Module Address

IP Address 192.168.2.252
Subnet Mask: 255.255.255.0
Default gateway 192.168.2.2

Connection1 (Server)

Local Properties(Server)
    TSAP: 20.00
    Only this connection: 192.168.2.2
Remote Properties(Client)
    TSAP: 10.00

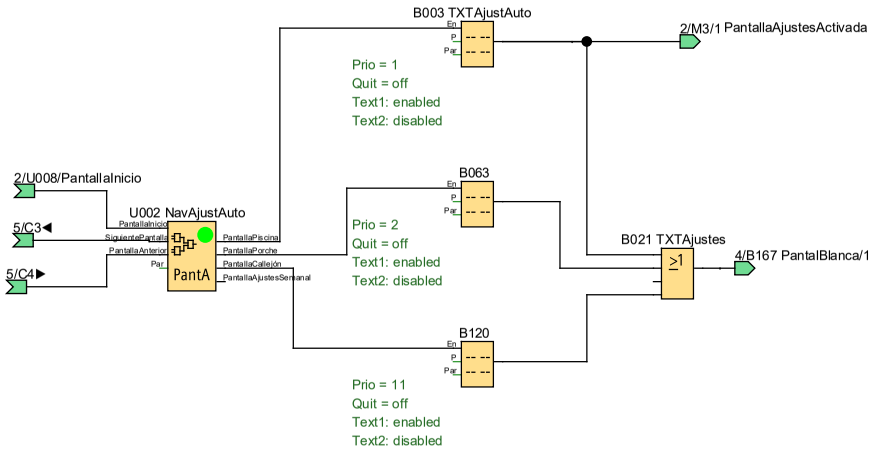
Parameter VM Mapping

ID	Block	Parameter	Type	Address
1	B048 T.MZPiscina [Off-Delay]	Off-Delay	Word	2
2	B048 T.MZPiscina [Off-Delay]	Off-Delay Time Base	Byte	4
3	B046 T.MZPorche [Off-Delay]	Off-Delay	Word	5
4	B046 T.MZPorche [Off-Delay]	Off-Delay Time Base	Byte	7
5	B044 T.MZCallejon [Off-Delay]	Off-Delay	Word	8
6	B044 T.MZCallejon [Off-Delay]	Off-Delay Time Base	Byte	10
7	B061 TodasEstacio [Weekly Timer]	Weekday1	Byte	20
8	B061 TodasEstacio [Weekly Timer]	On Time1	Word	21
9	B061 TodasEstacio [Weekly Timer]	Off Time1	Word	23
10	B065 [Astronomical clock]	Sunrise offset	Word	25
11	B065 [Astronomical clock]	Sunrise Time	Word	27
12	B050 TRemotoPisci [Off-Delay]	Off-Delay	Word	29
13	B050 TRemotoPisci [Off-Delay]	Off-Delay Time Base	Byte	31
14	B072 TRemotoPorch [Off-Delay]	Off-Delay	Word	32
15	B072 TRemotoPorch [Off-Delay]	Off-Delay Time Base	Byte	34
16	B109 TRemotoCalle [Off-Delay]	Off-Delay	Word	35
17	B109 TRemotoCalle [Off-Delay]	Off-Delay Time Base	Byte	37

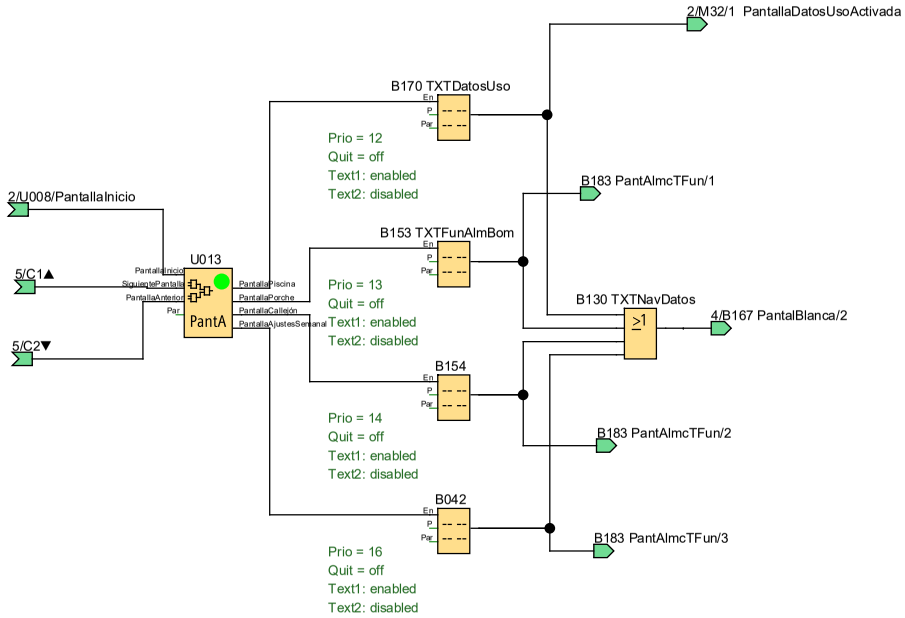
Parameter VM Mapping

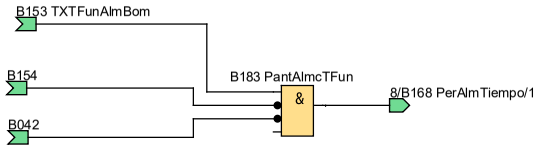
ID	Block	Parameter	Type	Address
18	B071 TAutoCallejo [Off-Delay]	Off-Delay	Word	17
19	B071 TAutoCallejo [Off-Delay]	Off-Delay Time Base	Byte	19

Navegación pantallas: Ajustes



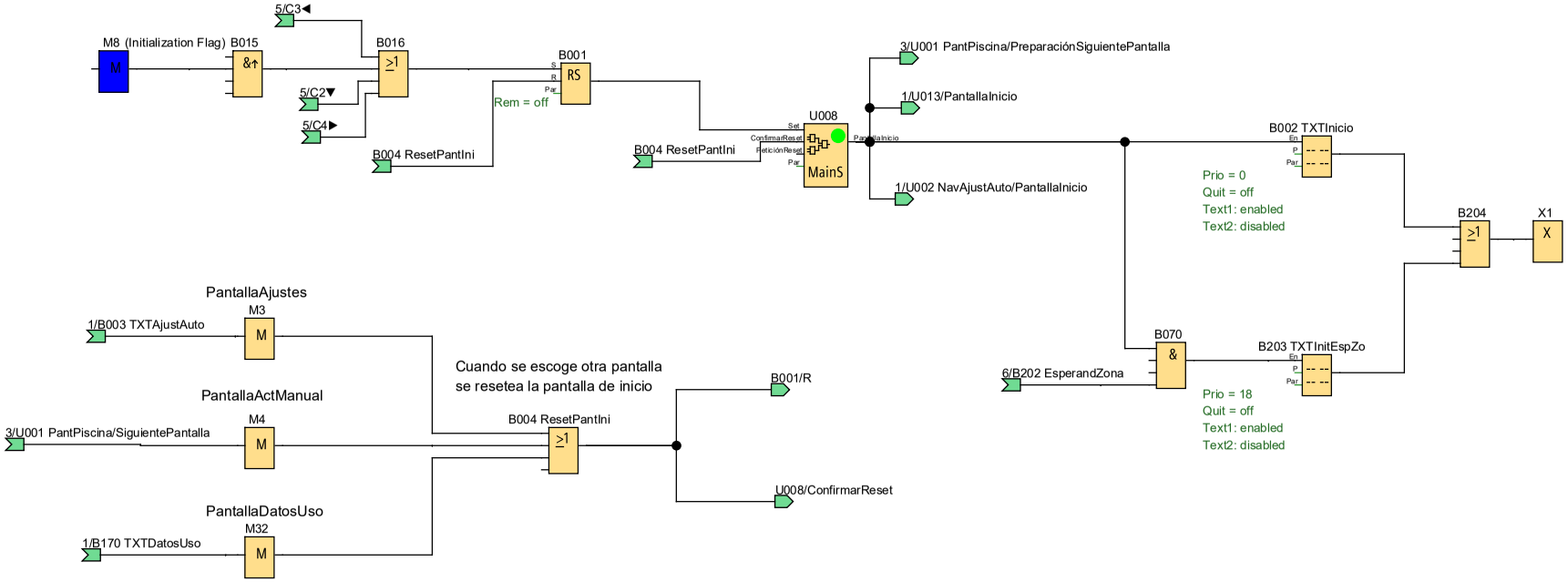
Navegación pantallas: Datos de uso





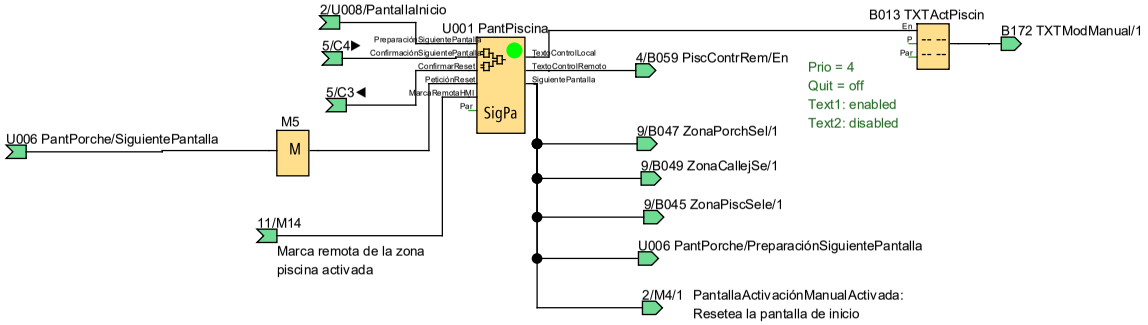
Creator:	simon		Project:		Customer:	
Checked:			Installation:		Diagram No.:	
Date:	11/5/25 1:41 AM/9/12/26 6:58 PM		File:	RiegoAutomático.lsc	Page:	4 / 32

