PLC tags table

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SIMATIC 300(1)\CPU 314C-2 DP\S7 Program(1)\Symbols

Properties of symbol table

Symbols

Author:

Comment:

Created on 05/12/2023 11:31:49 PM Last modified on: 06/15/2023 06:16:40 PM

Last filter criterion: All Symbols Number of symbols:

Last Sorting: Symbol Ascending

Last Sorti	Sorting: Symbol Ascending			
Status	Symbol	Address	Data type	Comment
	air blower force stop	M 3.7	BOOL	
	air valve relay	M 1.2	BOOL	
	air valve relay 2	M 4.2	BOOL	
	air valve test scada	M 1.3	BOOL	
	air valve timer	T 6	TIMER	
	air valve1	Q 1.1	BOOL	hardware output
	AL2SO4 open time	T 1	TIMER	
	AL2SO4 valve	Q 0.1	BOOL	
	alarm	Q 1.4	BOOL	
	alarm on scada	M 2.3	BOOL	
	alarm on scada relay	M 4.1	BOOL	
	before wash time	T 8	TIMER	delay time before start washing
	clarifier before start t	T 20	TIMER	
	clarifier force stop t	T 18	TIMER	
	clarifier off time	T 2	TIMER	
	clarifier on time	T 3	TIMER	
	delay time before alarm	T 12	TIMER	
	enter valve 1 delay time	T 10	TIMER	
	enter valve 2 delay time	T 11	TIMER	
	enter valve filter1	Q 0.5	BOOL	
	enter valve filter2	Q 0.6	BOOL	
	factory reset scada	M 2.4	BOOL	
	factory reset timer	T 13	TIMER	
	filter tank H-L relay	M 2.6	BOOL	
	flash mixer	Q 0.2	BOOL	
	force stop AL2SO4	M 3.2	BOOL	
	force stop clarifier	M 3.6	BOOL	
	force stop flash mixer	M 3.3	BOOL	
	force stop light	M 4.4	BOOL	
	force stop raw pump	M 3.1	BOOL	
	force stop slow mixer	M 3.4	BOOL	
	force stop sludge pump	M 3.5	BOOL	
	high filter tank1	I 0.4	BOOL	
	high filter tank2	I 0.6	BOOL	
	high treat tank dist	T 4	TIMER	
	led	Q 1.5	BOOL	
	led photo sensor	I 1.4	BOOL	
	led test from scada	M 1.1		
	LEVsensor before treat	I 1.2	BOOL	
	LEVsensor flash mixer	I 1.0	BOOL	
	LEVsensor Raw tank	I 0.1	BOOL	
	LEVsensor slow mixer	I 1.1	BOOL	
	low filter tank1	I 0.3	BOOL	
	low filter tank2	I 0.5	BOOL	
	PLC OK	M 0.0		
	raw feedback t befoalarm	T 15	TIMER	
	raw pump	Q 0.0		

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waterplant\
SIMATIC 300(1)\CPU 314C-2 DP\S7 Program(1)\Symbols

