



Window Wash Controller

v1.1.1

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Features

3 separate time clocks for different hours on different days of the week

2 window wash outputs, incase water system not large enough to handle all windows with one spray

Low level shut-off, both open on fall (N.C.) and close on fall (N.O.) inputs

Low level alarm, both solid on and flashing

Pause of system if water system in use by other application

Stop of system, to bypass time clocks

Force on of system for testing

Cycle counter for maintenance purposes

Battery back up of real-time clock

Installation

Installation

Mount Window Wash Controller on din rail

Incoming Power

Apply 110vac power to L1 and N (upper left) or

Apply 24vac power to P1 and P2 (upper left)

Inputs

NOTE: Inputs are 110vac, use same power that goes to L1

I1 & I2 Storage Tank Low Level Switch I1 (Switch opens when low) or I2 (Switch closes when low)

NOTE: If using I2 or no low level switch a jumper MUST be between L1 & I1

I3 Does not allow Window Wash #1 & #2 to turn on. Wash timers still run.

I4 Does not allow Window Wash #1 & #2 to turn on. Wash timers are paused.

(if you do not want window wash to work when something is on)

I5 Clear Wash Cycle Counts

I6 Force Window Wash #1

I7 Force Window Wash #2

I8 System Enable, **this input must be on for system to work**

Outputs

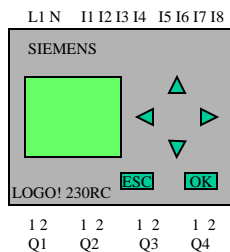
NOTE: All outputs are Normally Open Contacts 10amp Max.

Q1 is for Window Wash #1

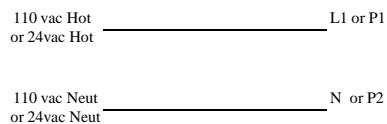
Q2 is for Window Wash #2 (when 2 valves or pumps used)

Q3 is for Tank Low Level Alarm (will close when tank is low)

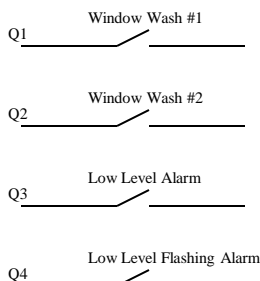
Q4 is for Tank Low Level Alarm (will flash when tank is low)



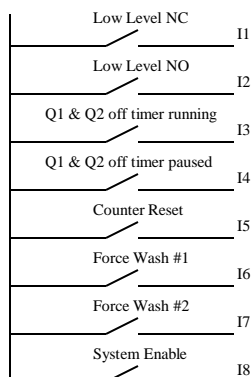
Input Wiring



Output Wiring



110vac or 24vac (use same as L1 or P1)



View Settings and Counts

During normal operation the following messages will be displayed depending on the status on the controller

Next
Window Wash
When XX:XXm
EqualsXX:XXm

#1Window
Wash On
Until XX:XXm
EqualsXX:XXm

#2Window
Wash On
Until XX:XXm
EqualsXX:XXm

To view Cycle counts, us the ▼ button to the following message
To clear counts momentarily apply power (L1) to Input I5.

Window Wash
Cycles
First XX
Second XX

To view time clock settings, us the ▼ button to the following messages
To set time clocks see programming on the following pages

Time Clock 1
Days MTWTFSS
Start XX:XX
Stop XX:XX


Time Clock 2
Days MTWTFSS
Start XX:XX
Stop XX:XX

Time Clock 3
Days MTWTFSS
Start XX:XX
Stop XX:XX


To view window wash settings, us the ▼ button to the following message
To set window wash settings see programming on the following pages

Window Wash
Every XX:XXm
First XX:XXm
SecondXX:XXm








Programming Parameters

To get to programming mode press the  button until the time and date message appear






Time
Date

When at the time and date message, Press the  button, and the following message will appear

>Stop
Set Param
Set Clock
Prg Name

To Set Clock, use the  button to Set Clock and press  button
Use the     buttons to move and set time and date, press 






Set Clock
DAY TIME
YYYY-MM-DD
XXXX-XX-XX

To Set the Time Clocks, use the  button to Set Parm and press  button
Use the   buttons to move to Schedule 1, 2 or 3 and, press 

Schedule 1
D=MTWTFSS
On =XX:XX
Off =XX:XX

Schedule 2
D=MTWTFSS
On =XX:XX
Off =XX:XX

Schedule 3
D=MTWTFSS
On =XX:XX
Off =XX:XX

Use the     buttons to move and set DAYS of week, time to turn ON and time to turn OFF. (time is in 24 hour format, 5:30 PM = 17:50) Press 

Programming Parameters

To Set how often to Cycle, use the ▼ button to Set Parm and press OK button
Use the ▼ ▲ buttons to move to HowOften and, press OK

HowOften
T =XX.XXm
Ta =XX:XXm

Use the ◀ ▶ ▼ ▲ buttons to move and set How Often to Cycle in
Minutes:Seconds, press OK

To Set How Long to Say On, use the ▼ button to Set Parm and press OK button
Use the ▼ ▲ buttons to move to Window 1 or Window 2 and, press OK

Window 1
T =XX.XXm
Ta =XX:XXm

Window 2
T =XX.XX
Ta =XX:XX

Use the ◀ ▶ ▼ ▲ buttons to move and set How Long to Stay On in
Minutes:Seconds, press OK

NOTE: When Window 1 is done, Window 2 will run then another Cycle will begin
NOTE: If a 00:00 value is set, it will skip that timer.

To Exit the Programming Mode, press ESC Until the time and date message appears

Time
Date

You can use the ▲ button to get back the count up screen or when it cycles, it
Will automatically go back to the correct screen

Warning Messages

Message	Cause	Remedy
Window Wash OFF Because I3 or I4 ON Or I8 is OFF	Input I3 or Input I4 is on (Inputs I3 & I4 allow the system to be paused if you do not window wash to work when arch is on) <i>and or</i> Input I8 is off (Input I8 allows you to disable system by opening contact)	Remove power from I3 and or I4 Apply power to I8
TANK LOW SYSTEM OFF UNTIL TANK AT MIN LEVEL	Water supply tank is low	Fill tank, Check low level switch Note: If I1 is open or I2 is closed system will show this message.
#1Window Wash On Until 00:00m EqualsXX:XXm	Message shows #1 Window or #2 Window Wash On and the Until time is at 00:00 and not counting up	Input I6 (Wash #1) or Input I7 (Wash #2) has Power going to it, forcing The Wash #1 or Wash #2 Output.
#2Window Wash On Until 00:00m EqualsXX:XXm		
>Program.. Card.. Clock.. Start	PLC in Stop Mode	Use ▼ button and move > To Start and press OK