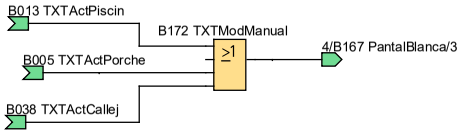
Navegación pantallas: Pantalla inicio

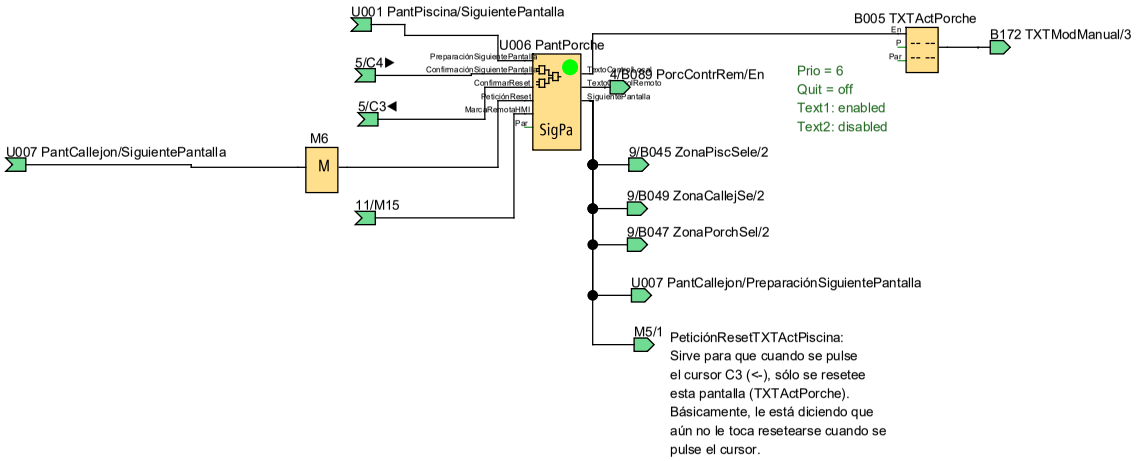


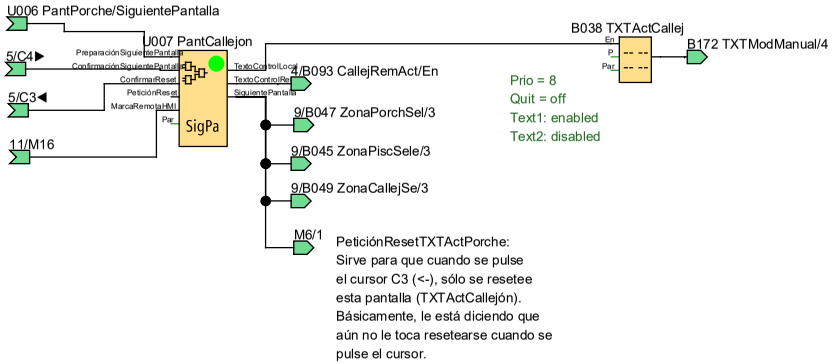
Creator:	simon		Project:		Customer:	
Checked:			Installation:		Diagram No.:	
Date:	11/5/25 1:41 AM/9/12/26 6:58 PM		File:	RiegoAutomático.lsc	Page:	5 / 32

Navegación pantallas: Modo manual



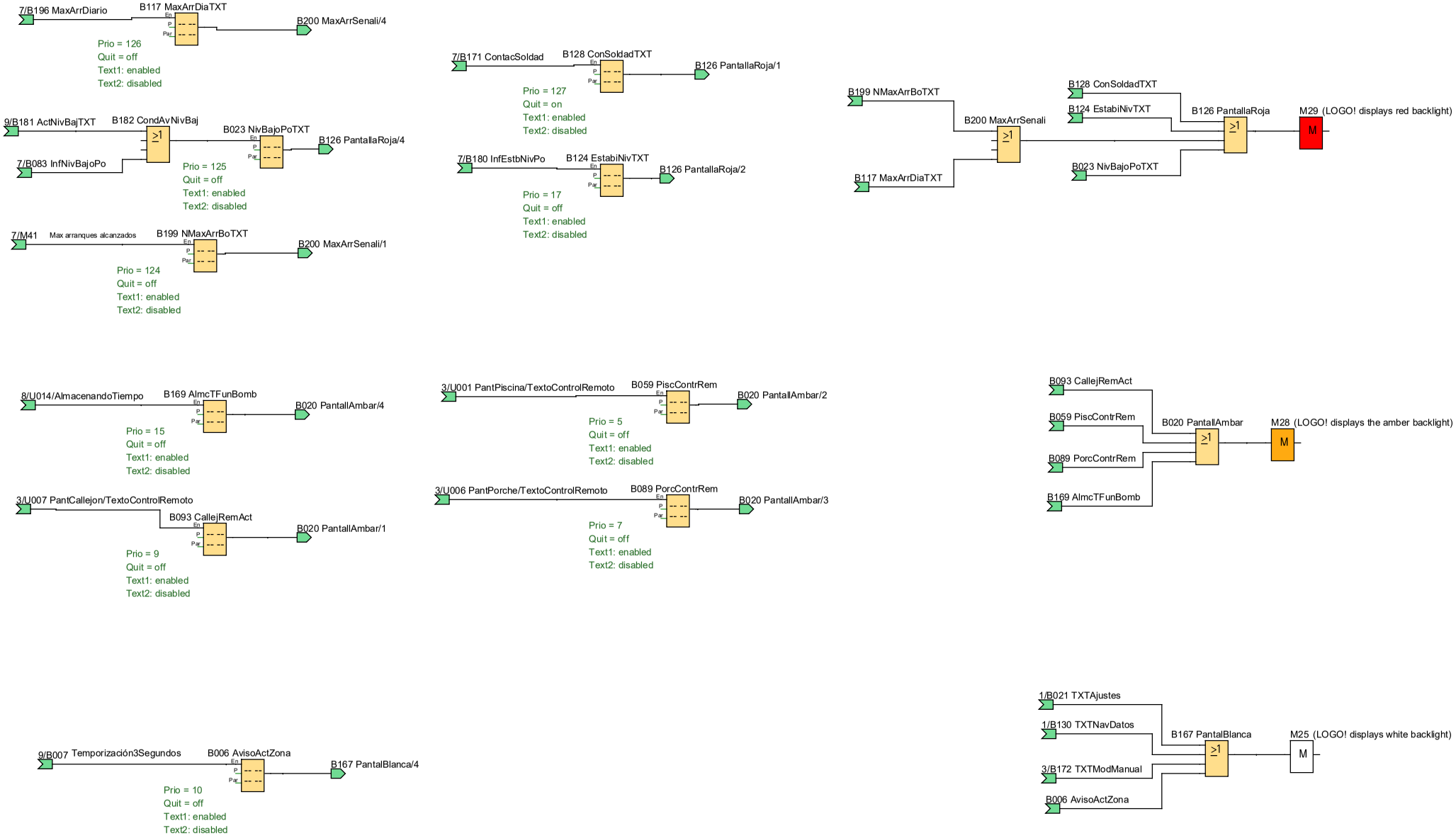






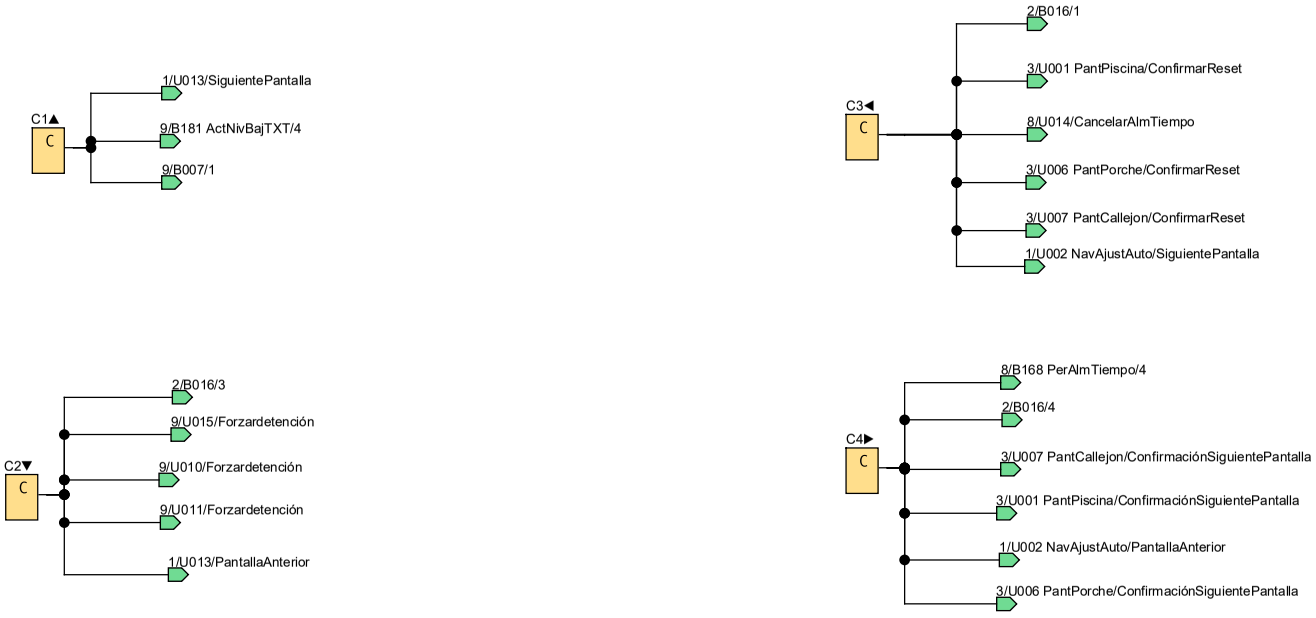
Creator:	simon		Project:		Customer:	
Checked:			Installation:		Diagram No.:	
Date:	11/5/25 1:41 AM/9/12/26 6:58 PM		File:	RiegoAutomático.lsc	Page:	6 / 32

