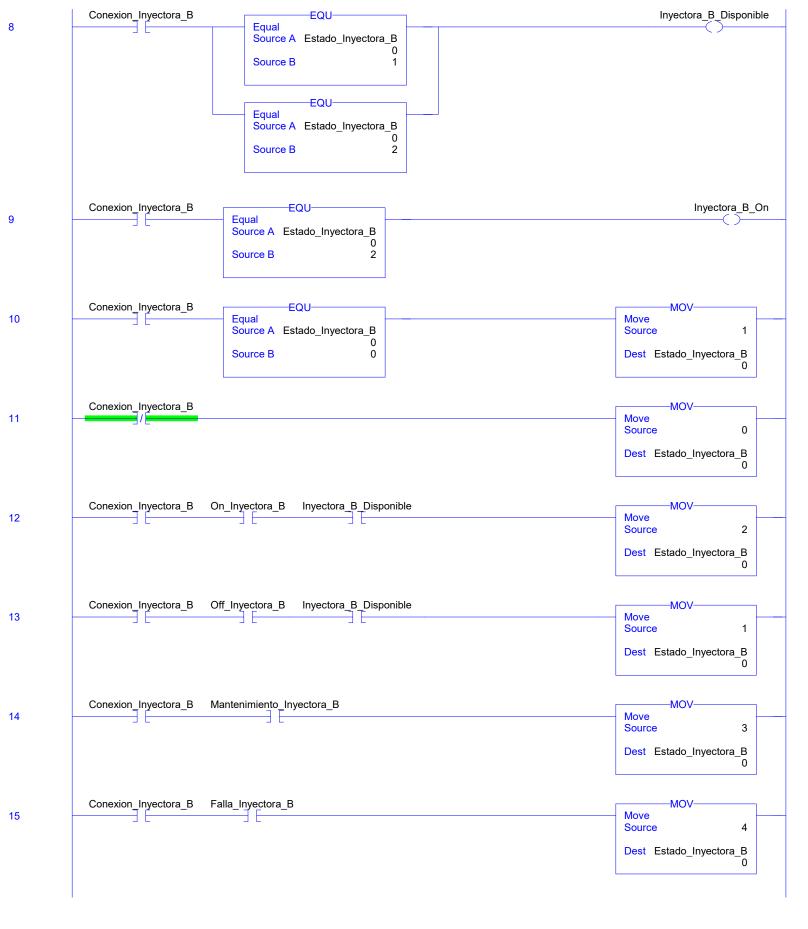
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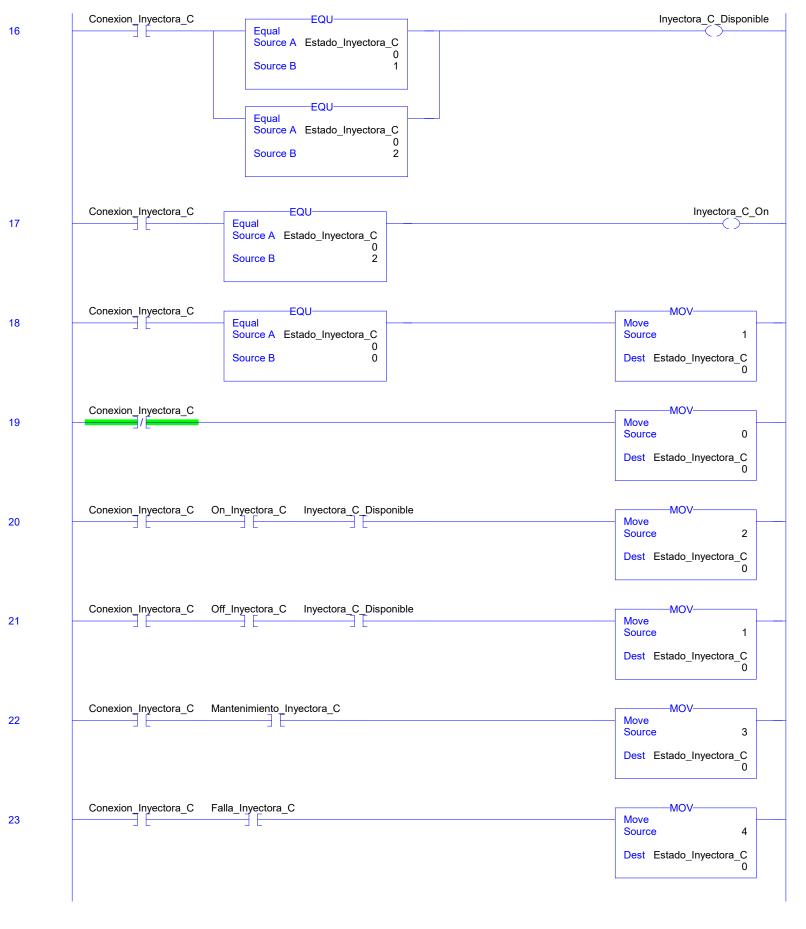
Total number of rungs in routine: 63 D:\UNAL\APM\APMToylab\Ladder.ACD