Status	Symbol	Address	Data type	Comment
	raw pump feedback alarm	M 3.0	BOOL	
	raw pump force stop t	T 19	TIMER	
	raw pump run feedback	I 0.2	BOOL	
	raw stop by alarm	T 16	TIMER	
	reset alarm scada	M 2.1	BOOL	
	reset hardware alarm	M 2.2	BOOL	
	reset sludge clarifier	M 0.1	BOOL	
	restart rev wash scada	M 4.5	BOOL	
	rev wash reminder scada	MD 212	DWORD	
	reverse wash time scada	MW 150	WORD	
	reverser timer reminder	MD 210	DWORD	
	S5TI_TIM	FC 33	FC 33	S5 Time to IEC Time
	service intake	I 1.5	BOOL	
	slow mixer	Q 0.3	BOOL	
	sludge clarifier off sca	MW 50	WORD	
	sludge clarifier on sca	MW 80	WORD	
	sludge clarifier relay	M 0.2	BOOL	
	sludge H-sensor tank	I 0.7	BOOL	
	sludge L-sensor tank	I 1.3	BOOL	
	sludge motor clarifier	Q 0.4	BOOL	
	sludge pipe color scada	M 1.0	BOOL	
	sludge pump	Q 1.3	BOOL	
	sludge pump force stop t	T 17	TIMER	
	sludge pump relay	M 2.7	BOOL	
	sludge time message	M 2.0	BOOL	
	sludge valve filter1	Q 1.6	BOOL	
	sludge valve filter2	Q 1.7	BOOL	
	start system	I 0.0	BOOL	
	start system timer	T 14	TIMER	
	system run for scada	M 2.5	BOOL	
	test clarifier from scad	M 0.3	BOOL	
	test flash mixer scada	M 0.5	BOOL	
	test raw pump scada	M 0.4	BOOL	
	test slow mixer scada	M 0.6	BOOL	
	test sludge pump scada	M 0.7	BOOL	
	TIM_S5TI	FC 40	FC 40	IEC Time to S5 Time
	timer before wash proces	T 21	TIMER	
	traet pipe color	M 1.4	BOOL	
	treat 2 dist.	T 7	TIMER	
	treat1	Q 0.7	BOOL	
	treat1 dist	T 9	TIMER	
	treat2	Q 1.0	BOOL	
	wash pump force stop	M 4.0	BOOL	
	wash timer process	T 5	TIMER	
	wash water relay	M 1.5	BOOL	
	wash water relay 2	M 4.3	BOOL	
	wash water test scada	M 1.6	BOOL	
	wash water1	Q 1.2	BOOL	
	zero washing time messag	M 1.7	BOOL	

SCADA tags table

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Tags

| Device_1 | Communication | Tags Tags

Name	Display name	Connection	Data type	Length
air blower force stop		plc	Bool	0
air valve1		plc	Bool	0
AL2SO4		plc	Bool	0
alarm		plc	Bool	0
enter valve filter1		plc	Bool	0
enter valve filter2		plc	Bool	0
factory reset		plc	Bool	0
filter tank 1 full		plc	Bool	0
flash mixer		plc	Bool	0
force stop AL2SO4		plc	Bool	0
force stop clarifier		plc	Bool	0
force stop flash mixer		plc	Bool	0
force stop light		plc	Bool	0
force stop raw pump		plc	Bool	0
force stop slow mixer		plc	Bool	0
force stop sludge pump		plc	Bool	0
high filter tank1		plc	Bool	0
led		plc	Bool	0
led sensor		plc	Bool	0
led test		plc	Bool	0
LEVsensor before treat		plc	Bool	0
LEVsensor flash mixer		plc	Bool	0
LEVsensor raw tank		plc	Bool	0
LEVsensor slow mixer		plc	Bool	0
low filter tank1		plc	Bool	0
low filter tank2		plc	Bool	0
no time for sludge alarm		plc	Bool	0
no time for wash alarm		plc	Bool	0

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Name	Display name	Connection	Data type	Length
plc ok		plc	Bool	0
raw pump		plc	Bool	0
raw pump feedback alarm	1	plc	Bool	0
raw pump run feedback		plc	Bool	0
reset alarm		plc	Bool	0
reset sludge motor clarifier		plc	Bool	0
restart reverse wash		plc	Bool	0
reverse wash timer		plc	Word	2
service intake		plc	Bool	0
slow mixer		plc	Bool	0
sludge H- sensor tank		plc	Bool	0
sludge L- sensor tank		plc	Bool	0
sludge motor clarifier		plc	Bool	0
sludge motor off reminde	r	plc	Real	4
sludge motor off time		plc	Word	2
sludge motor on time		plc	Word	2
sludge motor on time reminder		plc	Real	4
sludge pipe color		plc	Bool	0
sludge pump		plc	Bool	0
sludge valve buttom filter1		plc	Bool	0
system ready		plc	Bool	0
test air blower		plc	Bool	0
test clarifier manual		plc	Bool	0
test flash mixer scada		plc	Bool	0
test raw pump		plc	Bool	0
test slow mixer scada		plc	Bool	0
test sludge pump scada		plc	Bool	0
test wash pump		plc	Bool	0
treat pipe color		plc	Bool	0
treat1		plc	Bool	0
treat2		plc	Bool	0
wash pump force stop		plc	Bool	0
wash timer reminer		plc	Real	4
wash water test		plc	Bool	0
wash water1		plc	Bool	0