Textos de aviso del sistema

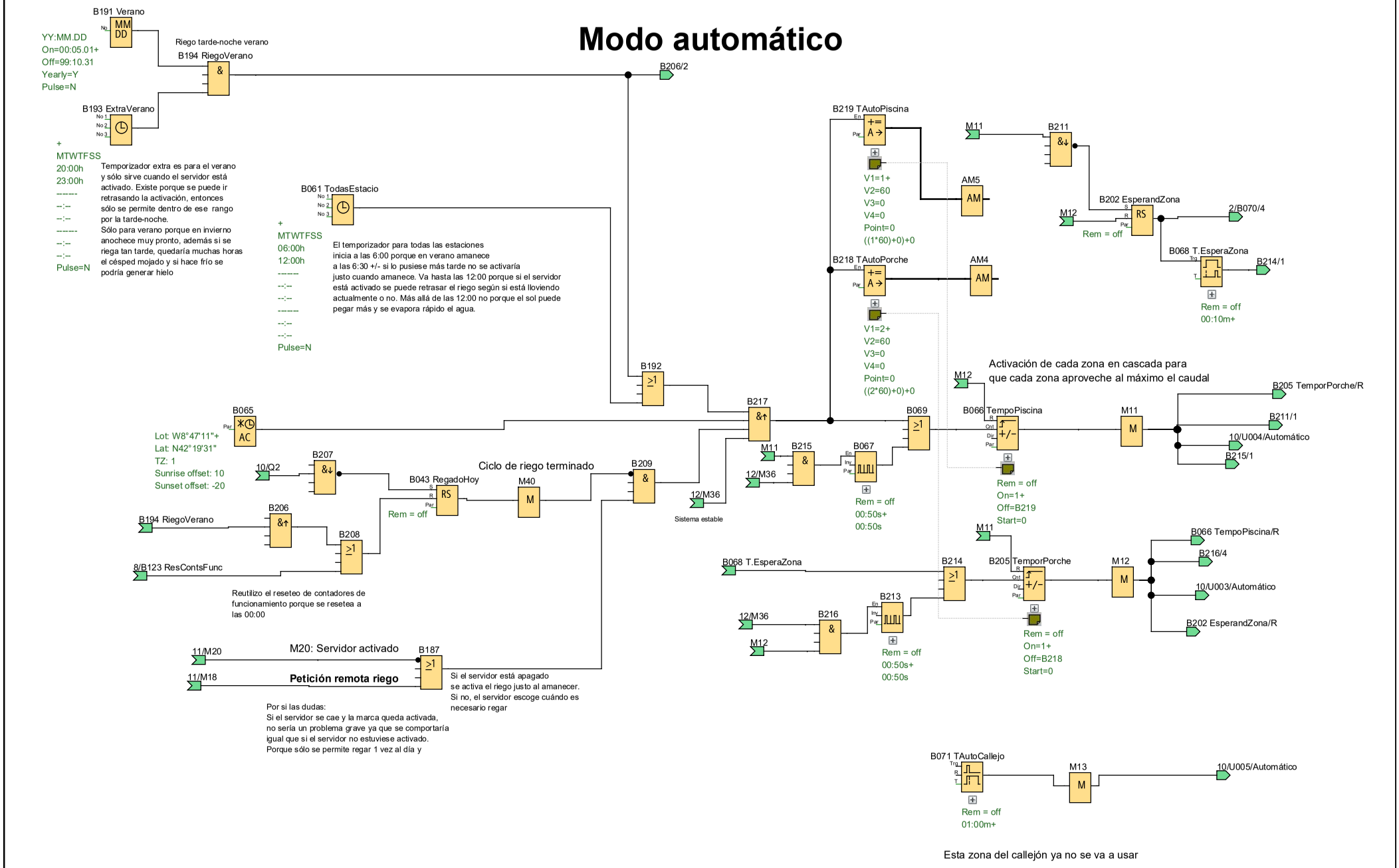


Creator:	simon		Project:		Customer:	
Checked:			Installation:		Diagram No.:	
Date:	11/5/25 1:41 AM/9/12/26 6:58 PM		File:	RiegoAutomático.lsc	Page:	7 / 32

Cursores de navegación

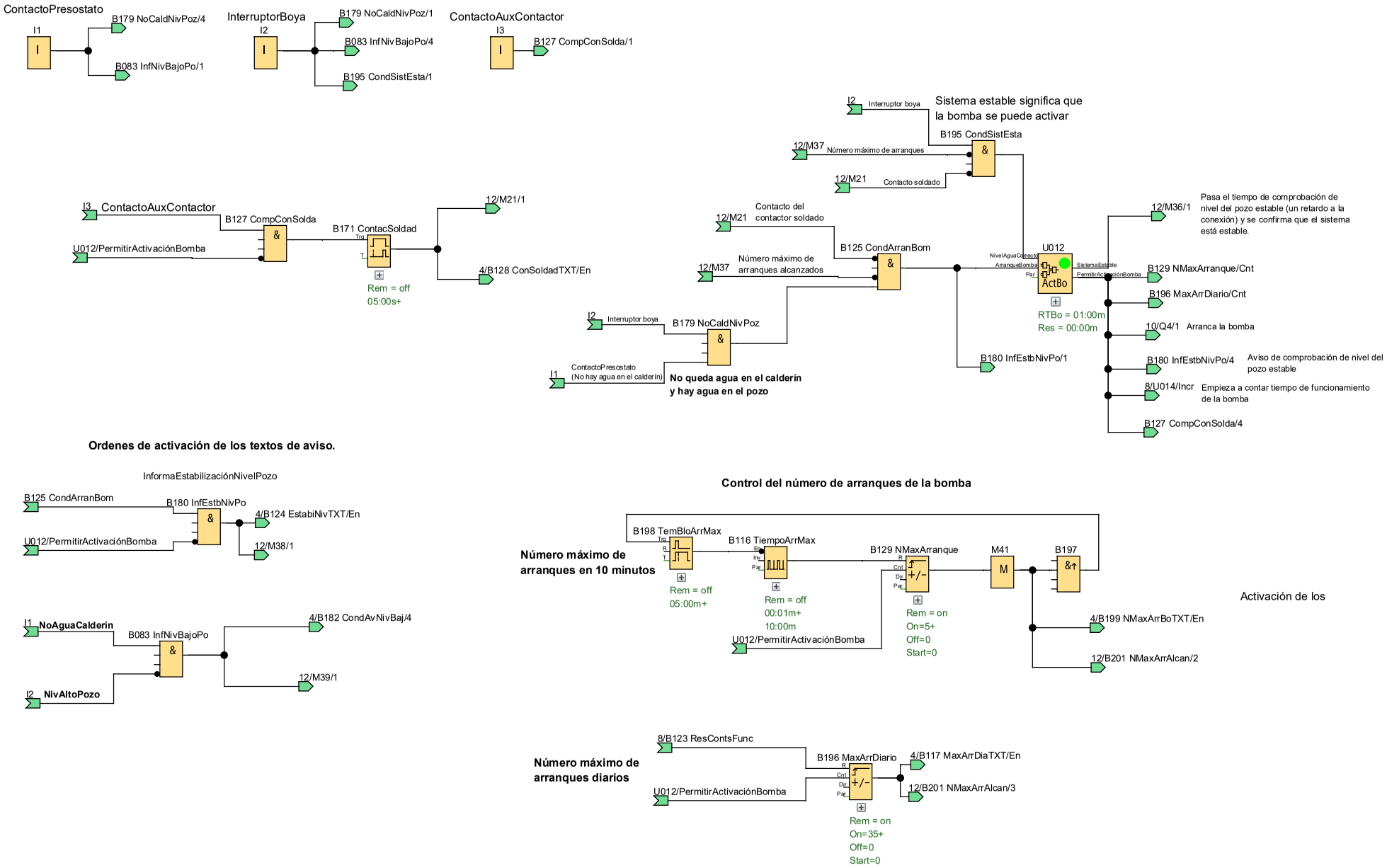


Modo automático



Creator:	simon		Project:		Customer:	
Checked:			Installation:		Diagram No.:	
Date:	11/5/25 1:41 AM/9/12/26 6:58 PM		File:	RiegoAutomático.lsc	Page:	9 / 32