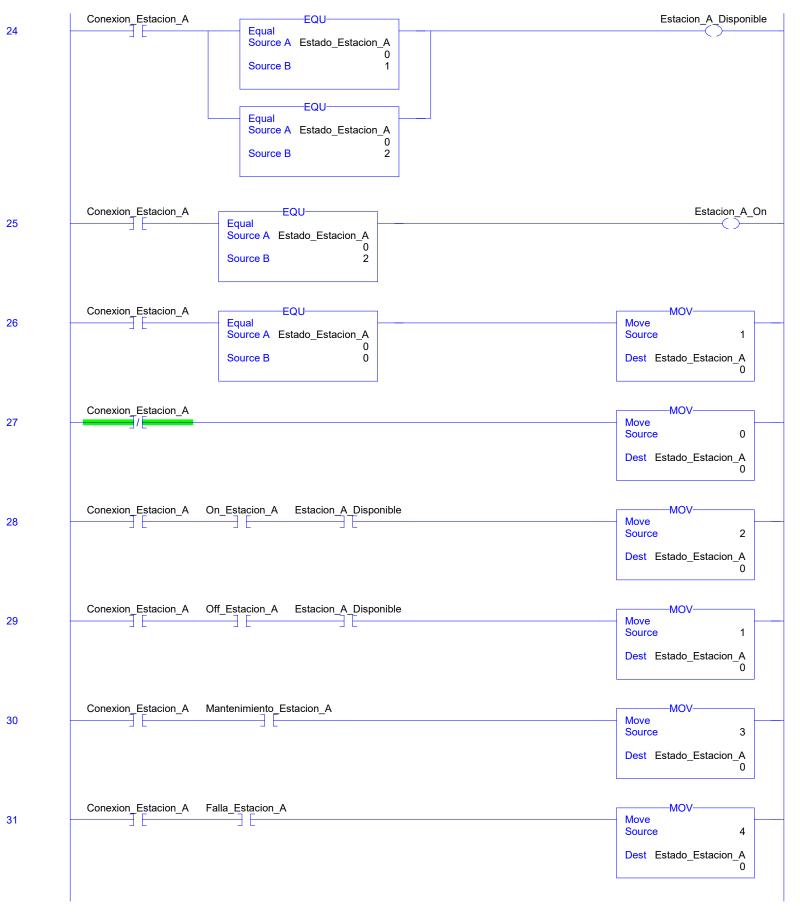


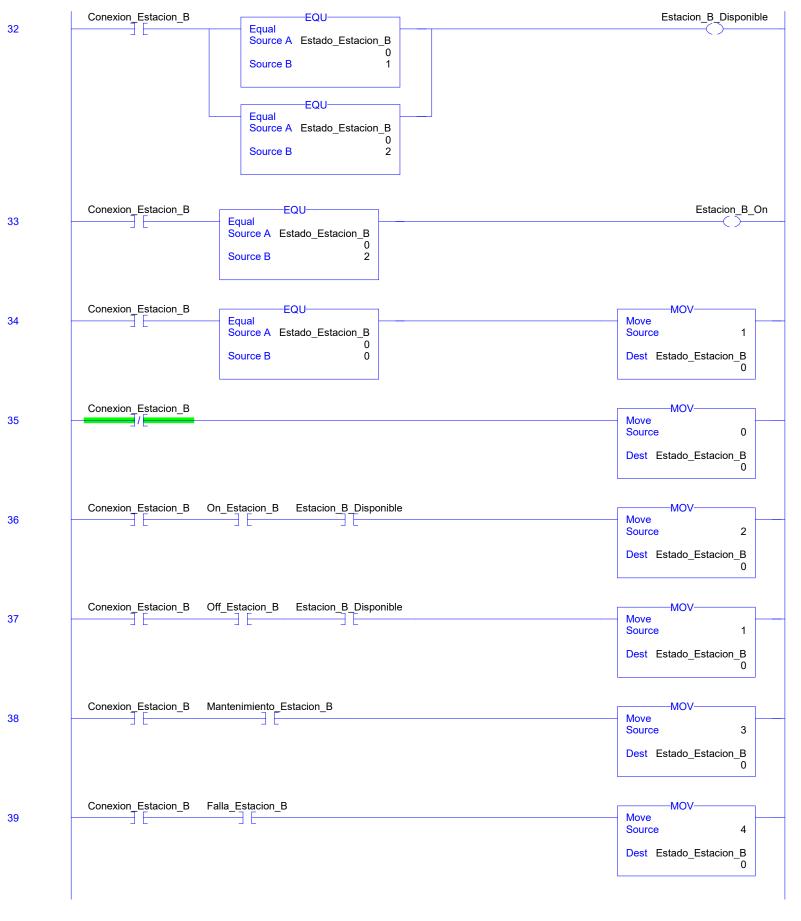
Total number of rungs in routine: 63

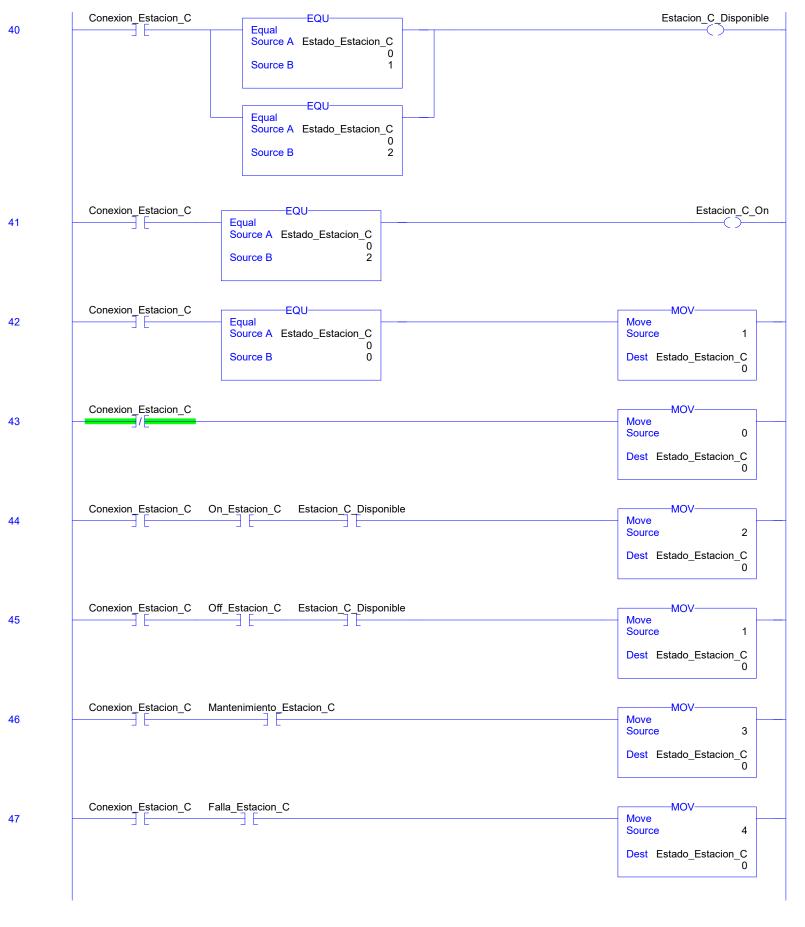


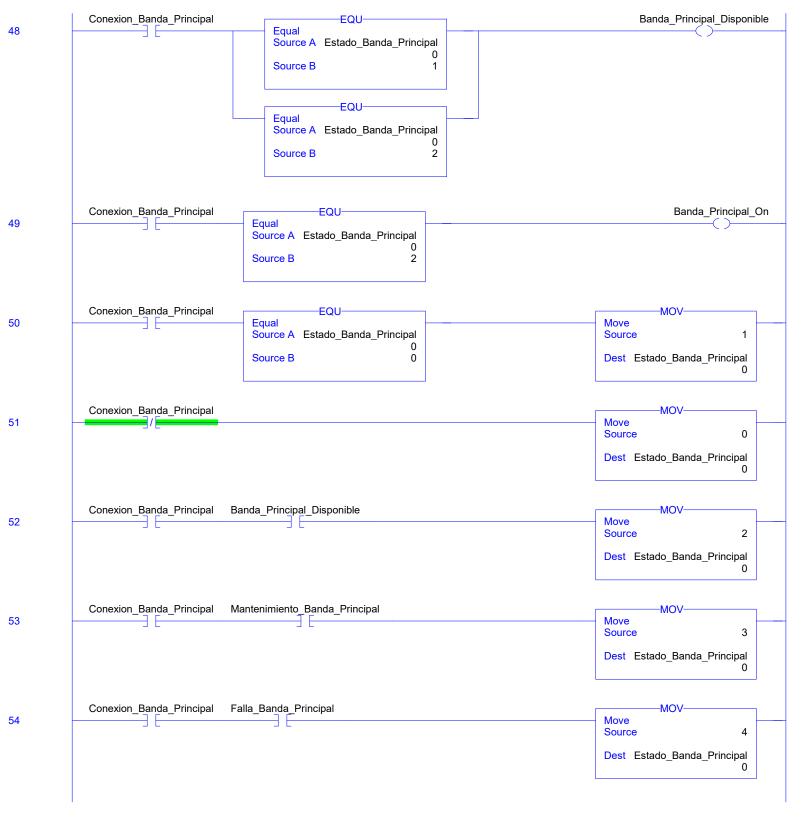
Total number of rungs in routine: 63



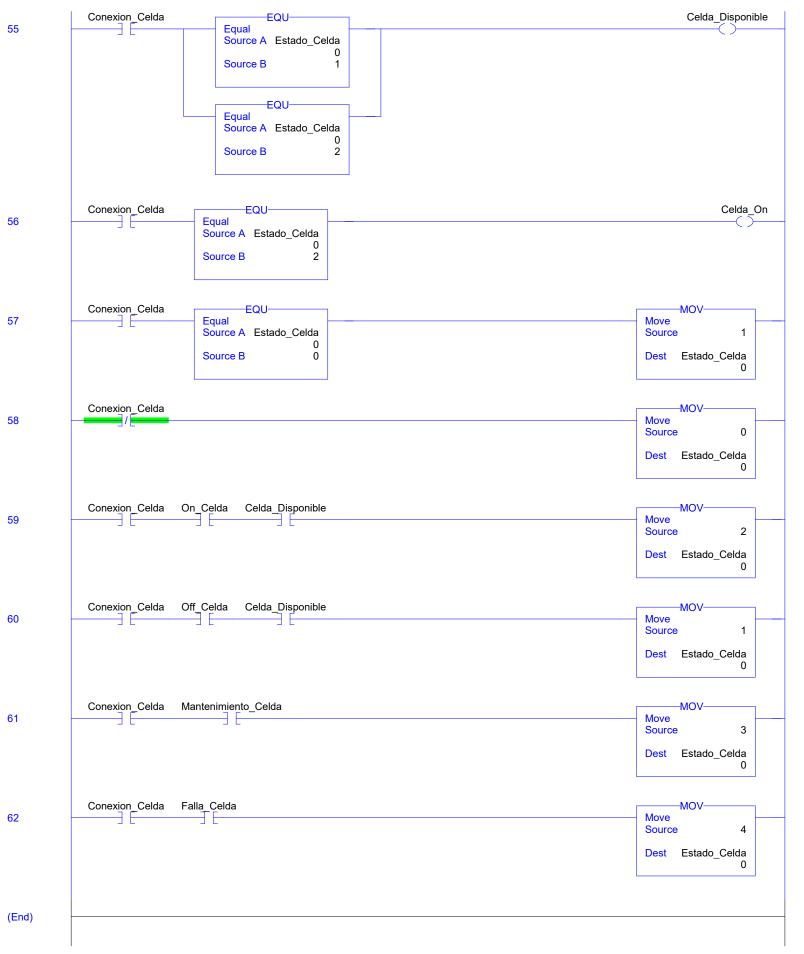








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Estados - Routine Tag Listing APMToyLabPLC:MainTask:MainProgram

lame	Value	Data Type	Scope
Banda_Principal_Disponible	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Banda_Principal_Disponible -	MainProgram/Estados - *48(OTI	E), 52(XIC)	
Banda_Principal_On	0	BOOL	MainProgram
Constant	No	BOOL	Maini Togram
	= : =		
External Access:	Read/Write		
Banda_Principal_On - MainPre		2/11/21 2/11/21	
_ 1 _	ogram/Control - 0(XIO), 1(XIC),	2(XIC), $3(XIC)$	
Banda_Principal_On - MainPro	ogram/Estados - *49(OTE)		
Celda_Disponible	0	BOOL	MainProgram
Constant	No		5
External Access:	Read/Write		
	am/Estados - *55(OTE), 59(XIC),	60(XIC)	
Cetau_Disponiote Maini Togre	um/Estados 55(01E), 57(AIC),	ou(AIC)	
Celda_On	0	BOOL	MainProgram
Constant	No		-
External Access:	Read/Write		
Celda On - MainProgram/Esta	udos - *56(OTE)		
	na_Celda - 0(XIC), 1(XIC), 2(XIC	E)	
Conexion Banda Principal	0	BOOL	APMToyLabPLC
	0 N-	BOOL	APMTOYLABPLC
Constant	No		
External Access:	Read/Write	10(1110) 50(1110) 51(1110) 52(1110)	52 (AHC)
Conexion_Banda_Principal - M	1ainProgram/Estados - 48(XIC), 4	49(XIC), 50(XIC), 51(XIO), 52(XIC),	03(XIC), 54(XIC)
Conexion Celda	0	BOOL	APMToyLabPLC
Constant	No		•
External Access:	Read/Write		
	m/Estados - 55(XIC), 56(XIC), 57	(XIC), 58(XIO), 59(XIC), 60(XIC), 61	(XIC), 62(XIC)
Constant Exterior A	0	DOOL	ADMTJ-LDI C
Conexion_Estacion_A	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write	a) • ((((((((((((((((((a) 20 (TTG) 21 (TTG)
Conexion_Estacion_A - MainPi	rogram/Estados - 24(XIC), 25(XIC	C), 26(XIC), 27(XIO), 28(XIC), 29(XI	C), 30(XIC), 31(XIC)
Conexion_Estacion_B	0	BOOL	APMToyLabPLC
Constant	No		,
External Access:	Read/Write		
		C), 34(XIC), 35(XIO), 36(XIC), 37(XI	C), 38(XIC), 39(XIC)
Conorion Estados C	0	DOOL	ADMTI -1.DI O
Conexion_Estacion_C	0 N-	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write	C) 42/VIC) 42/VIO) 44/VIO) 47/VIO	C) 46(VIC) 47(VIC)
Conexion_Estacion_C - MainPi	rogram/Estados - 40(XIC), 41(XI	C), 42(XIC), 43(XIO), 44(XIC), 45(XI	C), 46(XIC), 4/(XIC)
Conexion_Inyectora_A	0	BOOL	APMToyLabPLC
Constant	No		== === = y ==== z === = = = = = = = = = = = = = = = = =
External Access:	Read/Write		
		, 2(XIC), 3(XIO), 4(XIC), 5(XIC), 6(X	TIC), 7(XIC)
_ , _			
Conexion_Inyectora_B	0	BOOL	APMToyLabPLC
Constant	No		
	Read/Write	(O) 12(YIC) 13(YIC) 14(YIC) 15(Y	IC) R(VIC) O(VIC)
External Access:	Program/Estados III/VII I II/VI	O_I , $IZ(AICI$, $IZ(AICI$, $IZ(AICI$, $IZ(AICI$	C_j , $O(\Delta IC_j$, $\mathcal{I}(\Delta IC_j)$
External Access: Conexion_Inyectora_B - MainF	Program/Estados - 10(XIC), 11(XI	<i>,,</i> (<i>,,</i> (<i>,,</i> , , , , , , , , , , , , , , , , ,	
	Program/Estados - 10(XIC), 11(XI)	BOOL	APMToyLabPLC
Conexion_Inyectora_B - MainF			APMToyLabPLC
Conexion_Inyectora_B - MainF Conexion_Inyectora_C	0		APMToyLabPLC

APMToyLabPLC:MainTask:MainProgram D:\UNAL\APM\APMToylab\Ladder.ACD 0 **BOOL** Estacion A Disponible MainProgram No Constant Read/Write External Access: Estacion A Disponible - MainProgram/Estados - *24(OTE), 28(XIC), 29(XIC) 0 **BOOL** Estacion A On MainProgram Constant No External Access: Read/Write Estacion A On - MainProgram/Estados - *25(OTE) Estacion A On - MainProgram/Rutina Estaciones - 0(XIC), 1(XIC), 2(XIC), 4(XIC), 5(XIC) Estacion_B_Disponible 0 **BOOL** MainProgram No Constant Read/Write External Access: Estacion B Disponible - MainProgram/Estados - *32(OTE), 36(XIC), 37(XIC) 0 Estacion B On **BOOL** MainProgram Constant No Read/Write External Access: Estacion B On - MainProgram/Estados - *33(OTE) Estacion B On - MainProgram/Rutina Estaciones - 10(XIC), 11(XIC), 6(XIC), 7(XIC), 8(XIC) Estacion C Disponible 0 **BOOL** MainProgram Constant No External Access: Read/Write Estacion C Disponible - MainProgram/Estados - *40(OTE), 44(XIC), 45(XIC) Estacion C On 0 BOOL MainProgram Constant No **External Access:** Read/Write Estacion C On - MainProgram/Estados - *41(OTE) Estacion C On - MainProgram/Rutina Estaciones - 12(XIC), 13(XIC), 14(XIC), 16(XIC), 17(XIC) Estado_Banda_Principal 0 **INT** APMToyLabPLC Constant No Read/Write External Access: Estado Banda Principal - MainProgram/Estados - *50(MOV), *51(MOV), *52(MOV), *53(MOV), *54(MOV), 48(EQU), 49(EQU), 50(EQU) Estado Banda Principal - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU) 🛚 Estado Celda 0 **INT** APMToyLabPLC Constant No External Access: Read/Write Estado Celda - MainProgram/Estados - *57(MOV), *58(MOV), *59(MOV), *60(MOV), *61(MOV), *62(MOV), 55(EQU), 56(EQU), 57(EQU) Estado Celda - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU) Estado_Estacion_A 0 INT APMToyLabPLC Constant No Read/Write External Access: Estado Estacion A - MainProgram/Estados - *26(MOV), *27(MOV), *28(MOV), *29(MOV), *31(MOV), *31(MOV), 24(EQU), 25(EQU), Estado Estacion A - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU) 🛚 Estado Estacion B 0 INT APMToyLabPLC Constant No Read/Write External Access: Estado_Estacion_B - MainProgram/Estados - *34(MOV), *35(MOV), *36(MOV), *37(MOV), *38(MOV), *39(MOV), 32(EQU), 33(EQU), 34(EQU) Estado Estacion B - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU) Estado_Estacion_C 0 **INT** APMToyLabPLC No Constant External Access: Read/Write Estado Estacion C - MainProgram/Estados - *42(MOV), *43(MOV), *44(MOV), *45(MOV), *46(MOV), *47(MOV), 40(EQU), 41(EQU), 42(EQU)