□ Network 1: PLC conn. for scada

```
MO.0
"PLC OK"

MO.0
"PLC OK"

()
```



```
T13
                                          M2.5
  IO.0
            "factory
                                        "system
"start
              reset
                                        run for
                                        scada"
system"
              timer"
                                           -( )-
                                           T14
                                        "start
                                        system
                                         timer"
                                         S ODTS
                           S5T#500MS-TV
                                               BI
                                  ...⊢R
                                              BCD ⊢...
```

□ Network 3: raw pump system operation

```
T14
                            T13
                                                       T19
"start
               I0.1
                         "factory
                                          T16
                                                   "raw pump
            "LEVsensor
                                                                    Q0.0
system
                           reset
                                      "raw stop
                                                     force
timer"
            Raw tank"
                           timer"
                                      by alarm"
                                                     stop t"
                                                                 "raw pump"
               MO.4
            "test raw
             pump
             scada"
                            T19
               M3.1
                         "raw pump
             "force
                           force
            stop raw
                          stop t"
             pump"
                           S OFFDT
                                  Q
                S5T#2S-TV
                                 ві ⊢...
                               BCD - ...
                          "AL2SO4
                                         00.1
               00.0
                         open time"
                                       "AL2SO4
                                        valve"
            "raw pump"
                            S ODT
                                 Q
                S5T#2S -TV
                                BI
                    ...-|R
                               BCD
```

☐ Network 4: flash mixer network

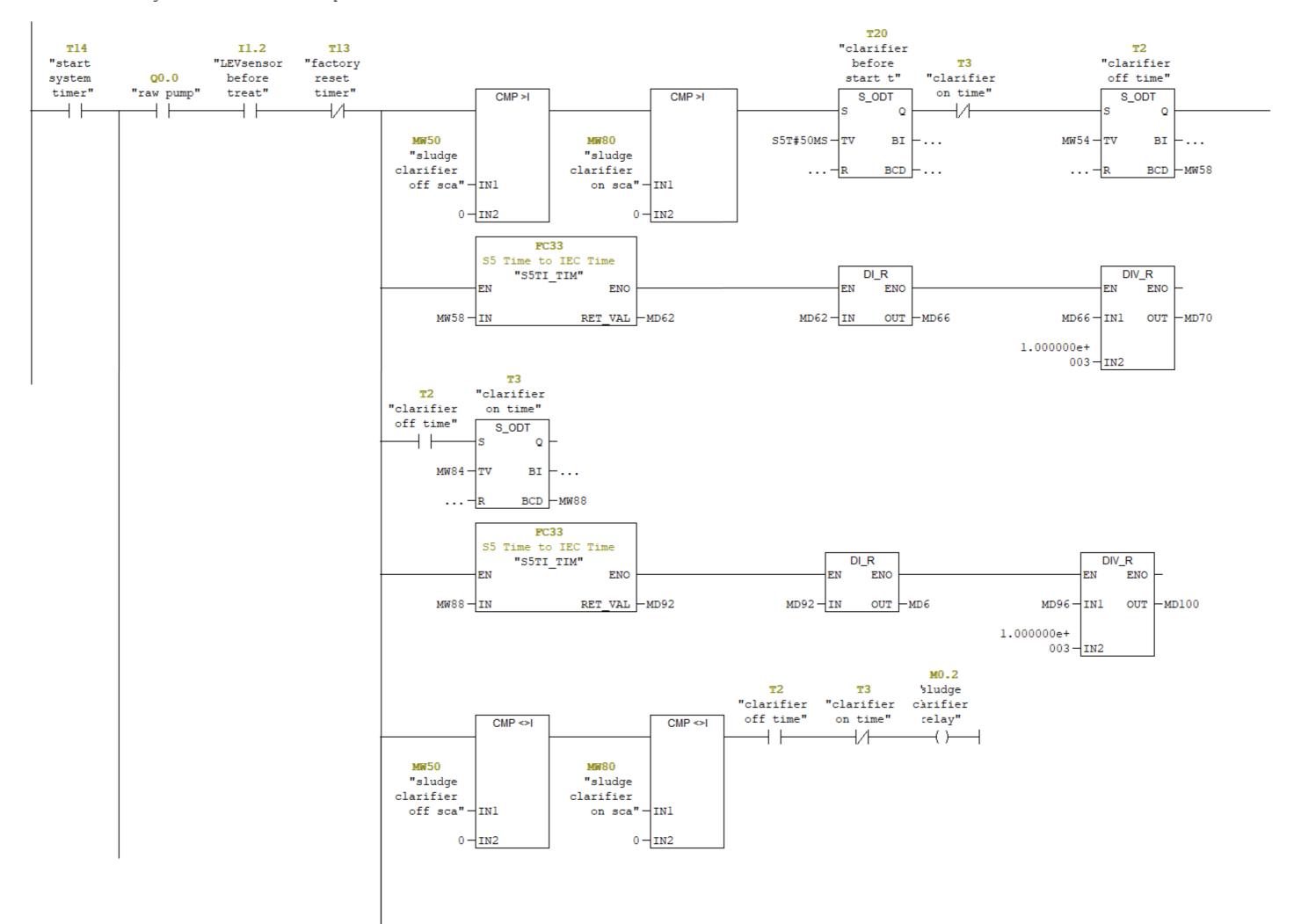
```
м3.3
  T14
                           I1.0
                                         T13
                                                    "force
"start
                        "LEVsensor
                                                                  Q0.2
                                     "factory
                                                    stop
               Q0.0
                          flash
                                                                 "flash
system
                                       reset
                                                    flash
timer"
            "raw pump"
                          mixer"
                                       timer"
                                                    mixer"
                                                                 mixer"
                                                                  —( )——|
              M0.5
             "test
             flash
             mixer
             scada"
```