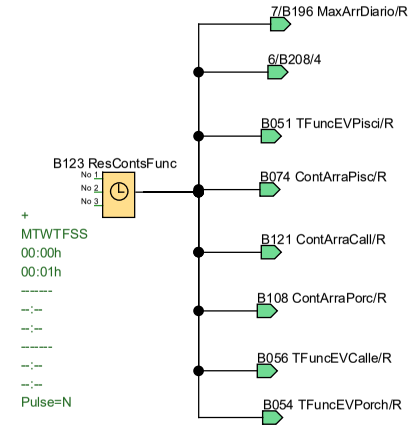
Protección bomba



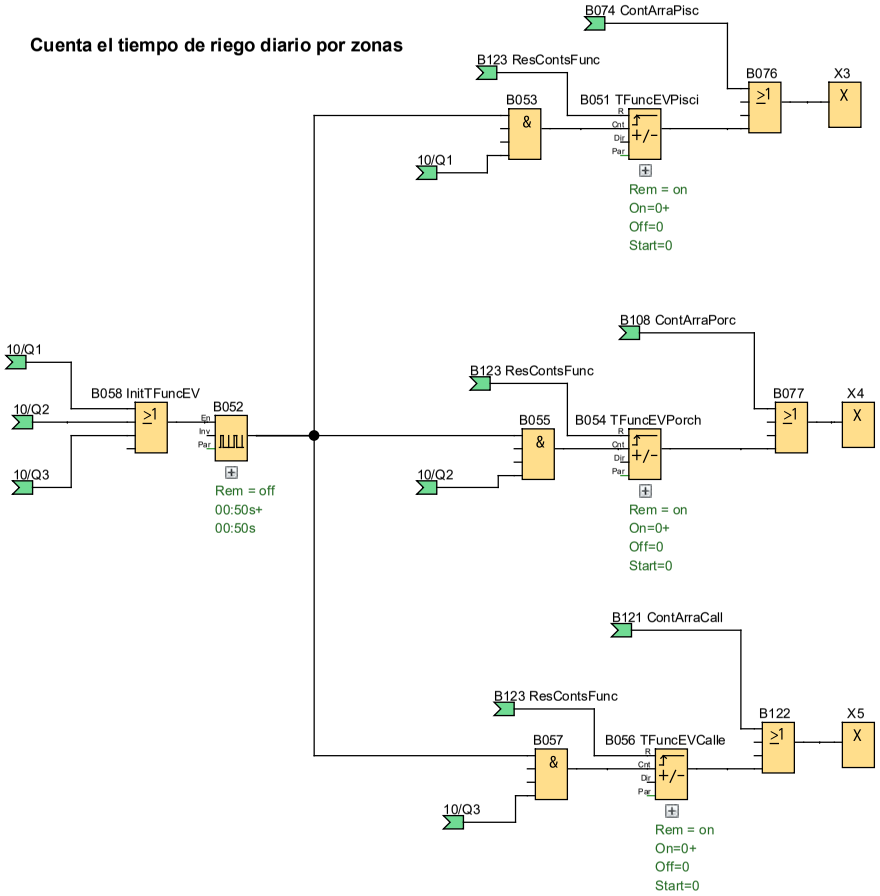
Creator:	simon		Project:		Customer:	
Checked:			Installation:		Diagram No.:	
Date:	11/5/25 1:41 AM/9/12/26 6:58 PM		File:	RiegoAutomático.lsc	Page:	10 / 32

Contadores de uso

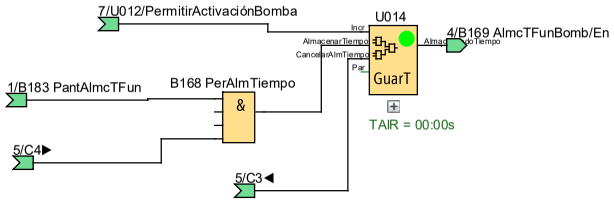
Reseteo diario



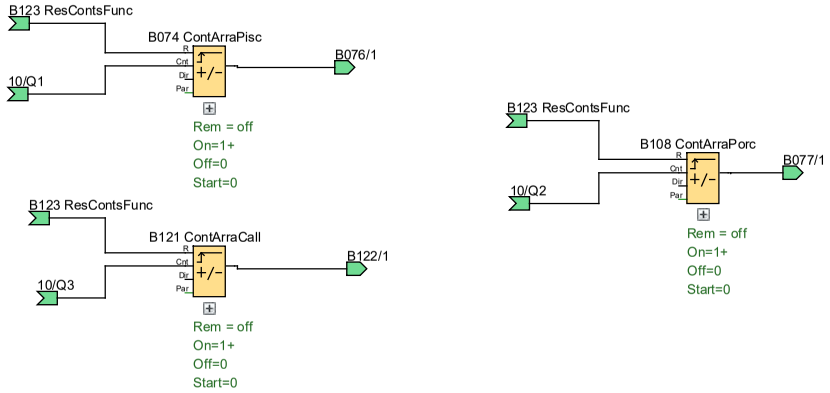
Cuenta el tiempo de riego diario por zonas



Guarda y cuenta el tiempo de funcionamiento de la bomba



Cuenta el número de riegos diarios por zonas



Creator:	simon		Project:		Customer:	
Checked:			Installation:		Diagram No.:	
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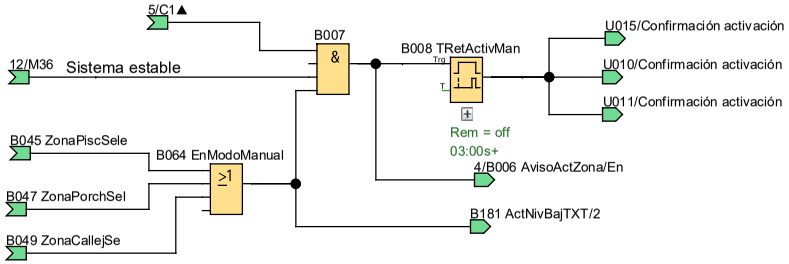
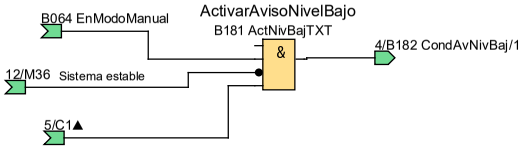
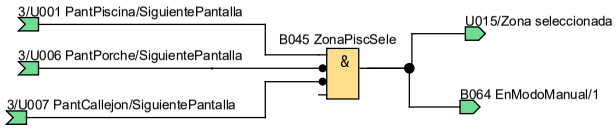
Modo manual

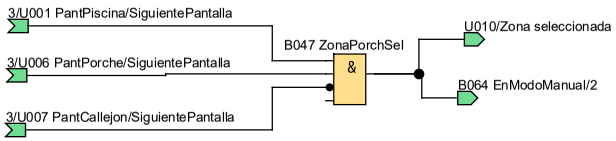
El tiempo de retardo de activación de cada zona
se activa siempre que se esté en modo manual,
el sistema sea estable y se quiera activar una zona.

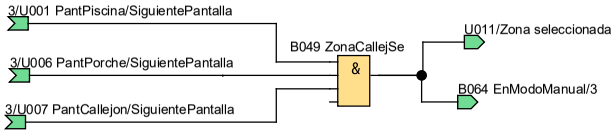


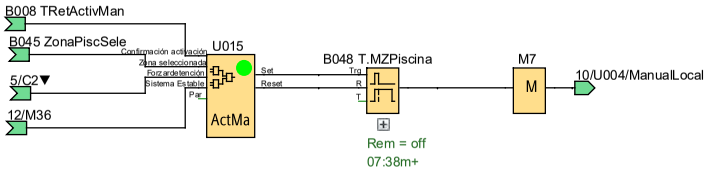
Si el nivel del pozo es bajo, al pulsar el cursor
de activación de la zona alerta sobre el nivel del pozo

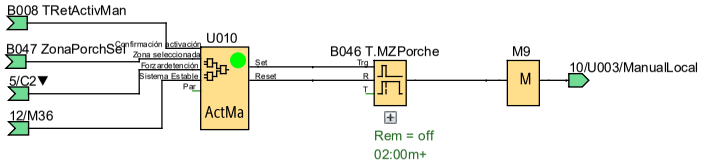


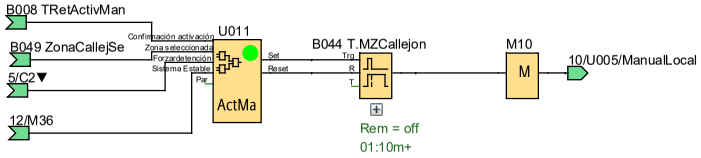












Creator:	simon		Project:		Customer:	
Checked:			Installation:		Diagram No.:	
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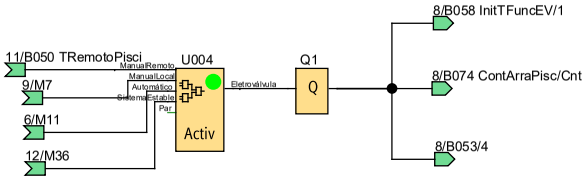
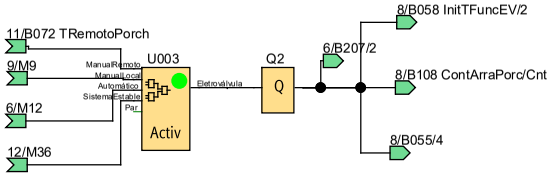
Activación salidas

Para futuros errores: Los UDFsd que tengan conectados a su salida una salida física, todas sus entradas deben de tener un estado marcado. O sea no pueden estar desconectadas porque aunque en la simulación funcione como un False físicamente no, por lo que se generan incongruencias entre la simulación y la realidad.