APMToyLabPLC:MainTask:MainProgram 07/03/2025 22:33:02
D:\UNAL\APM\APMToylab\Ladder.ACD

Estado Estacion C (Continued) Estado_Estacion_C - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU) 0 🛚 Estado Invectora A INT APMToyLabPLC Constant No External Access: Read/Write Estado Invectora A - MainProgram/Estados - *2(MOV), *3(MOV), *4(MOV), *5(MOV), *6(MOV), *7(MOV), 0(EOU), 1(EOU), 2(EOU) Estado Invectora A - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU) Estado_Inyectora_B 0 INT APMToyLabPLC Constant No **External Access:** Read/Write Estado Inyectora B - MainProgram/Estados - *10(MOV), *11(MOV), *12(MOV), *13(MOV), *14(MOV), *15(MOV), 10(EQU), 8(EQU), 9(EQU) Estado Inyectora B - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU) Estado_Inyectora_C 0 INT APMToyLabPLC Constant No External Access: Read/Write Estado Inyectora C - MainProgram/Estados - *18(MOV), *19(MOV), *20(MOV), *21(MOV), *23(MOV), *23(MOV), 16(EQU), 17(EQU), 18(EQU) Estado Inyectora C - MainProgram/Setup - *3(MOV), *4(MOV), 4(EQU) 🛚 Falla Banda Principal **BOOL** APMToyLabPLC Constant No External Access: Read/Write Falla Banda Principal - MainProgram/Estados - 54(XIC) 🛚 Falla Celda 0 BOOL APMToyLabPLC Constant No External Access: Read/Write Falla Celda - MainProgram/Estados - 62(XIC) ■ Falla_Estacion_A 0 **BOOL** APMToyLabPLC Constant No Read/Write External Access: Falla Estacion A - MainProgram/Estados - 31(XIC) Falla_Estacion_B 0 **BOOL** APMToyLabPLC Constant No External Access: Read/Write Falla Estacion B - MainProgram/Estados - 39(XIC) Falla_Estacion_C 0 **BOOL** APMToyLabPLC Constant No External Access: Read/Write Falla Estacion C - MainProgram/Estados - 47(XIC) Falla_Inyectora_A 0 **BOOL** APMToyLabPLC Constant No **External Access:** Read/Write Falla Inyectora A - MainProgram/Estados - 7(XIC) Falla Inyectora_B **BOOL** APMToyLabPLC Constant No **External Access:** Read/Write Falla Inyectora B - MainProgram/Estados - 15(XIC) Falla Inyectora C 0 **BOOL** APMToyLabPLC Constant No Read/Write External Access: Falla Inyectora C - MainProgram/Estados - 23(XIC) 0 **BOOL** Inyectora_A_Disponible MainProgram

Inyectora A Disponible (Continued) Constant Read/Write External Access: Inyectora A Disponible - MainProgram/Estados - *0(OTE), 4(XIC), 5(XIC) 0 **BOOL** Inyectora A On MainProgram Constant No Read/Write External Access: Inyectora A On - MainProgram/Estados - *1(OTE) Inyectora A On - MainProgram/Rutina Inyectoras - 0(XIC), 1(XIC), 3(XIC), 4(XIC), 5(XIC), 6(XIC), 7(XIC) Inyectora_B_Disponible 0 **BOOL** MainProgram Constant No Read/Write External Access: Inyectora B Disponible - MainProgram/Estados - *8(OTE), 12(XIC), 13(XIC) 0 Inyectora_B_On **BOOL** MainProgram Constant No Read/Write External Access: Invectora B On - MainProgram/Estados - *9(OTE) Inyectora B On - MainProgram/Rutina Inyectoras - 11(XIC), 12(XIC), 13(XIC), 14(XIC), 15(XIC), 8(XIC), 9(XIC) 0 **BOOL** Inyectora C Disponible MainProgram Constant No External Access: Read/Write Inyectora C Disponible - MainProgram/Estados - *16(OTE), 20(XIC), 21(XIC) Invectora C On 0 BOOL MainProgram Constant No **External Access:** Read/Write Inyectora C On - MainProgram/Estados - *17(OTE) Inyectora C On - MainProgram/Rutina Inyectoras - 16(XIC), 17(XIC), 19(XIC), 20(XIC), 21(XIC), 22(XIC), 23(XIC) Mantenimiento_Banda_Principal **BOOL** APMToyLabPLC 0 Constant No Read/Write External Access: Mantenimiento Banda Principal - MainProgram/Estados - 53(XIC) Mantenimiento_Celda **BOOL** APMToyLabPLC Constant No External Access: Read/Write Mantenimiento_Celda - MainProgram/Estados - 61(XIC) Mantenimiento Estacion A 0 **BOOL** APMToyLabPLC Constant No Read/Write External Access: Mantenimiento Estacion A - MainProgram/Estados - 30(XIC) Mantenimiento_Estacion_B 0 **BOOL** APMToyLabPLC Constant No **External Access:** Read/Write Mantenimiento Estacion B - MainProgram/Estados - 38(XIC) Mantenimiento_Estacion_C **BOOL** APMToyLabPLC Constant No **External Access:** Read/Write Mantenimiento Estacion C - MainProgram/Estados - 46(XIC) Mantenimiento_Inyectora_A 0 **BOOL** APMToyLabPLC Constant No Read/Write External Access: Mantenimiento Inyectora A - MainProgram/Estados - 6(XIC) Mantenimiento_Inyectora_B **BOOL** 0 APMToyLabPLC

			<u> </u>
Mantenimiento_Inyectora_	B (Continued)		
Constant	No		
External Access:	Read/Write		
Mantenimiento_Inyectora_	_B - MainProgram/Estados - 14(XIC)		
Mantenimiento_Inyectora_	_C 0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Mantenimiento_Inyectora_	_C - MainProgram/Estados - 22(XIC)		
Off_Celda	0	BOOL	APMToyLabPLC
Constant	No		·
External Access:	Read/Write		
Off_Celda - MainProgram			
Off_Estacion_A	0	BOOL	APMToyLabPLC
Constant	No		,
External Access:	Read/Write		
Off_Estacion_A - MainPro			
Off_Estacion_B	0	BOOL	APMToyLabPLC
Constant	No	2002	111 1111 0 1 2 2 2 2 2
External Access:	Read/Write		
Off_Estacion_B - MainPro			
Off_Estacion_C	0	BOOL	APMToyLabPLC
Constant	No	BOOL	Al WildyLabi LC
External Access:	Read/Write		
Off_Estacion_C - MainPro			
Off_Inyectora_A	0	BOOL	APMToyLabPLC
Constant	No	2002	111111111111111111111111111111111111111
External Access:	Read/Write		
Off_Inyectora_A - MainPr			
Off_Inyectora_B	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Off_Inyectora_B - MainPr			
Off_Inyectora_C	0	BOOL	APMToyLabPLC
Constant	No	BeeE	TH WITO JEGGT EC
External Access:	Read/Write		
Off_Inyectora_C - MainPr			
On_Celda	0	BOOL	APMToyLabPLC
Constant	No	BeeE	TH WITO JEAST EC
External Access:	Read/Write		
On_Celda - MainProgram			
On_Estacion_A	0	BOOL	APMToyLabPLC
Constant	No	BOOL	741 WITO y Later LC
External Access:	Read/Write		
On_Estacion_A - MainPro			
On_Estacion_B	0	BOOL	APMToyLabPLC
Constant	No	BOOL	AI WITOYLAUI LC
External Access:	Read/Write		
On_Estacion_B - MainPro			
On_Estacion_C	0	BOOL	APMToyLabPLC
Constant	No	BOOL	AI WITOYLAUI LC
External Access:	Read/Write		
On_Estacion_C - MainPro			
on_Estation_C - Main IC	, S. WIII LIGHTON TT(ZHC)		

Estados - Routine Tag Listing APMToyLabPLC:MainTask:MainProgram

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D:\UNAL\APM\APMToylab\Ladder.ACD

APMToyLabPLC

APMToyLabPLC

On_Inyectora_A 0 **BOOL** Constant No

Read/Write **External Access:**

On_Inyectora_A - MainProgram/Estados - 4(XIC)

On_Inyectora_B 0 **BOOL** Constant No

External Access: Read/Write

On_Inyectora_B - MainProgram/Estados - 12(XIC)

On_Inyectora_C **BOOL** APMToyLabPLC

Constant No

Read/Write External Access: On_Inyectora_C - MainProgram/Estados - 20(XIC) Estados - Routine Properties Listing APMToyLabPLC:MainTask:MainProgram

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General

■Ladder Diagram

MainProgram Type: In Program:

Number of Rungs: 63



MainRoutine - Routine Tag Listing APMToyLabPLC:MainTask:MainProgram

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Value Name **Data Type** Scope

No Tags Exist

MainRoutine - Routine Properties Listing APMToyLabPLC:MainTask:MainProgram

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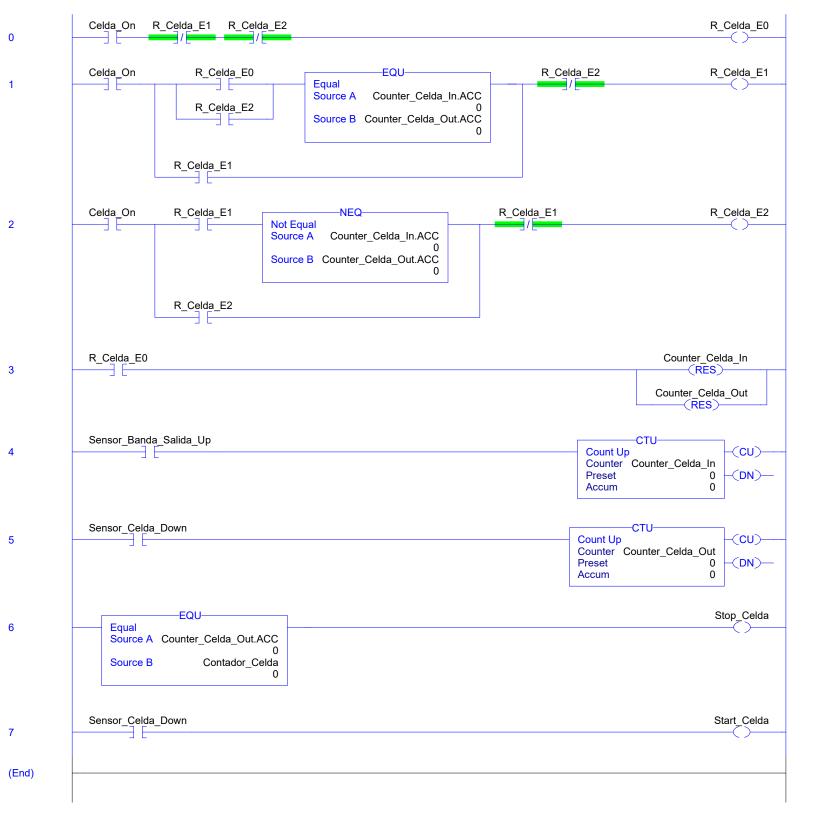
General

Ladder Diagram

MainProgram Type: In Program:

Number of Rungs:

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Name	Value	Data Type	Scope
Celda_On	()	BOOL	MainProgram
Constant	No	BOOL	Walii Togram
External Access:	Read/Write		
Celda On - MainProgram/Estados			
Celda On - MainProgram/Estados Celda On - MainProgram/Rutina			
Ceiaa_On - Maini rogram/Kaiina_	Celuu - 0(AIC), 1(AIC), 2(AIC)		
Dontador_Celda	0	INT	APMToyLabPLC
Constant	No		J
External Access:	Read/Write		
Contador Celda - MainProgram/R			
	_		
Counter_Celda_In		COUNTER	MainProgram
Constant	No		
External Access:	Read/Write		
	/Rutina_Celda - *3(RES), *4(CTU)		
Counter_Celda_In.ACC	0	DINT	
Counter_Celda_In.ACC - MainPro	gram/Rutina_Celda - 1(EQU), 2(NEQ)		
		COLDITION	
Counter_Celda_Out	27	COUNTER	MainProgram
Constant	No		
External Access:	Read/Write		
	m/Rutina_Celda - *3(RES), *5(CTU)	DD III	
Counter_Celda_Out.ACC		DINT	
Counter_Celda_Out.ACC - MainPi	rogram/Rutina_Celda - 1(EQU), 2(NEQ)), 6(EQU)	
R Celda E0	0	BOOL	MainProgram
Constant	No	BOOL	Walin Togram
External Access:	Read/Write		
	a Celda - *0(OTE), 1(XIC), 3(XIC)		
K_Cetau_E0 - Maini Togram/Ratin	u_ceiuu - 0(01L), 1(Mc), 3(Mc)		
R Celda E1	0	BOOL	MainProgram
Constant	No		C
External Access:	Read/Write		
R_Celda_E1 - MainProgram/Rutin	a_Celda - *1(OTE), 0(XIO), 1(XIC), 2(X	TC), 2(XIO)	
R_Celda_E2	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
R_Celda_E2 - MainProgram/Actua			
R_Celda_E2 - MainProgram/Rutin	a_Celda - *2(OTE), 0(XIO), 1(XIC), 1(X	(10), 2(XIC)	
Sensor_Banda_Salida_Up	0	BOOL	MainProgram
Constant	No	BOOL	Maiii Tograiii
External Access:	Read/Write		
Sensor Banda Salida Up - MainF			
Sensor Banda Salida Up - MainF Sensor Banda Salida Up - MainF			
Sensor_Bunda_Sunda_Op - Mumi	Togram/Schsores - 24(OSH)		
Sensor_Celda_Down	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Sensor_Celda_Down - MainProgra			
Sensor Celda Down - MainProgra			
	,		
Start_Celda	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Start_Celda - MainProgram/Rutino	a_Celda - *7(OTE)		
di e		D. 0.7	
Stop_Celda	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Stop_Celda - MainProgram/Rutina	_Celda - *6(OTE)		

Rutina_Celda - Routine Properties Listing APMToyLabPLC:MainTask:MainProgram

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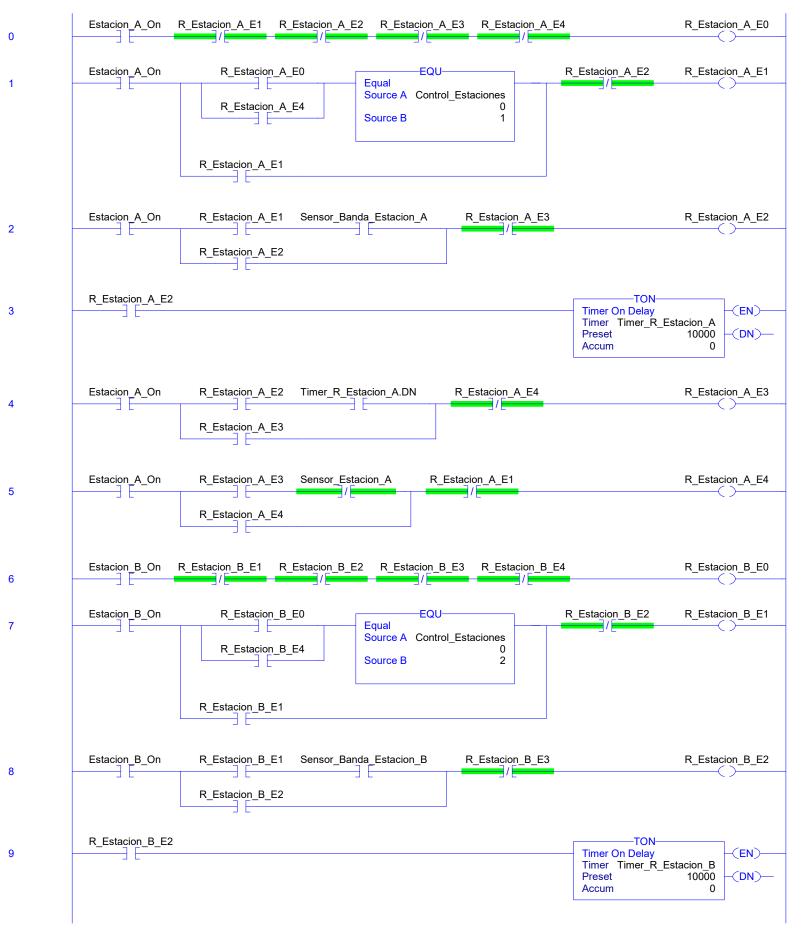
General

■Ladder Diagram

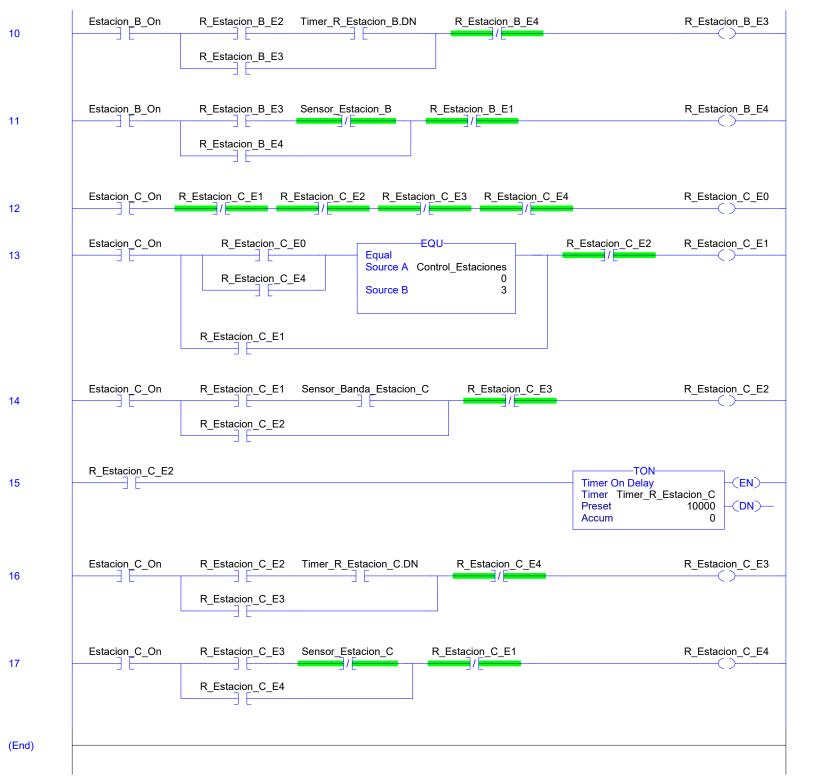
MainProgram Type: In Program:

Number of Rungs:

Total number of rungs in routine: 18



Total number of rungs in routine: 18



			,
Name	Value	Data Type	Scope
Control_Estaciones	0	INT	MainProgram
Constant	No		
External Access:	Read/Write		
	nProgram/Control - *4(MOV)	II) 12/EOII) 7/EOII)	
Control_Estactones - Math	nProgram/Rutina_Estaciones - 1(EQ	U), 13(EQU), /(EQU)	
Estacion_A_On	0	BOOL	MainProgram
Constant	No		5
External Access:	Read/Write		
Estacion_A_On - MainPro	ogram/Estados - *25(OTE)		
	ogram/Rutina_Estaciones - $0(XIC)$, 1	(XIC), 2(XIC), 4(XIC), 5(XIC)	
Estada D.O.	0	DOOL	M ' D
Estacion_B_On	0 No	BOOL	MainProgram
Constant			
External Access:	Read/Write		
Estacion_B_On - MainPro	ogram/Estaaos - ~55(O1E) ogram/Rutina Estaciones - 10(XIC),	11(YIC) 6(YIC) 7(YIC) 8(YIC)	
Estacion_B_On - Maini ro	rgram/Kutina_Estactones - 10(AIC),	$II(AIC)$, $\theta(AIC)$, $\gamma(AIC)$, $\theta(AIC)$	
Estacion_C_On	0	BOOL	MainProgram
Constant	No		-
External Access:	Read/Write		
Estacion C On - MainPro	ogram/Estados - *41(OTE)		
		13(XIC), 14(XIC), 16(XIC), 17(XIC)	
D Estacion A EO	0	BOOL	MainDuagnama
R_Estacion_A_E0 Constant	0 No	BOOL	MainProgram
External Access:	Read/Write		
	Program/Control - 1(XIC), 2(XIC), 3	(VIC)	
	Program/Control - 1(AIC), 2(AIC), 5 Program/Rutina Estaciones - *0(OT)		
R_Estacion_A_E1	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write	T 0)	
	Program/Actuadores - 16(XIC), 17(X		
R_Estacion_A_E1 - MainF	Program/Rutina_Estaciones - *1(OT	E), $\theta(XIO)$, $I(XIC)$, $2(XIC)$, $3(XIO)$	
R_Estacion_A_E2	0	BOOL	MainProgram
Constant	No		8
External Access:	Read/Write		
R Estacion A E2 - MainH	Program/Actuadores - 15(XIC), 16(X	TC), 17(XIO), 18(XIC), 19(XIO)	
		E), $\theta(XIO)$, $I(XIO)$, $2(XIC)$, $3(XIC)$, $4(XIO)$	C)
D Estacion A E2	0	BOOL	MainDuagnama
R_Estacion_A_E3 Constant	0 No	BOOL	MainProgram
	No Read/Write		
External Access:	Program/Actuadores - 15(XIC)		
	Program/Rutina Estaciones - *4(OT)	E), 0(XIO), 2(XIO), 4(XIC), 5(XIC)	
	3		
R_Estacion_A_E4	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write	(T.T. C)	
	Program/Control - 1(XIC), 2(XIC), 3		
R_Estacion_A_E4 - MainF	Program/Rutina_Estaciones - *5(OT	E), $\theta(XIO)$, $I(XIC)$, $4(XIO)$, $5(XIC)$	
R_Estacion_B_E0	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
	Program/Control - 1(XIC), 2(XIC), 3	(XIC)	
	Program/Rutina_Estaciones - *6(OT		
D Estacion D F1	0	BOOL	MainDragram
R_Estacion_B_E1 Constant	0 No	DUUL	MainProgram
External Access:	Read/Write		
Datemar Access.	Read/ Wille		

```
R Estacion B E1 (Continued)
   R Estacion B E1 - MainProgram/Actuadores - 21(XIC), 22(XIO)
   R Estacion B E1 - MainProgram/Rutina Estaciones - *7(OTE), 11(XIO), 6(XIO), 7(XIC), 8(XIC)
 R Estacion_B_E2
                                                                        BOOL
                                                                                                            MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R Estacion B E2 - MainProgram/Actuadores - 20(XIC), 21(XIC), 22(XIO), 23(XIC), 24(XIO)
   R Estacion B E2 - MainProgram/Rutina Estaciones - *8(OTE), 10(XIC), 6(XIO), 7(XIO), 8(XIC), 9(XIC)
 R Estacion B E3
                                                                        BOOL
                                                                                                            MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R Estacion B E3 - MainProgram/Actuadores - 20(XIC)
   R Estacion B E3 - MainProgram/Rutina Estaciones - *10(OTE), 10(XIC), 11(XIC), 6(XIO), 8(XIO)
                                   0
                                                                        BOOL
 R_Estacion_B_E4
                                                                                                            MainProgram
   Constant
                                   No
                                   Read/Write
   External Access:
   R Estacion B E4 - MainProgram/Control - 1(XIC), 2(XIC), 3(XIC)
   R Estacion B E4 - MainProgram/Rutina Estaciones - *11(OTE), 10(XIO), 11(XIC), 6(XIO), 7(XIC)
                                   0
                                                                        BOOL
 R Estacion C E0
                                                                                                            MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R_Estacion_C_E0 - MainProgram/Control - 1(XIC), 2(XIC), 3(XIC)
   R Estacion C E0 - MainProgram/Rutina Estaciones - *12(OTE), 13(XIC)
 R Estacion C E1
                                   0
                                                                        BOOL
                                                                                                            MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R_Estacion_C_E1 - MainProgram/Actuadores - 26(XIC), 27(XIO)
   R Estacion C E1 - MainProgram/Rutina Estaciones - *13(OTE), 12(XIO), 13(XIC), 14(XIC), 17(XIO)
                                                                        BOOL
 R Estacion_C_E2
                                                                                                            MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R Estacion C E2 - MainProgram/Actuadores - 25(XIC), 26(XIC), 27(XIO), 28(XIC), 29(XIO)
   R_Estacion_C_E2 - MainProgram/Rutina_Estaciones - *14(OTE), 12(XIO), 13(XIO), 14(XIC), 15(XIC), 16(XIC)
 R Estacion C E3
                                                                        BOOL
                                                                                                            MainProgram
   Constant
                                   No
   External Access:
                                   Read/Write
   R Estacion C E3 - MainProgram/Actuadores - 25(XIC)
   R Estacion C E3 - MainProgram/Rutina Estaciones - *16(OTE), 12(XIO), 14(XIO), 16(XIC), 17(XIC)
                                   0
                                                                        BOOL
                                                                                                            MainProgram
 R Estacion C E4
   Constant
                                   No
   External Access:
                                   Read/Write
   R Estacion C E4 - MainProgram/Control - 1(XIC), 2(XIC), 3(XIC)
   R Estacion C E4 - MainProgram/Rutina Estaciones - *17(OTE), 12(XIO), 13(XIC), 16(XIO), 17(XIC)
🛚 Sensor Banda Estacion A
                                   0
                                                                        BOOL
                                                                                                            APMToyLabPLC
   Constant
                                   No
   External Access:
                                   Read/Write
   Sensor Banda Estacion A - MainProgram/Rutina Estaciones - 2(XIC)
   Sensor_Banda_Estacion_A - MainProgram/Sensores - 12(XIC), 13(XIC)
🛚 Sensor Banda Estacion B
                                                                        BOOL
                                                                                                            APMToyLabPLC
   Constant
                                   No
   External Access:
                                   Read/Write
   Sensor Banda Estacion B - MainProgram/Rutina Estaciones - 8(XIC)
   Sensor Banda Estacion B - MainProgram/Sensores - 16(XIC), 17(XIC)
```