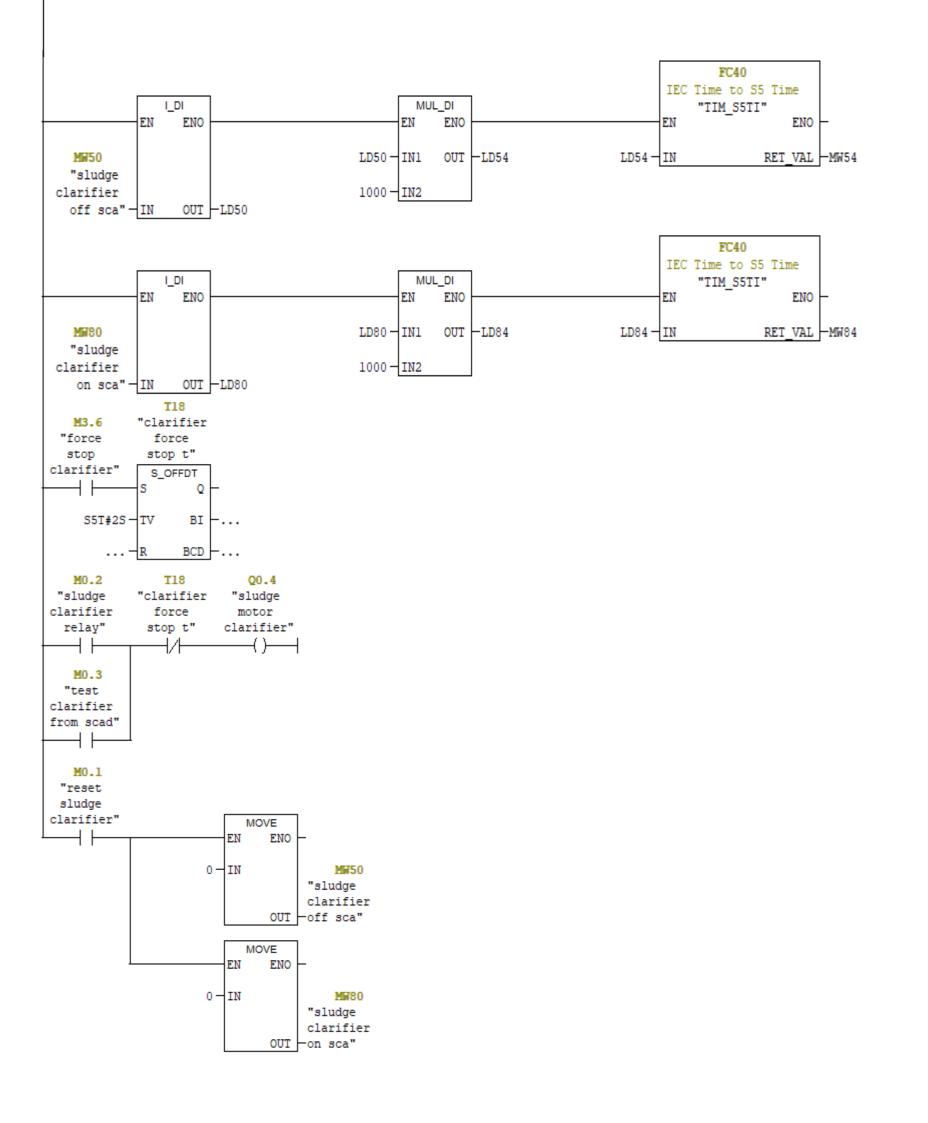
☐ Network 5: slow mixer network

```
T14
                              11.1
                                            T13
                                                         м3.4
                          "LEVsensor
"start
                                        "factory
                                                        "force
                                                                       Q0.3
               00.0
                                                                      "slow
system
                             slow
                                                      stop slow
                                          reset
timer"
             "raw pump"
                            mixer"
                                          timer"
                                                        mixer"
                                                                      mixer"
                                                                       <del>( )--</del>
               MO.6
              "test
               slow
              mixer
              scada"
```