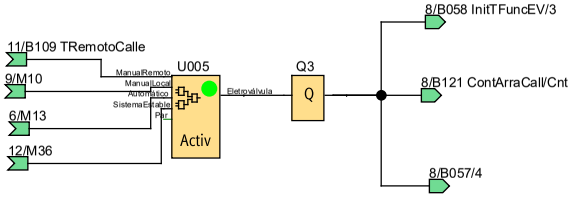
Q1



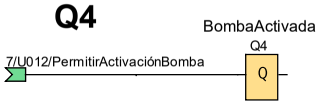
Q2



Q3



Q4



Creator:	simon		Project:		Customer:	
Checked:			Installation:		Diagram No.:	
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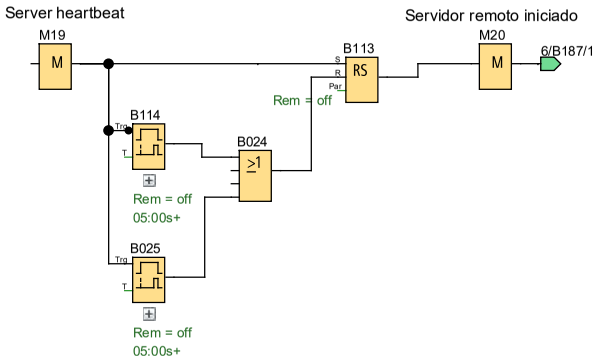
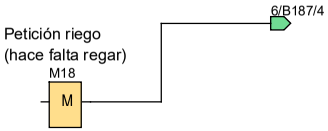
Remoto: Escritura

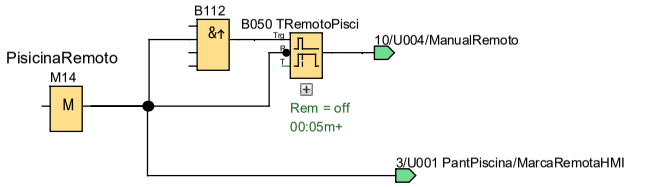
Las marcas son escritas a través de Snap7 con el servidor remoto

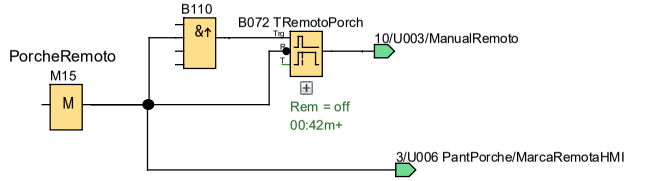
Si la marca se queda 5 segundos seguidos activada o desactivada es que el servidor remoto está apagado.

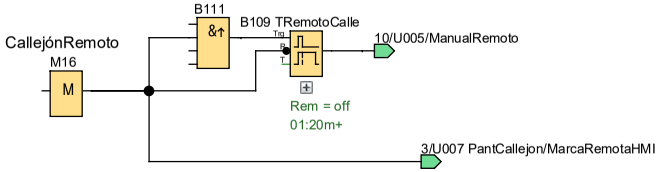




Activación de las zonas desde la interfaz web. El valor de los temporizadores se cambia desde la interfaz web.

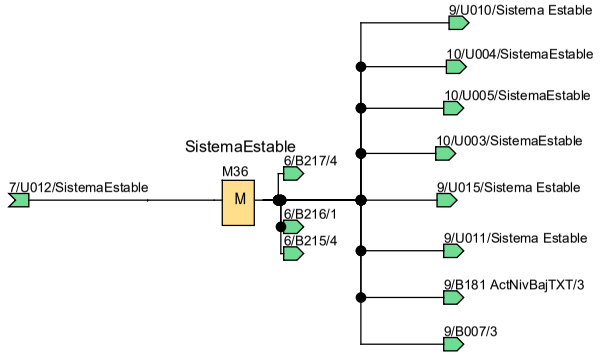


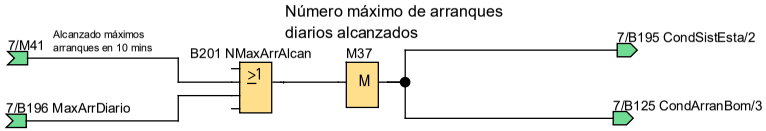


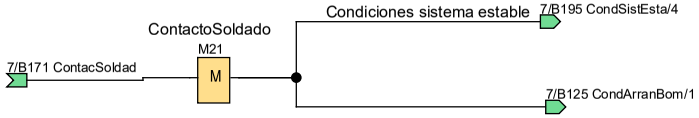


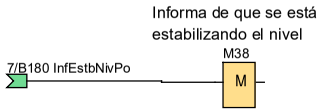
Remoto: Lectura

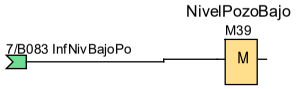
Mando estos estados al frontend simplemente para que se vea visualmente el estado del sistema.
No se usan como condiciones de activación fuera de este programa. Es decir, ni en Python ni mucho menos en JavaScript.











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Checked:			Installation:		Diagram No.:	
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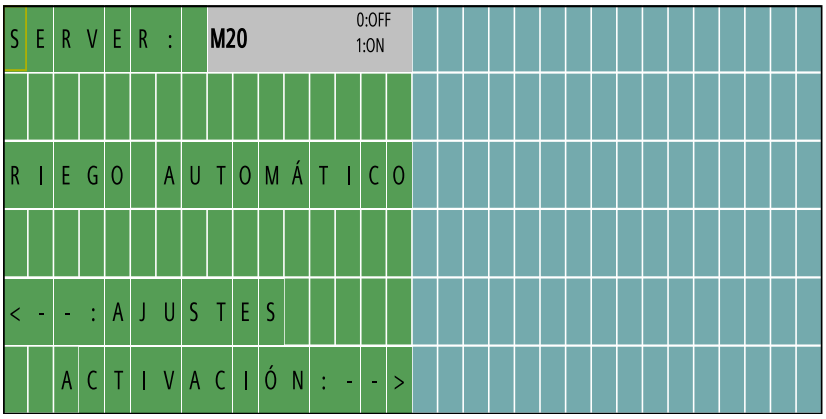
Block Number (Type)	Parameter
B001(Latching Relay) :	Rem = off
B002 TXTInicio(Message texts) :	Prio = 0 Quit = off Text1: enabled Text2: disabled

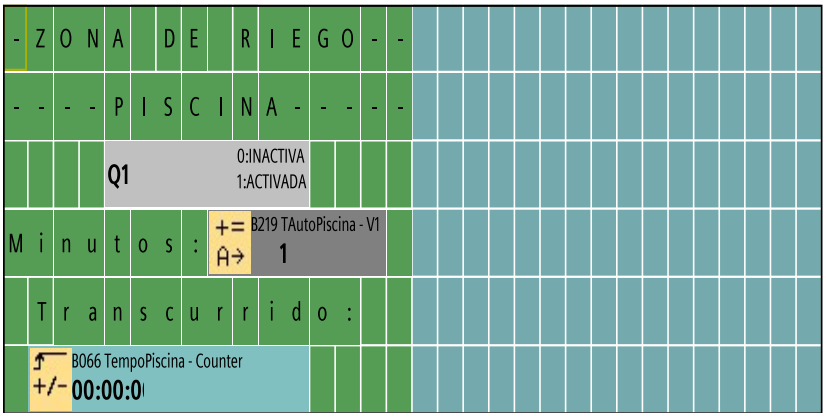


--> Ticker setting
- CBC
- Line1: N
- Line2: N
- Line3: N
- Line4: N
- Line5: N
- Line6: N

Message Destination
- Both

Line1.9 IOStatus: M20;Off="OFF";On="ON"

B003 TXTAjustAuto(Message texts) :	Prio = 1 Quit = off Text1: enabled Text2: disabled



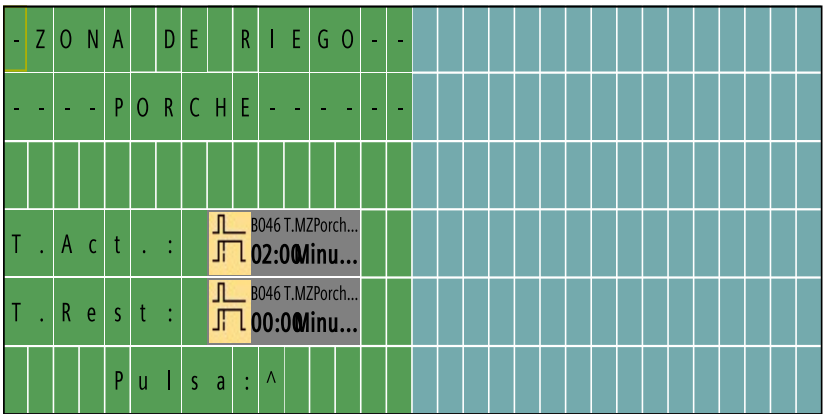
--> Ticker setting
- CBC
- Line1: N
- Line2: N
- Line3: N
- Line4: N
- Line5: N
- Line6: N

Message Destination
- Both

Line3.5 IOStatus: Q1;Off="INACTIVA";On="ACTIVADA"
Line4.9 B219 TAutoPiscina-P1
Line6.2 ScaleTime: B066 TempoPiscina-Cnt;s

B004 ResetPantIni(OR) : Cuando se escoge otra pantalla se resetea la pantalla de inicio	

Block Number (Type)	Parameter
B005 TXTActPorche(Message texts) :	Prio = 6 Quit = off Text1: enabled Text2: disabled