🛮 Sensor Banda Estacion C 0 **BOOL** APMToyLabPLC Constant No Read/Write External Access: Sensor Banda Estacion C - MainProgram/Rutina Estaciones - 14(XIC) Sensor Banda Estacion C - MainProgram/Sensores - 20(XIC), 21(XIC) Sensor_Estacion_A **BOOL** APMToyLabPLC Constant No Read/Write External Access: Sensor Estacion A - MainProgram/Rutina Estaciones - 5(XIO) Sensor Estacion A - MainProgram/Sensores - 14(XIC), 15(XIC) **■** Sensor_Estacion_B 0 **BOOL** APMToyLabPLC Constant No External Access: Read/Write Sensor Estacion B - MainProgram/Rutina Estaciones - 11(XIO) Sensor Estacion B - MainProgram/Sensores - 18(XIC), 19(XIC) ¶ Sensor_Estacion_C 0 **BOOL** APMToyLabPLC Constant No **External Access:** Read/Write Sensor Estacion C - MainProgram/Rutina Estaciones - 17(XIO) Sensor Estacion C - MainProgram/Sensores - 22(XIC), 23(XIC) Timer_R_Estacion A **TIMER** MainProgram Constant No External Access: Read/Write Timer R Estacion A - MainProgram/Rutina Estaciones - *3(TON) Timer R Estacion A.DN **BOOL** Timer R Estacion A.DN - MainProgram/Rutina Estaciones - 4(XIC)

Timer_R_Estacion_B TIMER MainProgram

Constant No External Access: Read/Write

Timer_R_Estacion_B - MainProgram/Rutina_Estaciones - *9(TON)

Timer R Estacion B.DN 0 BOOL

Timer R Estacion B.DN - MainProgram/Rutina Estaciones - 10(XIC)

Timer_R_Estacion_C TIMER MainProgram

Constant No

External Access: Read/Write

Timer_R_Estacion_C - MainProgram/Rutina_Estaciones - *15(TON)

Timer_R_Estacion_C.DN 0 BOOL

Timer \overline{R} Estacion C.DN - MainProgram/Rutina Estaciones - 16(XIC)

Rutina_Estaciones - Routine Properties Listing APMToyLabPLC:MainTask:MainProgram

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General

■Ladder Diagram

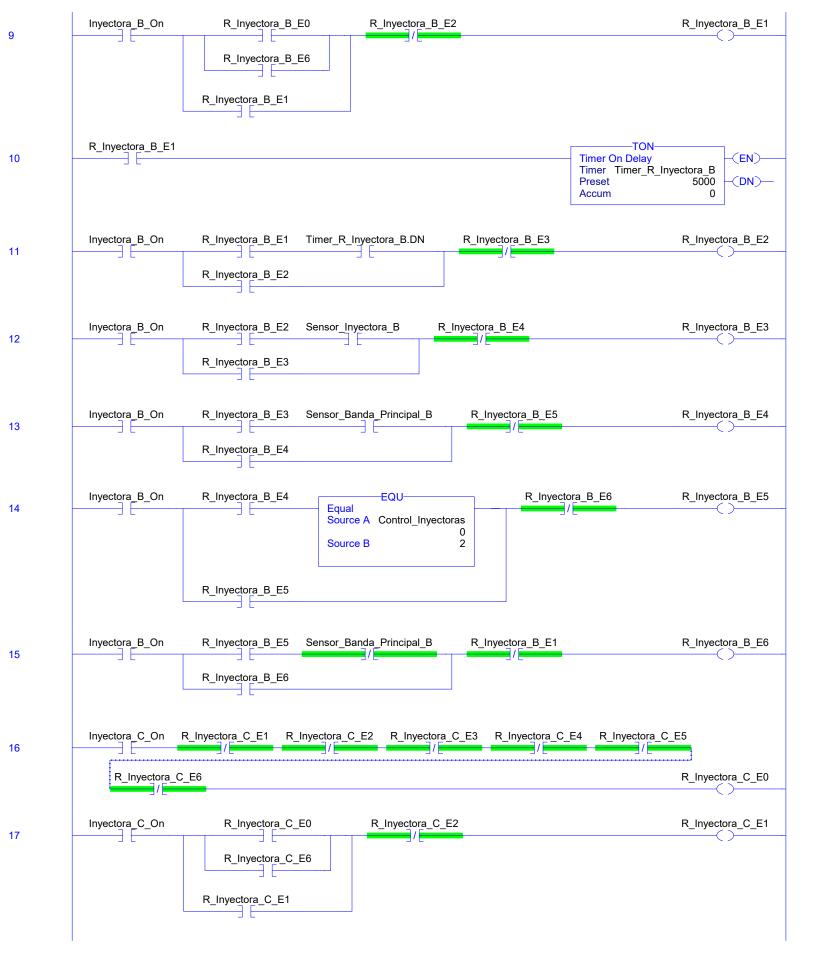
MainProgram Type: In Program:

Number of Rungs:

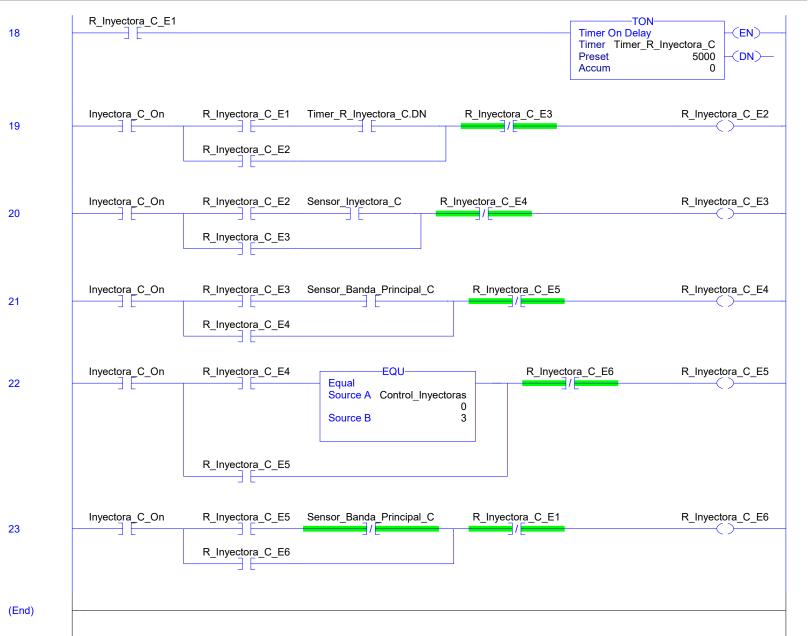


Total number of rungs in routine: 24

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Total number of rungs in routine: 24



• 7	***	D / T	~	
Name	Value	Data Type	Scope	
Control_Inyectoras	0 N-	INT	MainProgram	
Constant External Access:	No Read/Write			
Control Inyectoras - MainProgr				
	am/Control - ^4(MOV) am/Rutina Inyectoras - 14(EQU), 22(E	(OII) 6(FOII)		
Control_Inyectorus - MainFrogr	am/Kutina_Inyectorus - 14(EQO), 22(E	QU), 0(EQU)		
Inyectora A On	0	BOOL	MainProgram	
Constant	No	BOOL	Wann Togram	
External Access:	Read/Write			
Inyectora_A_On - MainProgram				
	n/Rutina Inyectoras - 0(XIC), 1(XIC), 3((XIC), 4(XIC), 5(XIC), 6(XIC), 7(XIC)		
, 3	_ 7	<i>// (</i>		
Inyectora_B_On	0	BOOL	MainProgram	
Constant	No		_	
External Access:	Read/Write			
Inyectora_B_On - MainProgram				
Inyectora_B_On - MainProgram	/Rutina_Inyectoras - 11(XIC), 12(XIC),	13(XIC), 14(XIC), 15(XIC), 8(XIC), 9(XIC	")	
Inyectora_C_On	0	BOOL	MainProgram	
Constant	No			
External Access:	Read/Write			
Inyectora_C_On - MainProgram		10(7776) 10(7776) 11(7776) 11(7776) 11(7776)		
Inyectora_C_On - MainProgram	n/Rutina_Inyectoras - 16(XIC), 17(XIC),	19(XIC), 20(XIC), 21(XIC), 22(XIC), 23(X	AIC)	
D I A F0	0	DOOL	M · D	
R_Inyectora_A_E0	0 N-	BOOL	MainProgram	
Constant External Access:	No Read/Write			
	am/Rutina Inyectoras - *0(OTE), 1(XIC	7)		
K_Inyectora_A_E0 - MainFrogr	am/Kuuna_Inyectoras - *0(OTE), I(AIC			
R_Inyectora_A_E1	0	BOOL	MainProgram	
Constant	No	BOOL	Walli Togram	
External Access:	Read/Write			
	am/Actuadores - 1(XIC), 2(XIO), 3(XIC)), 4(XIO)		
	am/Rutina Inyectoras - *1(OTE), 0(XIC			
R_Inyectora_A_E2	0	BOOL	MainProgram	
Constant	No			
External Access:	Read/Write			
R_Inyectora_A_E2 - MainProgr				
R_Inyectora_A_E2 - MainProgr	am/Rutina_Inyectoras - $*3(OTE)$, $\theta(XIC)$	O), 1(XIO), 3(XIC), 4(XIC)		
D. T		Door	16 ' B	
R_Inyectora_A_E3	0	BOOL	MainProgram	
Constant	No			
External Access:	Read/Write)		
	am/Actuadores - 0(XIC), 1(XIC), 2(XIO) am/Rutina Inyectoras - *4(OTE), 0(XIC			
K_Invectora_A_E3 - Maini rogr	am/Ruuna_inyecioras = 4(O1E), 0(Aic)), 3(A1O), 4(A1C), 3(A1C)		
R_Inyectora_A_E4	0	BOOL	MainProgram	
Constant	No	BOOL	Walli Togram	
External Access:	Read/Write			
R_Inyectora_A_E4 - MainProgr				
R Inyectora A E4 - MainProgr	am/Control - 1(XIC), 2(XIC), 2(XIO), 3((XIC), 3(XIO)		
	am/Rutina_Inyectoras - *5(OTE), 0(XIC			
R_Inyectora_A_E5	0	BOOL	MainProgram	
Constant	No			
External Access:	Read/Write			
R_Inyectora_A_E5 - MainProgr) 5 (HO) ((HS) 5 (HS)		
R_Inyectora_A_E5 - MainProgram/Rutina_Inyectoras - *6(OTE), 0(XIO), 5(XIO), 6(XIC), 7(XIC)				
D. Lecentre A. E.C.	0	DOOL	M ' D	
R_Inyectora_A_E6	0 N-	BOOL	MainProgram	
Constant	No Read/Write			
External Access:	NEAU/ WITTE			