\square Network 6: sludge pump network

```
T17
                                                      "sludge
                             I1.3
  T14
                T13
                                           IO.7
                         "sludge L-
                                       "sludge H-
                                                                      Q1.3
"start
            "factory
                                                       pump
                                                                   "sludge
system
                           sensor
              reset
                                        sensor
                                                      force
timer"
              timer"
                            tank"
                                         tank"
                                                      stop t"
                                                                     pump"
                                           Q1.3
                                        "sludge
                                         pump"
                                           +
               M0.7
              "test
             sludge
              pump
              scada"
                          "sludge
               M3.5
             "force
                            pump
              stop
                           force
             sludge
                           stop t"
                           S_OFFDT
              pump"
                 S5T#2S-TV
                                 BI
                                BCD ⊨ : : :
                    ::: =|R
                                          M1.0
               Q1.6
                                        "sludge
            "sludge
                                         pipe
             valve
                                         color
             filterl"
                                         scada"
                                          <del>_( )_</del>
               \dashv \vdash
               Q1.7
             "sludge
             valve
             filter2"
```

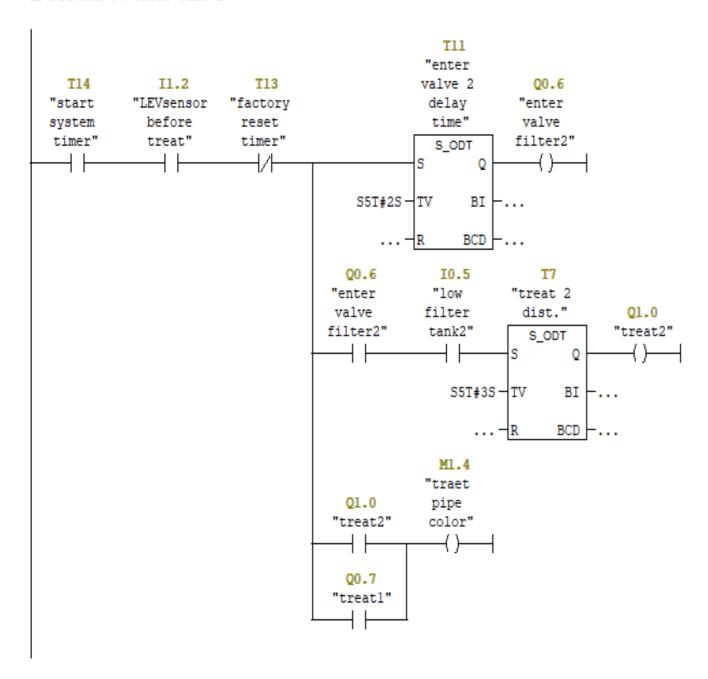




☐ Network 8: lighting system

```
I1.4
                T13
                              M4.4
  "led
              "factory
                            "force
 photo
               reset
                             stop
                                           Q1.5
                                           "led"
                            light"
 sensor"
               timer"
                             \dashv \not \vdash
   M1.1
"led test
  from
  scada"
```