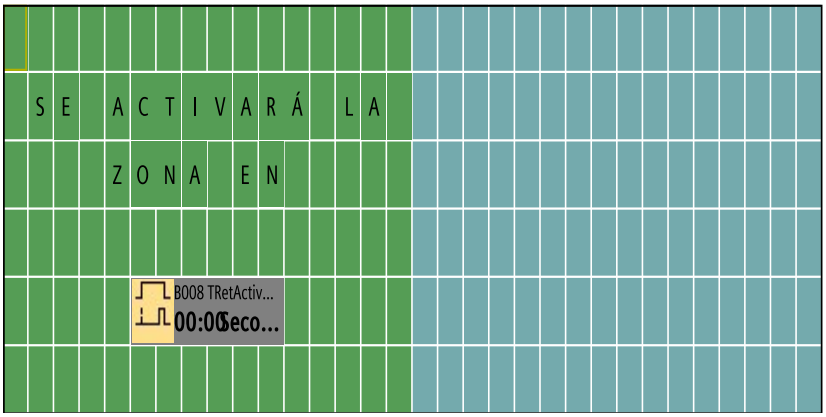


--> Ticker setting
- CBC
- Line1: N
- Line2: N
- Line3: N
- Line4: N
- Line5: N
- Line6: N

Message Destination
- Both

Line4.9 B046 T.MZPorche-T
Line5.9 B046 T.MZPorche-TRest

B006 AvisoActZona(Message texts) :	Prio = 10 Quit = off Text1: enabled Text2: disabled



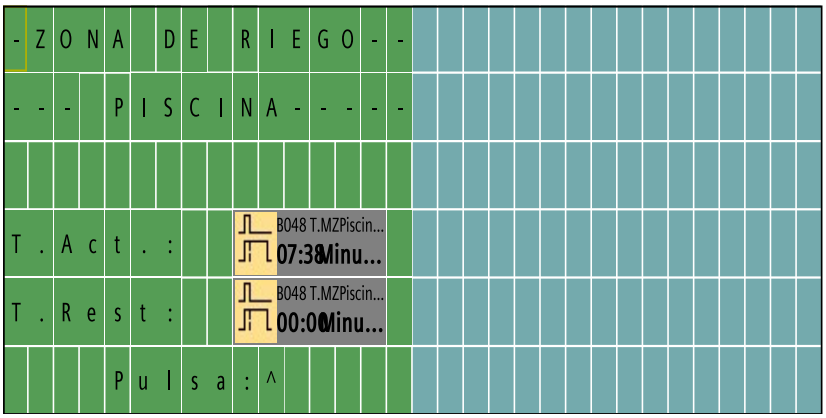
--> Ticker setting
- CBC
- Line1: N
- Line2: N
- Line3: N
- Line4: N
- Line5: N
- Line6: N

Message Destination
- Both

Line5.6 B008 TRetActivMan-TRest

B008 TRetActivMan(On-Delay) :	Rem = off 03:00s+

Block Number (Type)	Parameter
B013 TXTActPiscin(Message texts) :	Prio = 4 Quit = off Text1: enabled Text2: disabled



Line4.10 B048 T.MZPiscina-T
Line5.10 B048 T.MZPiscina-TRest

--> Ticker setting
- CBC
- Line1: N
- Line2: N
- Line3: N
- Line4: N
- Line5: N
- Line6: N

Message Destination
- Both

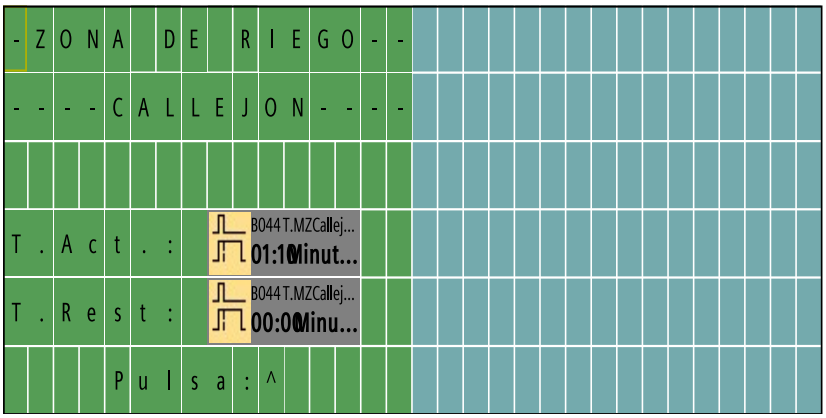
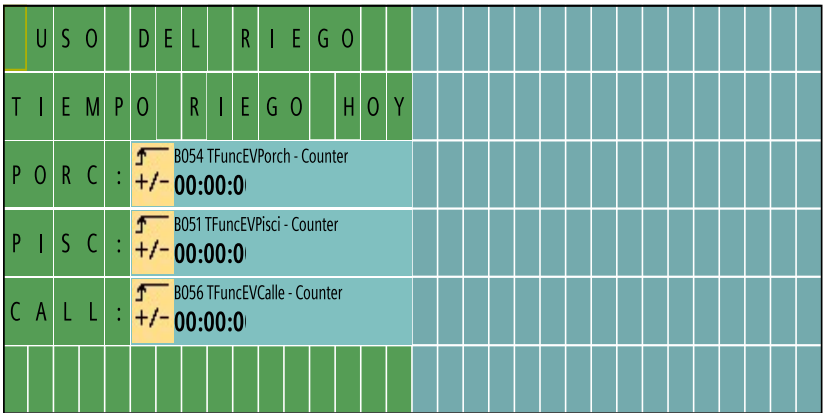
B023 NivBajoPoTXT(Message texts) :	Prio = 125 Quit = off Text1: enabled Text2: disabled

Line6.6 U012-Res

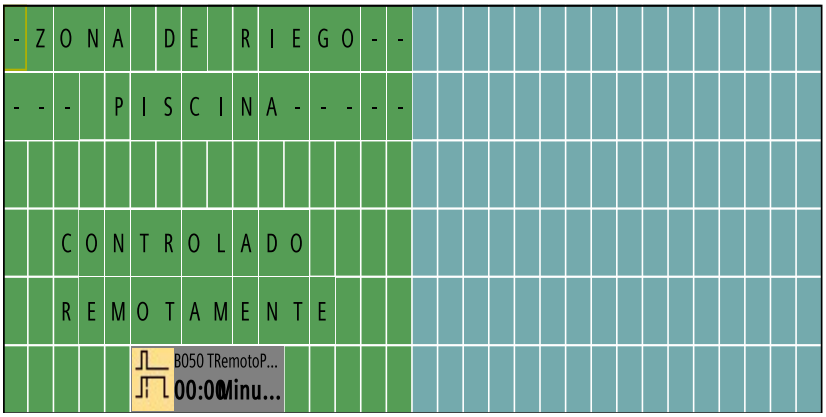
--> Ticker setting
- CBC
- Line1: N
- Line2: N
- Line3: N
- Line4: N
- Line5: N
- Line6: N

Message Destination
- Both

B025(On-Delay) :	Rem = off 05:00s+

Block Number (Type)	Parameter
B038 TXTActCallej(Message texts) :  Line4.9 B044 T.MZCallejon-T Line5.9 B044 T.MZCallejon-TRest	Prio = 8 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B042(Message texts) :  Line3.6 ScaleTime: B054 TFuncEVPorch-Cnt;s Line4.6 ScaleTime: B051 TFuncEVPisci-Cnt;s Line5.6 ScaleTime: B056 TFuncEVCalle-Cnt;s	Prio = 16 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B043 RegadoHoy(Latching Relay) :	Rem = off
B044 T.MZCallejon(Off-Delay) :	Rem = off 01:10m+
B046 T.MZPorche(Off-Delay) :	Rem = off 02:00m+
B048 T.MZPiscina(Off-Delay) :	Rem = off 07:38m+
B050 TRemotoPisci(Off-Delay) :	Rem = off 00:05m+

Block Number (Type)	Parameter
B051 TFuncEVPisci(Up/Down counter) :	Rem = on On=0+ Off=0 Start=0
B052(Asynchronous Pulse Generator) :	Rem = off 00:50s+ 00:50s
B054 TFuncEVPorch(Up/Down counter) :	Rem = on On=0+ Off=0 Start=0
B056 TFuncEVCalle(Up/Down counter) :	Rem = on On=0+ Off=0 Start=0
B059 PiscContrRem(Message texts) :	Prio = 5 Quit = off Text1: enabled Text2: disabled