R_Inyectora_A_E6 (Continued) R Inyectora A E6 - MainProgram/Rutina Inyectoras - *7(OTE), 0(XIO), 1(XIC), 6(XIO), 7(XIC) 0 R Invectora B E0 **BOOL** MainProgram Constant No Read/Write **External Access:** R Invectora B E0 - MainProgram/Rutina Invectoras - *8(OTE), 9(XIC) 0 **BOOL** MainProgram R Inyectora B E1 Constant No **External Access:** Read/Write R Inyectora B E1 - MainProgram/Actuadores - 6(XIC), 7(XIO), 8(XIC), 9(XIO) R Inyectora B E1 - MainProgram/Rutina Inyectoras - *9(OTE), 10(XIC), 11(XIC), 15(XIO), 8(XIO), 9(XIC) 0 **BOOL** R Inyectora B E2 MainProgram Constant No **External Access:** Read/Write R Invectora B E2 - MainProgram/Actuadores - 6(XIC), 7(XIO) R Inyectora B E2 - MainProgram/Rutina Inyectoras - *11(OTE), 11(XIC), 12(XIC), 8(XIO), 9(XIO) 0 **BOOL** R Invectora B E3 MainProgram Constant No Read/Write External Access: R Invectora B E3 - MainProgram/Actuadores - 5(XIC), 6(XIC), 7(XIO) R Invectora B E3 - MainProgram/Rutina Invectoras - *12(OTE), 11(XIO), 12(XIC), 13(XIC), 8(XIO) R Inyectora B E4 0 **BOOL** MainProgram Constant No External Access: Read/Write R Inyectora B E4 - MainProgram/Actuadores - 6(XIC), 7(XIO) R Inyectora B E4 - MainProgram/Control - 1(XIC), 1(XIO), 2(XIC), 3(XIC), 3(XIO) R Inyectora B E4 - MainProgram/Rutina Inyectoras - *13(OTE), 12(XIO), 13(XIC), 14(XIC), 8(XIO) 0 **BOOL** R_Inyectora_B_E5 MainProgram Constant No Read/Write **External Access:** R Invectora B E5 - MainProgram/Actuadores - 5(XIC) R Inyectora B E5 - MainProgram/Rutina Inyectoras - *14(OTE), 13(XIO), 14(XIC), 15(XIC), 8(XIO) R Inyectora_B_E6 0 **BOOL** MainProgram Constant No Read/Write External Access: R Inyectora B E6 - MainProgram/Rutina Inyectoras - *15(OTE), 14(XIO), 15(XIC), 8(XIO), 9(XIC) R Inyectora C E0 0 **BOOL** MainProgram Constant No Read/Write External Access: R Inyectora C E0 - MainProgram/Rutina Inyectoras - *16(OTE), 17(XIC) R Inyectora C E1 **BOOL** MainProgram Constant No External Access: Read/Write R Inyectora C E1 - MainProgram/Actuadores - 11(XIC), 12(XIO), 13(XIC), 14(XIO) R_Inyectora_C_E1 - MainProgram/Rutina_Inyectoras - *17(OTE), 16(XIO), 17(XIC), 18(XIC), 19(XIC), 23(XIO) R_Inyectora_C_E2 0 **BOOL** MainProgram Constant No **External Access:** Read/Write R Inyectora C E2 - MainProgram/Actuadores - 11(XIC), 12(XIO) R Inyectora C E2 - MainProgram/Rutina Inyectoras - *19(OTE), 16(XIO), 17(XIO), 19(XIC), 20(XIC) 0 **BOOL** R Inyectora C E3 MainProgram Constant No Read/Write External Access:

```
R Inyectora C E3 (Continued)
   \overline{R} Invectora \overline{C} E3 - MainProgram/Actuadores - 10(XIC), 11(XIC), 12(XIO)
   R Invectora C E3 - MainProgram/Rutina Invectoras - *20(OTE), 16(XIO), 19(XIO), 20(XIC), 21(XIC)
 R Inyectora C E4
                                                                        BOOL
                                                                                                             MainProgram
   Constant
                                    No
                                    Read/Write
   External Access:
   R Invectora C E4 - MainProgram/Actuadores - 11(XIC), 12(XIO)
   R Inyectora C E4 - MainProgram/Control - 1(XIC), 1(XIO), 2(XIC), 2(XIO), 3(XIC)
   R Inyectora C E4 - MainProgram/Rutina Inyectoras - *21(OTE), 16(XIO), 20(XIO), 21(XIC), 22(XIC)
 R_Inyectora_C_E5
                                    0
                                                                        BOOL
                                                                                                             MainProgram
   Constant
                                    No
   External Access:
                                    Read/Write
   R Inyectora C E5 - MainProgram/Actuadores - 10(XIC)
   R Inyectora C E5 - MainProgram/Rutina Inyectoras - *22(OTE), 16(XIO), 21(XIO), 22(XIC), 23(XIC)
 R Inyectora C E6
                                                                        BOOL
                                                                                                             MainProgram
   Constant
                                    No
                                    Read/Write
   External Access:
   R Inyectora C E6 - MainProgram/Rutina Inyectoras - *23(OTE), 16(XIO), 17(XIC), 22(XIO), 23(XIC)
🔋 Sensor_Banda_Principal_A
                                    0
                                                                        BOOL
                                                                                                             APMToyLabPLC
   Constant
                                    No
   External Access:
                                    Read/Write
   Sensor Banda Principal A - MainProgram/Rutina Invectoras - 5(XIC), 7(XIO)
   Sensor Banda Principal A - MainProgram/Sensores - 2(XIC), 3(XIC)
🛚 Sensor Banda Principal B
                                                                        BOOL
                                                                                                             APMToyLabPLC
   Constant
                                    No
   External Access:
                                    Read/Write
   Sensor Banda Principal B - MainProgram/Rutina Inyectoras - 13(XIC), 15(XIO)
   Sensor Banda Principal B - MainProgram/Sensores - 6(XIC), 7(XIC)
Sensor_Banda_Principal_C
                                                                        BOOL
                                                                                                             APMToyLabPLC
   Constant
                                    No
   External Access:
                                    Read/Write
   Sensor Banda Principal C - MainProgram/Rutina Inyectoras - 21(XIC), 23(XIO)
   Sensor Banda Principal C - MainProgram/Sensores - 10(XIC), 11(XIC)
Sensor Inyectora A
                                                                        BOOL
                                                                                                             APMToyLabPLC
   Constant
                                    No
   External Access:
                                    Read/Write
   Sensor Inyectora A - MainProgram/Rutina Inyectoras - 4(XIC)
   Sensor Inyectora A - MainProgram/Sensores - 0(XIC), 1(XIC)
Sensor_Inyectora_B
                                    0
                                                                        BOOL
                                                                                                             APMToyLabPLC
   Constant
                                    No
   External Access:
                                    Read/Write
   Sensor Inyectora B - MainProgram/Rutina Inyectoras - 12(XIC)
   Sensor Inyectora B - MainProgram/Sensores - 4(XIC), 5(XIC)
Sensor Inyectora C
                                    0
                                                                        BOOL
                                                                                                             APMToyLabPLC
   Constant
                                    No
   External Access:
                                    Read/Write
   Sensor Inyectora C - MainProgram/Rutina Inyectoras - 20(XIC)
   Sensor Inyectora C - MainProgram/Sensores - 8(XIC), 9(XIC)
 Timer R Inyectora A
                                                                        TIMER
                                                                                                             MainProgram
   Constant
                                    No
   External Access:
                                    Read/Write
   Timer R Inyectora A - MainProgram/Rutina Inyectoras - *2(TON)
 Timer R Inyectora A.DN
                                                                        BOOL
   Timer R Inyectora A.DN - MainProgram/Rutina Inyectoras - 3(XIC)
```

Rutina_Invectoras - Routine Tag Listing APMToyLabPLC:MainTask:MainProgram Page 79 07/03/2025 22:33:16

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Timer_R_Inyectora_B TIMER MainProgram

Constant No

External Access: Read/Write

Timer_R_Inyectora_B - MainProgram/Rutina_Inyectoras - *10(TON)

Timer_R_Inyectora_B.DN 0 BOOL

Timer_R_Inyectora_B.DN - MainProgram/Rutina_Inyectoras - 11(XIC)

Timer_R_Inyectora_C TIMER MainProgram

BOOL

Constant No

External Access: Read/Write

Timer_R_Inyectora_C - MainProgram/Rutina_Inyectoras - *18(TON)

Timer_R_Inyectora_C.DN 0

Timer R Inyectora C.DN - MainProgram/Rutina Inyectoras - 19(XIC)

Rutina_Inyectoras - Routine Properties Listing APMToyLabPLC:MainTask:MainProgram

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General

■Ladder Diagram

MainProgram Type: In Program:

Number of Rungs: 24

D:\UNAL\APM\APMToylab\Ladder.ACD

APMToyLabPLC:MainTask:MainProgram Total number of rungs in routine: 28



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D:\UNAL\APM\APMToylab\Ladder.ACD

APMToyLabPLC:MainTask:MainProgram Total number of rungs in routine: 28



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Total number of rungs in routine: 28