☐ Network 9: treat tank 2



```
T10
                                                 "enter
 T14
              T13
                          I1.2
                                       T4
                                                valve 1
                                                               Q0.5
"start
           "factory
                       "LEVsensor
                                     "high
                                                 delay
                                                              "enter
                         before
                                     treat
                                                  time"
                                                              valve
system
            reset
timer"
            timer"
                         treat"
                                   tank dist"
                                                             filterl"
                                                  S_ODT
                                                              —()—
                                        S5T#2S TV
                                                       ΒI
                                                           -...
                                                      BCD
                                      I0.3
                                                               M2.6
                                                  IO.4
                                     "low
                                                  "high
                                                             "filter
                                     filter
                                                 filter
                                                            tank H-L
                                     tankl"
                                                 tankl"
                                                              relay"
                                                  M2.6
                                                 "filter
                                                tank H-L
                                                 relay"
                                                   T4
                                      M2.6
                                                  "high
                                    "filter
                                                 treat
                                    tank H-L
                                               tank dist"
                                     relay"
                                                  S_ODT
                                        S5T#2S TV
                                                      BI
                                                      BCD
                                      Q0.5
                                                  I0.3
                                                                T4
                                                                            T13
                                                                                         T9
                                                                         "factory
                                     "enter
                                                  "low
                                                              "high
                                                                                      "treatl
                                     valve
                                                 filter
                                                              treat
                                                                          reset
                                                                                       dist"
                                                                                                    Q0.7
                                    filterl"
                                                 tankl"
                                                            tank dist"
                                                                          timer"
                                                                                       S_ODT
                                                                                                   "treatl"
                                                                                            ΒI
                                                                             S5T#2S TV
                                                                                           BCD -...
                                                                                                                 T8
                                                                                                                delay
                                                                                                                 time
                                                                            T21
                                                                                                                before
                                                                          "timer
                                                                                                                start
                                       T4
                                                                         before
                                                                                                    M4.5
                                                                                                               washing
                                                                                                                                                    T5
                                     "high
                                                                                                                                        Q1.6
                                                                                                                                                   "wash
                                                                                                 "restart
                                                                                                               "before
                                                                          wash
                                                                                                                                      "sludge
                                                                                                                                                  timer
                                     treat
                                                                         proces"
                                                                                                 rev wash
                                                                                                             wash time"
                                                                                                                                       valve
                                                                                                                                                 process"
                                   tank dist"
                                                                                                   scada"
                                                  CMP >I
                                                                                                                S_ODT
                                                                           S_ODT
                                                                                                                                      filterl"
                                                                                                                                                   S_ODT
                                                                                                                                          MW154 TV
                                                                                                                                                       BI
                                     MW150
                                                                 S5T#1S-TV
                                                                                                      S5T#1S-TV
                                                                                                                     ві ⊢...
                                                                                BI ⊢...
                                     "reverse
                                                                                                                                                      BCD -MW200
                                                                              BCD -...
                                                                                                                    BCD -...
                                    wash time
                                                                                                                                                                                                                       M1.2
                                        scada" - IN1
                                                                                                                                                                                                                       "air
                                                                                                                                                                                                                      valve
                                             0 - IN2
                                                                                                                                                   BCD_I
N ENO
                                                                                                                                                                                                                      relay"
                                                                                                                                                                                    CMP <=I
                                                                                                                                                                                                           CMP >I
                                                                                                                                                                                                                       -()---
                                                                                                                                                 EN
                                                                                                                                          MW200 IN OUT LW226
                                                                                                                                                                          MW150
                                                                                                                                                                                                   LW226 - IN1
                                                                                                                                                                         "reverse
                                                                                                                                                                        wash time
                                                                                                                                                                                                   LW220 - IN2
                                                                                                                                                                           scada" - IN1
                                                                                                                                                                                                 T5
                                                                                                                                                                                                                       M1.5
                                                                                                                                                                                                "wash
                                                                                                                                                                                                                      "wash
                                                                                                                                                                               99 - IN2
                                                                                                                                                                                               timer
                                                                                                                                                                                                                      water
                                                                                                                                                                                               process"
                                                                                                                                                                                                                      relay"
                                                                                                                                                                                                           CMP <=I
                                                                                                                                                                                                \dashv\prime\vdash
                                                                                                                                                                                                                       -()---|
                                                                                                                                                                                                   LW226-IN1
                                                                                                                                                                                                   LW224 -IN2
```