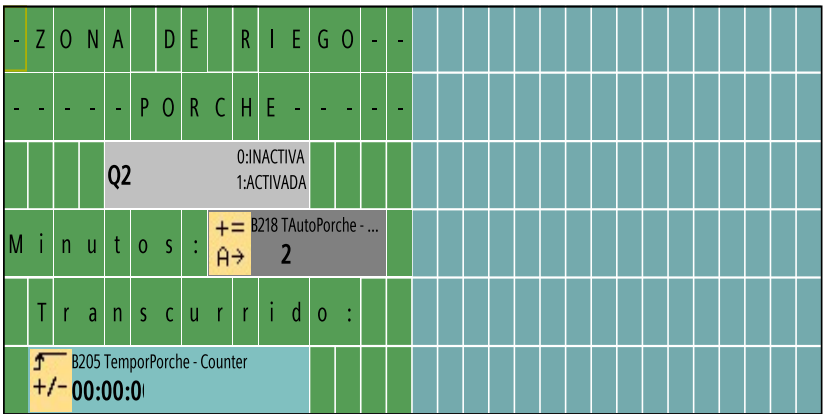


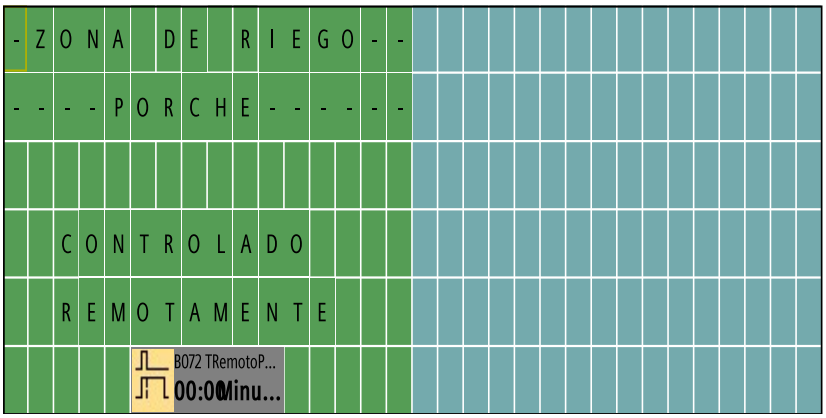
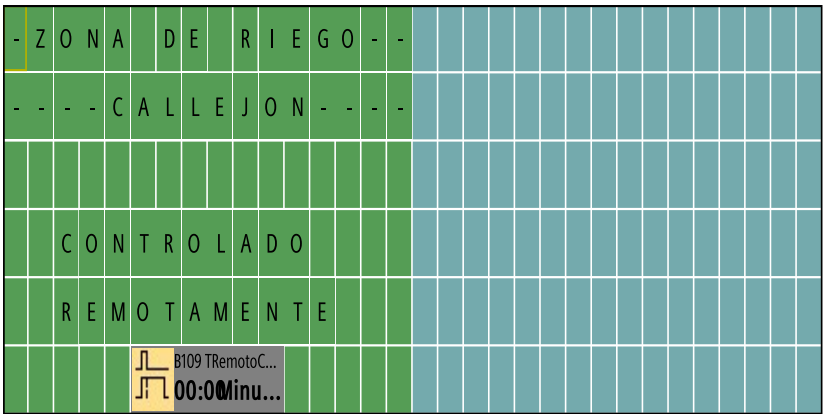
Line6.6 B050 TRemotoPisci-TRest

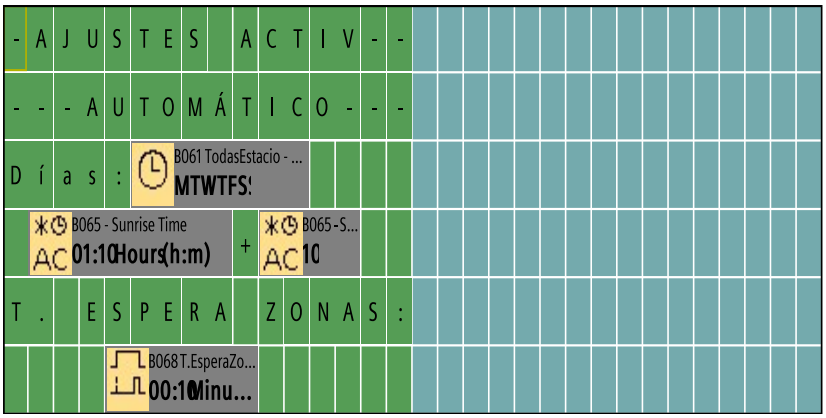
--> Ticker setting
- CBC
- Line1: N
- Line2: N
- Line3: N
- Line4: N
- Line5: N
- Line6: N

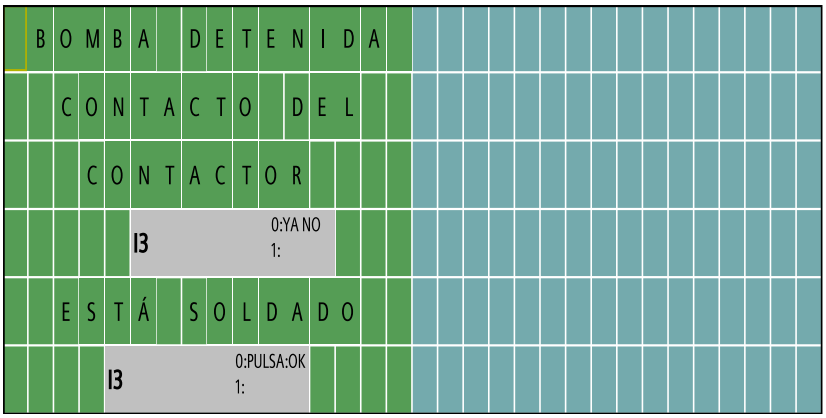
Message Destination
- Both

B061 TodasEstacio(Weekly Timer) :	+ MTWTFSS 06:00h 12:00h ------- --:-- --:-- ------- --:-- --:-- Pulse=N

Block Number (Type)	Parameter
B063(Message texts) :  Line3.5 IOStatus: Q2;Off="INACTIVA";On="ACTIVADA" Line4.9 B218 TAutoPorche-P1 Line6.2 ScaleTime: B205 TemporPorche-Cnt;s	Prio = 2 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B065(Astronomical clock) :	Lot: W8°47'11"+ Lat: N42°19'31" TZ: 1 Sunrise offset: 10 Sunset offset: -20
B066 TempoPiscina(Up/Down counter) :	Rem = off On=1+ Off=B219 Start=0
B067(Asynchronous Pulse Generator) :	Rem = off 00:50s+ 00:50s
B068 T.EsperaZona(On-Delay) :	Rem = off 00:10m+
B071 TAutoCallejo(Off-Delay) :	Rem = off 01:00m+
B072 TRemotoPorch(Off-Delay) :	Rem = off 00:42m+
B074 ContArraPisc(Up/Down counter) :	Rem = off On=1+ Off=0 Start=0

Block Number (Type)	Parameter
B089 PorcContrRem(Message texts) :  Line6.6 B072 TRemotoPorch-TRest	Prio = 7 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B093 CallejRemAct(Message texts) :  Line6.6 B109 TRemotoCalle-TRest	Prio = 9 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B108 ContArraPorc(Up/Down counter) :	Rem = off On=1+ Off=0 Start=0
B109 TRemotoCalle(Off-Delay) :	Rem = off 01:20m+
B113(Latching Relay) :	Rem = off
B114(On-Delay) :	Rem = off 05:00s+
B116 TiempoArrMax(Asynchronous Pulse Generator) :	Rem = off 00:01m+ 10:00m

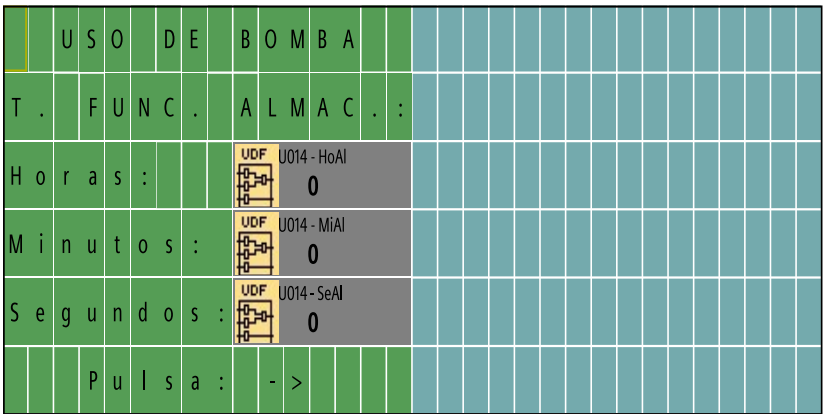
Block Number (Type)	Parameter
B117 MaxArrDiaTXT(Message texts) : Line5.7 B196 MaxArrDiario-Cnt	Prio = 126 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B120(Message texts) :  Line3.6 B061 TodasEstacio-D0 Line4.2 B065-TR Line4.11 B065-TRO Line6.5 B068 T.EsperaZona-T	Prio = 11 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B121 ContArraCall(Up/Down counter) :	Rem = off On=1+ Off=0 Start=0
B123 ResContsFunc(Weekly Timer) :	+ MTWTFSS 00:00h 00:01h ------- --:-- --:-- ------- --:-- --:-- Pulse=N

Block Number (Type)	Parameter
B124 EstabiNivTXT(Message texts) : Line5.5 U012-Res	Prio = 17 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B128 ConSoldadTXT(Message texts) :  Line4.6 IOStatus: I3;Off="YA NO";On="" Line6.5 IOStatus: I3;Off="PULSA:OK";On=""	Prio = 127 Quit = on Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B129 NMaxArranque(Up/Down counter) :	Rem = on On=5+ Off=0 Start=0

Block Number (Type)	Parameter

B153 TXTFunAlmBom(Message texts) :

Prio = 13
Quit = off
Text1: enabled
Text2: disabled



-->

Ticker setting
- CBC
- Line1: N
- Line2: N
- Line3: N
- Line4: N
- Line5: N
- Line6: N