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Name	Value	Data Type	Scope
Sensor_Banda_Estacion_A	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Sensor_Banda_Estacion_A - Main	Program/Rutina_Estaciones - 2(XIC)		
Sensor_Banda_Estacion_A - Main	Program/Sensores - 12(XIC), 13(XIC)		
Sensor_Banda_Estacion_A_Down	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Sensor_Banda_Estacion_A_Down	- MainProgram/Sensores - *13(OSF)		
Sensor_Banda_Estacion_A_OSF	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Sensor_Banda_Estacion_A_OSF -	MainProgram/Sensores - *13(OSF)		
Sensor_Banda_Estacion_A_OSR	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Sensor_Banda_Estacion_A_OSR -	MainProgram/Sensores - *12(OSR)		
Sensor_Banda_Estacion_A_Up	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Sensor_Banda_Estacion_A_Up - M	MainProgram/Sensores - *12(OSR)		
Sensor_Banda_Estacion_B	0	BOOL	APMToyLabPLC
Constant	No		•
External Access:	Read/Write		
Sensor_Banda_Estacion_B - Main	Program/Rutina_Estaciones - 8(XIC)		
Sensor_Banda_Estacion_B - Main	Program/Sensores - 16(XIC), 17(XIC)		
Sensor_Banda_Estacion_B_Down	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Sensor_Banda_Estacion_B_Down	- MainProgram/Sensores - *17(OSF)		
Sensor_Banda_Estacion_B_OSF	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Sensor_Banda_Estacion_B_OSF -	MainProgram/Sensores - *17(OSF)		
Sensor_Banda_Estacion_B_OSR	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Sensor_Banda_Estacion_B_OSR -	MainProgram/Sensores - *16(OSR)		
Sensor_Banda_Estacion_B_Up	0	BOOL	MainProgram
Constant	No		
External Access:	Read/Write		
Sensor_Banda_Estacion_B_Up - M	MainProgram/Sensores - *16(OSR)		
Sensor_Banda_Estacion_C	0	BOOL	APMToyLabPLC
Constant	No		•
External Access:	Read/Write		
Sensor_Banda_Estacion C - Main.	Program/Rutina_Estaciones - 14(XIC)		
Sensor_Banda_Estacion_C - Main.	Program/Sensores - 20(XIC), 21(XIC)		
Sensor_Banda_Estacion_C_Down	0	BOOL	MainProgram
Constant	No		S
External Access:	Read/Write		
	- MainProgram/Sensores - *21(OSF)		
	, ,		

BOOL Sensor Banda Estacion C OSF 0 MainProgram Constant No Read/Write External Access: Sensor Banda Estacion C OSF - MainProgram/Sensores - *21(OSF) BOOL. Sensor Banda Estacion C OSR 0 MainProgram Constant No External Access: Read/Write Sensor Banda Estacion C OSR - MainProgram/Sensores - *20(OSR) Sensor_Banda_Estacion_C_Up **BOOL** MainProgram Constant No **External Access:** Read/Write Sensor_Banda_Estacion_C_Up - MainProgram/Sensores - *20(OSR) 🛚 Sensor Banda Principal A 0 **BOOL** APMToyLabPLC Constant No Read/Write External Access: Sensor Banda Principal A - MainProgram/Rutina Inyectoras - 5(XIC), 7(XIO) Sensor Banda Principal A - MainProgram/Sensores - 2(XIC), 3(XIC) Sensor Banda Principal A Down 0 **BOOL** MainProgram Constant No Read/Write External Access: Sensor Banda Principal A Down - MainProgram/Sensores - *3(OSF) Sensor Banda Principal A OSF BOOL. MainProgram Constant No **External Access:** Read/Write Sensor_Banda_Principal_A_OSF - MainProgram/Sensores - *3(OSF) Sensor_Banda_Principal_A OSR 0 **BOOL** MainProgram Constant External Access: Read/Write Sensor Banda Principal A OSR - MainProgram/Sensores - *2(OSR) Sensor_Banda_Principal_A_Up **BOOL** MainProgram Constant No Read/Write External Access: Sensor Banda Principal A Up - MainProgram/Sensores - *2(OSR) Sensor Banda Principal B 0 **BOOL** APMToyLabPLC Constant No External Access: Read/Write Sensor Banda Principal B - MainProgram/Rutina Inyectoras - 13(XIC), 15(XIO) Sensor Banda Principal B - MainProgram/Sensores - 6(XIC), 7(XIC) Sensor Banda Principal B Down 0 **BOOL** MainProgram Constant No **External Access:** Read/Write Sensor Banda Principal B Down - MainProgram/Sensores - *7(OSF) Sensor Banda Principal B OSF **BOOL** MainProgram Constant No **External Access:** Read/Write Sensor_Banda_Principal_B_OSF - MainProgram/Sensores - *7(OSF) **BOOL** Sensor Banda Principal B OSR MainProgram Constant No Read/Write External Access: Sensor Banda Principal B OSR - MainProgram/Sensores - *6(OSR) **BOOL** Sensor_Banda_Principal_B_Up 0 MainProgram Constant No

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Page 86 APMToyLabPLC:MainTask:MainProgram D:\UNAL\APM\APMToylab\Ladder.ACD Sensor Banda Principal B Up (Continued) Read/Write External Access: Sensor Banda Principal B Up - MainProgram/Sensores - *6(OSR) 🛚 Sensor Banda Principal C **BOOL** APMToyLabPLC Constant No External Access: Read/Write Sensor Banda Principal C - MainProgram/Rutina Inyectoras - 21(XIC), 23(XIO) Sensor Banda Principal C - MainProgram/Sensores - 10(XIC), 11(XIC) Sensor_Banda_Principal_C_Down 0 **BOOL** MainProgram Constant **External Access:** Read/Write Sensor Banda Principal C Down - MainProgram/Sensores - *11(OSF) Sensor_Banda_Principal_C_OSF **BOOL** MainProgram No Constant Read/Write External Access: Sensor Banda Principal C OSF - MainProgram/Sensores - *11(OSF) **BOOL** Sensor Banda Principal C OSR 0 MainProgram Constant No Read/Write External Access: Sensor Banda Principal C OSR - MainProgram/Sensores - *10(OSR) Sensor Banda Principal C Up **BOOL** MainProgram Constant No **External Access:** Read/Write Sensor Banda Principal C Up - MainProgram/Sensores - *10(OSR) 🛚 Sensor Banda Salida 0 **BOOL** APMToyLabPLC Constant No Read/Write **External Access:** Sensor Banda Salida - MainProgram/Sensores - 24(XIC), 25(XIC) **BOOL** Sensor_Banda_Salida_Down 0 MainProgram Constant No External Access: Read/Write Sensor Banda Salida Down - MainProgram/Sensores - *25(OSF) Sensor_Banda_Salida_OSF **BOOL** MainProgram Constant No External Access: Read/Write Sensor Banda Salida OSF - MainProgram/Sensores - *25(OSF) 0 **BOOL** MainProgram Sensor Banda Salida OSR No Constant Read/Write External Access: Sensor Banda Salida OSR - MainProgram/Sensores - *24(OSR) Sensor Banda Salida Up 0 **BOOL** MainProgram Constant No **External Access:** Read/Write Sensor Banda Salida Up - MainProgram/Rutina Celda - 4(XIC) Sensor Banda Salida Up - MainProgram/Sensores - *24(OSR) Sensor Celda 0 **BOOL** APMToyLabPLC Constant No **External Access:** Read/Write Sensor Celda - MainProgram/Sensores - 26(XIC), 27(XIC) 0 Sensor_Celda_Down **BOOL** MainProgram

No

Read/Write

Constant

External Access:

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MainProgram

MainProgram

MainProgram

APMToyLabPLC

MainProgram

MainProgram

MainProgram

MainProgram

APMToyLabPLC

MainProgram

MainProgram

Sensor Celda Down (Continued) Sensor Celda Down - MainProgram/Rutina Celda - 5(XIC), 7(XIC) Sensor Celda Down - MainProgram/Sensores - *27(OSF) Sensor Celda OSF Constant No

Read/Write External Access:

Sensor Celda OSF - MainProgram/Sensores - *27(OSF)

0 Sensor_Celda_OSR Constant No **External Access:** Read/Write

Sensor Celda OSR - MainProgram/Sensores - *26(OSR)

0 Sensor_Celda_Up

Constant No Read/Write External Access:

Sensor Celda Up - MainProgram/Sensores - *26(OSR)

Sensor_Estacion_A

No Constant Read/Write External Access:

Sensor Estacion A - MainProgram/Rutina Estaciones - 5(XIO) Sensor Estacion A - MainProgram/Sensores - 14(XIC), 15(XIC)

Sensor Estacion A Down

Constant No

External Access: Read/Write

Sensor Estacion A Down - MainProgram/Sensores - *15(OSF)

Sensor Estacion A OSF 0 Constant No

Read/Write External Access:

Sensor_Estacion_A_OSF - MainProgram/Sensores - *15(OSF)

Sensor_Estacion_A_OSR 0

Constant No

External Access: Read/Write

Sensor Estacion A OSR - MainProgram/Sensores - *14(OSR)

Sensor_Estacion_A_Up

Constant No

External Access: Read/Write

Sensor Estacion A Up - MainProgram/Contadores - 3(XIC)

Sensor Estacion A Up - MainProgram/Sensores - *14(OSR)

Sensor_Estacion_B 0

Constant No External Access: Read/Write

Sensor Estacion B - MainProgram/Rutina Estaciones - 11(XIO)

Sensor Estacion B - MainProgram/Sensores - 18(XIC), 19(XIC)

Sensor Estacion B Down 0 No Constant

External Access: Read/Write

Sensor_Estacion_B_Down - MainProgram/Sensores - *19(OSF)

No

0 Sensor Estacion B OSF

External Access: Read/Write

Sensor Estacion B OSF - MainProgram/Sensores - *19(OSF)

Sensor_Estacion_B_OSR No Constant

Constant

BOOL

MainProgram

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APMToyLabPLC:MainTask:MainProgram D:\UNAL\APM\APMToylab\Ladder.ACD Sensor Estacion B OSR (Continued) Read/Write External Access: Sensor Estacion B OSR - MainProgram/Sensores - *18(OSR) **BOOL** MainProgram Sensor Estacion B Up Constant No External Access: Read/Write Sensor Estacion B Up - MainProgram/Contadores - 4(XIC) Sensor Estacion B Up - MainProgram/Sensores - *18(OSR) Sensor_Estacion_C **BOOL** APMToyLabPLC Constant No **External Access:** Read/Write Sensor Estacion C - MainProgram/Rutina Estaciones - 17(XIO) Sensor Estacion C - MainProgram/Sensores - 22(XIC), 23(XIC) 0 **BOOL** Sensor_Estacion_C_Down MainProgram Constant No Read/Write External Access: Sensor Estacion C Down - MainProgram/Sensores - *23(OSF) Sensor Estacion C OSF **BOOL** MainProgram Constant No Read/Write External Access: Sensor Estacion C OSF - MainProgram/Sensores - *23(OSF) Sensor Estacion C OSR 0 BOOL. MainProgram Constant No Read/Write **External Access:** Sensor Estacion C OSR - MainProgram/Sensores - *22(OSR) Sensor Estacion C Up 0 **BOOL** MainProgram Constant No Read/Write External Access: Sensor Estacion C Up - MainProgram/Contadores - 5(XIC) Sensor Estacion C Up - MainProgram/Sensores - *22(OSR) Sensor_Inyectora_A 0 **BOOL** APMToyLabPLC Constant No External Access: Read/Write Sensor Inyectora A - MainProgram/Rutina Inyectoras - 4(XIC) Sensor Inyectora A - MainProgram/Sensores - 0(XIC), 1(XIC) Sensor Inyectora A Down **BOOL** MainProgram Constant No External Access: Read/Write Sensor Inyectora A Down - MainProgram/Sensores - *1(OSF) Sensor_Inyectora_A_OSF 0 **BOOL** MainProgram Constant No **External Access:** Read/Write Sensor Inyectora A OSF - MainProgram/Sensores - *1(OSF) Sensor Inyectora A OSR **BOOL** MainProgram Constant No **External Access:** Read/Write Sensor Inyectora A OSR - MainProgram/Sensores - *0(OSR) **BOOL** MainProgram Sensor_Inyectora_A_Up Constant No Read/Write External Access: Sensor Inyectora A Up - MainProgram/Contadores - 0(XIC) Sensor Invectora A Up - MainProgram/Sensores - *0(OSR)

MainProgram

MainProgram

Sensor Inyectora B Constant

No External Access:

Read/Write

0

No

Sensor Invectora B - MainProgram/Rutina Invectoras - 12(XIC) Sensor Invectora B - MainProgram/Sensores - 4(XIC), 5(XIC)

Sensor Inyectora B Down

Constant

Read/Write External Access:

Sensor Inyectora B Down - MainProgram/Sensores - *5(OSF)

Sensor_Inyectora_B_OSF

0 Constant No

Read/Write External Access:

Sensor Inyectora B OSF - MainProgram/Sensores - *5(OSF)

0 Sensor Inyectora B OSR

Constant No

Read/Write External Access:

Sensor_Inyectora_B_OSR - MainProgram/Sensores - *4(OSR)

Sensor Inyectora B Up

Constant No

Read/Write **External Access:**

Sensor Invectora B Up - MainProgram/Contadores - 1(XIC)

Sensor Inyectora B Up - MainProgram/Sensores - *4(OSR)

Sensor Inyectora C

0

Constant No

Read/Write External Access:

Sensor Inyectora C - MainProgram/Rutina Inyectoras - 20(XIC)

Sensor Inyectora C - MainProgram/Sensores - 8(XIC), 9(XIC)

0 Sensor_Inyectora_C_Down

Sensor Inyectora C OSF

Read/Write External Access:

Sensor Inyectora C OSR 0

Constant No

Read/Write External Access:

Sensor Inyectora C OSR - MainProgram/Sensores - *8(OSR)

Sensor_Inyectora_C_Up 0

Constant No

External Access: Read/Write

Sensor Inyectora C Up - MainProgram/Contadores - 2(XIC)

Sensor Inyectora C Up - MainProgram/Sensores - *8(OSR)

BOOL

APMToyLabPLC

BOOL MainProgram

BOOL MainProgram

BOOL MainProgram

BOOL MainProgram

BOOL APMToyLabPLC

Constant No

Read/Write External Access:

Sensor Inyectora C Down - MainProgram/Sensores - *9(OSF)

BOOL

Constant No

Sensor Inyectora C OSF - MainProgram/Sensores - *9(OSF)

BOOL

BOOL

MainProgram

BOOL MainProgram

Sensores - Routine Properties Listing APMToyLabPLC:MainTask:MainProgram

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General

■Ladder Diagram

MainProgram Type: In Program:

Number of Rungs:

Setup - Ladder Diagram

APMToyLabPLC:MainTask:MainProgram Total number of rungs in routine: 5

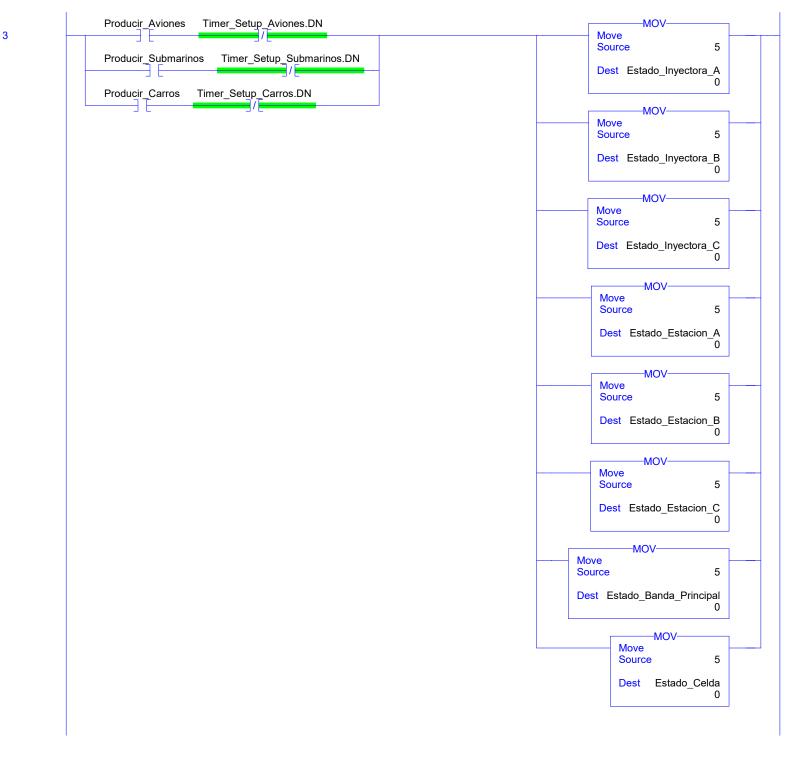
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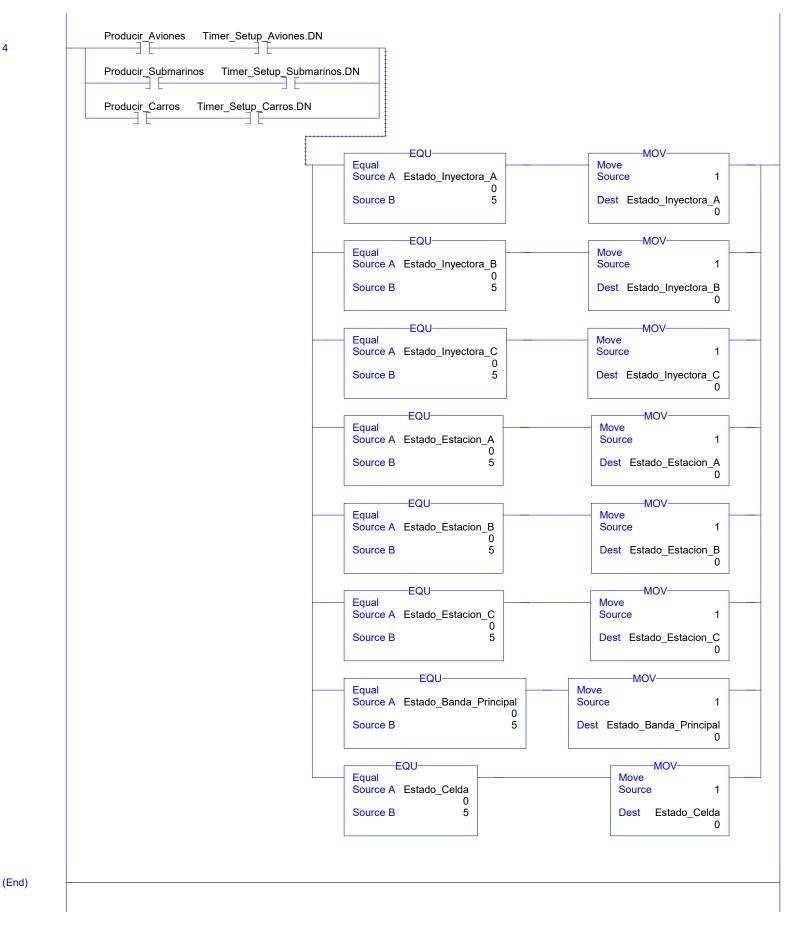
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D:\UNAL\APM\APMToylab\Ladder.ACD



Total number of rungs in routine: 5



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			,
Name	Value	Data Type	Scope
[▮] Estado_Banda_Principal	0	INT	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
		(N), *51(MOV), *52(MOV), *53(MOV), *5	54(MOV), 48(EQU), 49(EQU), 50(EQU)
Estaao_Banaa_Principal - M	fainProgram/Setup - *3(MOV),	**4(MOV), 4(EQU)	
[₿] Estado_Celda	0	INT	APMToyLabPLC
Constant	No		3
External Access:	Read/Write		
	n/Estados - *57(MOV), *58(MC	OV), *59(MOV), *60(MOV), *61(MOV), *	62(MOV), 55(EQU), 56(EQU), 57(EQU)
Estado_Celda - MainProgran	n/Setup - *3(MOV), *4(MOV),	4(EQU)	
	0	D.M.	ADMIT I IDIC
Estado_Estacion_A	0	INT	APMToyLabPLC
Constant	No		
External Access:	Read/Write	27/4/01/) *20/4/01/) *20/4/01/) *20/4/0	NU *21/MOU\ 24/EOU\ 25/EOU\
	ogram/Estados - *26(MOV), *2	?7(MOV), *28(MOV), *29(MOV), *30(MC	(N), *31(MOV), 24(EQU), 25(EQU),
26(EQU) Estado Estacion A - MainPr	ogram/Setup - *3(MOV), *4(M	OV) 4(EOU)	
Litato_Litation_11 Main17		01), 1(120)	
Estado_Estacion_B	0	INT	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Estado_Estacion_B - MainPr	ogram/Estados - *34(MOV), *3	35(MOV), *36(MOV), *37(MOV), *38(MC	OV), *39(MOV), 32(EQU), 33(EQU),
<i>34(EQU)</i>			
Estado_Estacion_B - MainPr	ogram/Setup - *3(MOV), *4(M	OV), 4(EQU)	
Estado_Estacion_C	0	INT	APMToyLabPLC
Constant	No	1111	741 WITO YEARST EC
External Access:	Read/Write		
		43(MOV), *44(MOV), *45(MOV), *46(MC	OV) *47(MOV) 40(FOU) 41(FOU)
42(EQU)	08/4/1/25/4405 12(1/107);		77), 77(MO7), 70(Egc), 71(Egc),
	rogram/Setup - *3(MOV), *4(M	OV), 4(EQU)	
Estado_Inyectora_A	0	INT	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
		(MOV), *4(MOV), *5(MOV), *6(MOV), *	$7(MOV)$, $\theta(EQU)$, $I(EQU)$, $2(EQU)$
Estado_Inyectora_A - MainP	Program/Setup - *3(MOV), *4(M	1OV), 4(EQU)	
Estado Inyectora B	0	INT	APMToyLabPLC
Constant	No	1111	711 WTO y East EC
External Access:	Read/Write		
		:11(MOV), *12(MOV), *13(MOV), *14(MO	OV). *15(MOV). 10(EOU). 8(EOU).
9(EQU)	10(1127),	11(1107), 12(1107), 10(1107), 17(110	10(1127), 10(1280), 0(1280),
	Program/Setup - *3(MOV), *4(M	10V), 4(EQU)	
бI		72.700	
Estado_Inyectora_C	0	INT	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
	Program/Estados - *18(MOV), *	^c 19(MOV), *20(MOV), *21(MOV), *22(Mo	OV), *23(MOV), 16(EQU), 17(EQU),
18(EQU)	(6	50T) (TOT)	
Estado_Inyectora_C - MainP	Program/Setup - *3(MOV), *4(M	10V), 4(EQU)	
Producir_Aviones	0	BOOL	APMToyLabPLC
Constant	No	BOOL	74 WITOYDAOI DC
External Access:	Read/Write		
Producir Aviones - MainPros			
	gram/Setup - 0(XIC), 3(XIC), 4((XIC)	
		,	
Producir_Carros	0	BOOL	APMToyLabPLC
Constant	No		
External Access:	Read/Write		
Producir_Carros - MainProg	ram/Contadores - 14(XIC)		

BOOL

TIMER

APMToyLabPLC

MainProgram

Producir Carros (Continued)

Producir Submarinos

Producir Carros - MainProgram/Setup - 2(XIC), 3(XIC), 4(XIC)

Constant No

External Access: Read/Write

Producir Submarinos - MainProgram/Contadores - 13(XIC)

Producir Submarinos - MainProgram/Setup - 1(XIC), 3(XIC), 4(XIC)

0

Timer_Setup_Aviones Constant No

External Access: Read/Write

Timer Setup Aviones - MainProgram/Setup - *0(TON)

Timer_Setup_Aviones.DN **BOOL**

Timer_Setup_Aviones.DN - MainProgram/Setup - 3(XIO), 4(XIC)

Timer_Setup_Carros **TIMER** MainProgram

Constant No

External Access: Read/Write

Timer Setup Carros - MainProgram/Setup - *2(TON)

BOOL Timer Setup Carros.DN

Timer_Setup_Carros.DN - MainProgram/Setup - 3(XIO), 4(XIC)

Timer Setup Submarinos TIMER MainProgram

Constant No

External Access: Read/Write

Timer Setup Submarinos - MainProgram/Setup - *1(TON)

BOOL Timer Setup Submarinos.DN

Timer Setup Submarinos.DN - MainProgram/Setup - 3(XIO), 4(XIC)

Setup - Routine Properties Listing APMToyLabPLC:MainTask:MainProgram

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General

■Ladder Diagram

MainProgram Type: In Program:

Number of Rungs:

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