Message Destination
- Both

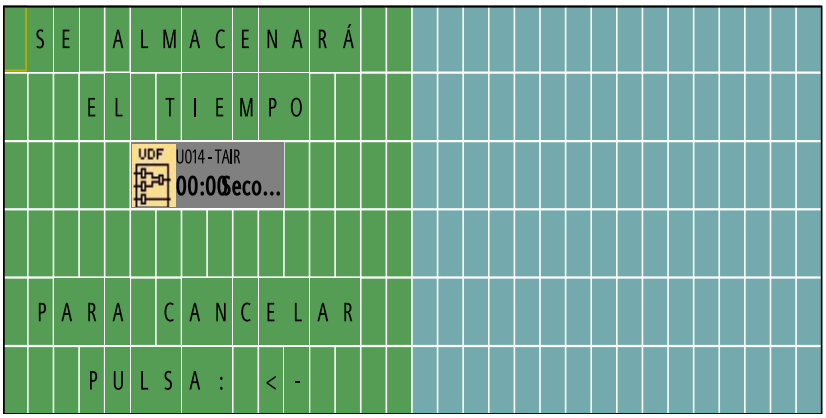
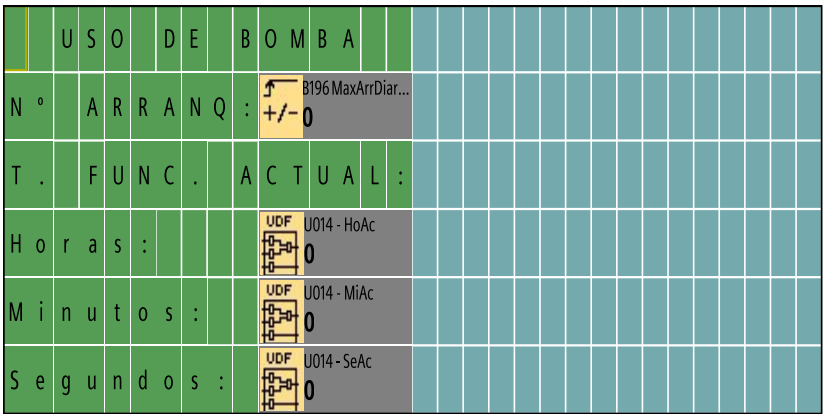
B154(Message texts) :

Prio = 14
Quit = off
Text1: enabled
Text2: disabled

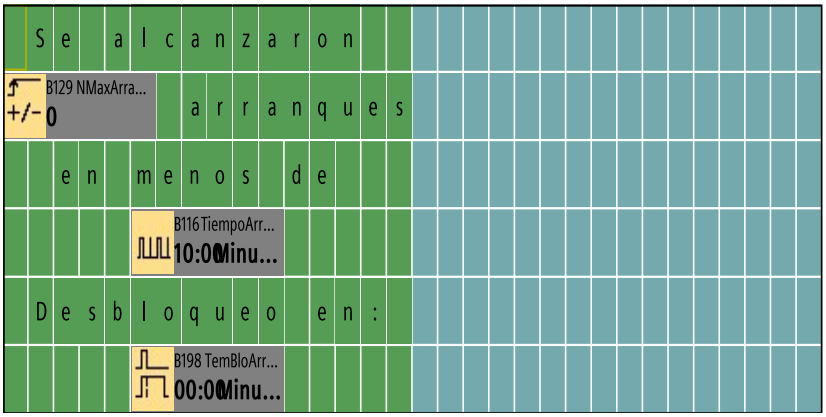
-->

Ticker setting
- CBC
- Line1: N
- Line2: N
- Line3: N
- Line4: N
- Line5: N
- Line6: N

Message Destination
- Both

Block Number (Type)	Parameter
B169 AlmcTFunBomb(Message texts) :  Line3.6 U014-TAIR	Prio = 15 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B170 TXTDatosUso(Message texts) :  Line2.11 B196 MaxArrDiario-Cnt Line4.11 U014-HoAc Line5.11 U014-MiAc Line6.11 U014-SeAc	Prio = 12 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B171 ContacSoldad(On-Delay) :	Rem = off 05:00s+
B179 NoCaldNivPoz(AND) : No queda agua en el calderín y hay agua en el pozo	
B180 InfEstbNivPo(AND) : InformaEstabilizaciónNivelPozo	
B181 ActNivBajTXT(AND) : ActivarAvisoNivelBajo	
B187(OR) : Si el servidor está apagado se activa el riego justo al amanecer. Si no, el servidor escoge cuándo es necesario regar	

Block Number (Type)	Parameter
B191 Verano(Yearly Timer) :	YY:MM.DD On=00:05.01+ Off=99:10.31 Yearly=Y Pulse=N
B193 ExtraVerano(Weekly Timer) : Temporizador extra es para el verano y sólo sirve cuando el servidor está activado. Existe porque se puede ir retrasando la activación, entonces sólo se permite dentro de ese rango por la tarde-noche. Sólo para verano porque en invierno anochece muy pronto, además si se riega tan tarde, quedaría muchas horas el césped mojado y si hace frío se podría generar hielo	+ MTWTFSS 20:00h 23:00h ------- --:-- --:-- ------- --:-- --:-- Pulse=N
B194 RiegoVerano(AND) : Riego tarde-noche verano	
B195 CondSistEsta(AND) : Sistema estable significa que la bomba se puede activar	
B196 MaxArrDiario(Up/Down counter) :	Rem = on On=35+ Off=0 Start=0
B198 TemBloArrMax(Off-Delay) :	Rem = off 05:00m+
B199 NMaxArrBoTXT(Message texts) :	Prio = 124 Quit = off Text1: enabled Text2: disabled

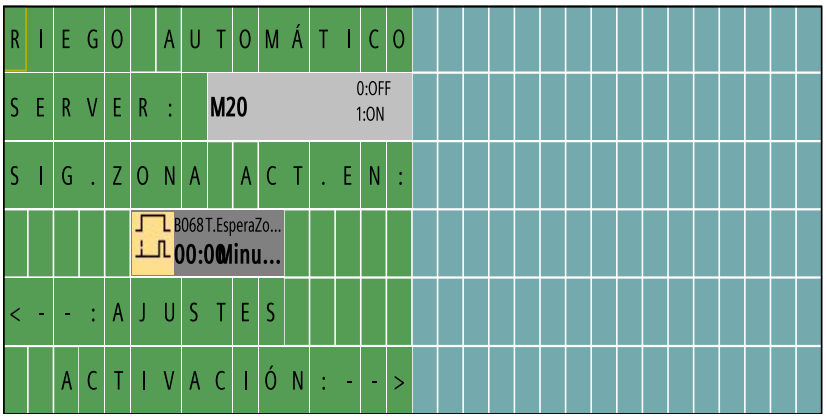


--> Ticker setting
- CBC
- Line1: N
- Line2: N
- Line3: N
- Line4: N
- Line5: N
- Line6: N

Message Destination
- Both

Line2.1 B129 NMaxArranque-Cnt
Line4.6 B116 TiempoArrMax-TL
Line6.6 B198 TemBloArrMax-TRest

B202 EsperandZona(Latching Relay) :	Rem = off

Block Number (Type)	Parameter
B203 TXTInitEspZo(Message texts) :  Line2.9 IOStatus: M20;Off="OFF";On="ON" Line4.6 B068 T.EsperaZona-TRest	Prio = 18 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both
B205 TemporPorche(Up/Down counter) :	Rem = off On=1+ Off=B218 Start=0
B213(Asynchronous Pulse Generator) :	Rem = off 00:50s+ 00:50s
B218 TAutoPorche(Mathematic instruction) :	V1=2+ V2=60 V3=0 V4=0 Point=0 ((2*60)+0)+0
B219 TAutoPiscina(Mathematic instruction) :	V1=1+ V2=60 V3=0 V4=0 Point=0 ((1*60)+0)+0
I1(Input) : ContactoPresostato	
I2(Input) : InterruptorBoya	
I3(Input) : ContactoAuxContactor	
M3(Flag) : PantallaAjustes	
M4(Flag) : PantallaActManual	
M14(Flag) : PisicinaRemoto	

Block Number (Type)	Parameter
M15(Flag) : PorcheRemoto	
M16(Flag) : CallejónRemoto	
M18(Flag) : Petición riego (hace falta regar)	
M19(Flag) : Server heartbeat	
M20(Flag) : Servidor remoto iniciado	
M21(Flag) : ContactoSoldado	
M32(Flag) : PantallaDatosUso	
M36(Flag) : SistemaEstable	
M37(Flag) : Número máximo de arranques diarios alcanzados	
M38(Flag) : Informa de que se está estabilizando el nivel	
M39(Flag) : NivelPozoBajo	
M40(Flag) : Ciclo de riego terminado	
Q4(Output) : BombaActivada	
U001 PantPiscina(User-Defined Function block) :	
U002 NavAjustAuto(User-Defined Function block) :	
U003(User-Defined Function block) :	
U004(User-Defined Function block) :	
U005(User-Defined Function block) :	
U006 PantPorche(User-Defined Function block) :	
U007 PantCallejon(User-Defined Function block) :	
U008(User-Defined Function block) :	
U010(User-Defined Function block) :	

Block Number (Type)	Parameter
U011(User-Defined Function block) :	
U012(User-Defined Function block) :	RTBo = 01:00m Res = 00:00m
U013(User-Defined Function block) :	
U014(User-Defined Function block) :	TAIR = 00:00s
U015(User-Defined Function block) :	

Connection	Label
C1▲	
C2▼	
C3◄	
C4►	
I1	
I2	
I3	
AM4	
AM5	
M3	
M4	
M5	
M6	
M7	
M8	Initialization Flag
M9	
M10	
M11	
M12	
M13	
M14	
M15	
M16	
M18	
M19	
M20	
M21	
M25	LOGO! displays white backlight
M28	LOGO! displays the amber backlight
M29	LOGO! displays red backlight
M32	
M36	
M37	
M38	
M39	

Connection	Label
M40	
M41	
Q1	
Q2	
Q3	
Q4	
X1	
X3	
X4	
X5	