



JEVEN UV CONTROL

Manual

Version 19-01







Jeven UV Control has three different options for start and stop of the facility, monitoring the UV lamps and control the operating time of the UV lamps.

Also the possibility to adjust the alarm limit for the ampere measurement, if for an example, install one or more UV TurboSwing afterwards.



TABLE OF CONTENTS

1. STEERING FUNCTION
1.1 Manual start and stop03
1.2 Start and stop with weekly hours
1.3 Start and stop by external signal04
2. OPERATING TIME
2.1 Read off the current operating time
3. ALARM 05
3.1 Alarm UV lamp05
3.2 Alarm Operating time
3.3 Sum alarm05
4. PROGRAMMING ALARM LIMIT
5. MODBUS COMMUNICATION
6. CONTACT 12



1. STERRING FUNCTION

1.1 Manual start and stop



Esc + ◀

1.2 Start and stop with weekly hours

To enter the program menu, press $\mathbf{\nabla}$ then Esc.

In the program, select: 1."Program", 2 "Set parameter" and 3. The submenu "TIME".



Here you have opportunity to use up to 3 different time programmings D1, D2 and D3. Example:

D1	D2
M, T, W, T, F	S, S
On1	On2
07:00	10:00
Off1	Off2
16:00	14:00



Exit the program menu by pressing Esc until, time and date appears on the screen, then press arrow \blacktriangle .

1. STEERING FUNCTION

1.3 Start and stop by external signal

Connect the control cable to input I8 on Siemens LOGO! At least 79VAC and 0,13 mA are required to start the facility. The facility is stopped when the voltage level falls abow 30 VAC and 0,06 mA.



2. OPERATING TIME

2.1 Read off the current operating time

Esc + 🕨



The UV lamps have a life span of 8.000 hours, after that they need to be replaced. The system will indicate when the operating time of 8.000 hours has been reached.



3. ALARM

3.1 Alarm UV lamp

If a UV lamp breaks, the system detects the power loss and generates an alarm. Then it need to be physically controlled in which filter house the diode that is marked UV does not light up blue. Once it is determined which UV lamp is broken, then replace it and after that the alarm can be replaced by pressing ESC $+ \blacktriangle$.



3.2 Alarm Operating time

Jeven UV-Control har inbyggd kontroll av brinntiden på UV-lampan, systemet kommer att ge ett larm när 8.000 timmar har uppnåts, vilket är livslängden på UV-lamporna. Byt samtliga UV-lampor och återställ drifttiden genom att trycka ESC + ▼



3.3 Sum alarm

It is possible to connect to a superordinate system and receive a signal when an alarms has been triggered. Connect any optional volatge, max 240VAC/VDC to the potential-free relay output Q1 (NO) on the Siemens LOGO!





PROGRAMMING ALARM LIMIT

The UV lamps are monitored by measuring the total power value of the UV lamps in the facility. If a UV lamp would break, the system detects the power change and shows the alarm on the display and triggers the potential-free relay output Q1 on the Siemens LOGO!

Due to the low power consumption of a UV lamp (0,1A), the power relay Finder 71.51 is programmed with the internal power transformer to obtain a more stable power measurement. This results in that the visual value shown on the display on Finder 71.51 is only a fictitious value.

Jeven UV Control is delivered pre-programmed and calibrated for each individual project/kitchen.

Below are instructions, if needed, to recalibrate the system:

• Start the facility and control all the filter houses that the diode indicates that the UV lamp is lit, then read on the display on Finder 71.51, what the current value of the power is.



• Take one grease collection basin down in the kitchen hood that is closest to the Jeven UV Control, then read what power value that indicates on the display on Finder 71.51, when a UV lamp has been switched off.



• The alarm limit shall have a value between a fully functioning facility and when one (1) UV lamp is disconnected, as the example above: Fully functioning 40A, one (1) UV lamp disconnected 34A. The alarm limit should then hav a value of 37A.



• To control the current alarm limit and the ability to adjust it, you need to enter the programming view on Finder 71.51. Access the programming view by holding down the "Set /Reset" and "Select" buttons simultaneously for 3 seconds.



• Window 1: Shows that we should measure the alternating electric current AC, this must not be changed! Press the "SET/RESET" button to move forward.



PROGRAMMING ALARM LIMIT continued.

- Window 2: The value of the internal power transformer is shown here.
- That value must not be changed!

Press the "SET/RESET" button to move forward.



• Window 3: Here you choose wheter you want to measure under or over power, the system should measure underpower and must not be changed! Press the "SET/RESET" button to move forward.



• Window 4: Here you can change the alarm limit for the UV current, control which level that is programmed and change if it is necessary. Use the "SET/RESET" button to move the cursor in the window, change the numbers by pressing the "SE-LECT" button until the correct number is shown on the window. As in the example abowe, we wanted 37A.

Press the "SET/RESET" button to move forward.





PROGRAMMING ALARM LIMIT continued.

• Window 5: Here shows the value for the pre-programmed hysteresis value, this must not be changed!

Press the "SET/RESET" button to move forward.



• Window 6: (t1) A program of outgoing alarms is programmed here, from the time that a power lodd is detected. Finder 71.51 is programmed with a delay of 10 seconds. This value should not be changed.

Press "SET/RESET" button to move forward.



• Window 7: (t2) A delay is programmed here when Finder 71.51 is about to start measuring the under power, the delay is programmed by 10 seconds for the power to be stable before measurement. This value should not be changed! Press the "SET/RESET" button to move forward.

finder						
	t2					
	10.0					
SET/RI	ESET SELECT					
DEF	71.51.8.230.1021					



PROGRAMMING ALARM LIMIT continued.

• Window 8: Selection of memory function, the memory function should not be used. Do not change!

Press the "SET/RESET" button to move forward.



• Window 9: The closing window, press the "SET/RESET" button to exit the programming view. If there is a need to continue again from the beginning, press the "SELECT" button.

Restart the facility and take down one grease collection basin, the system will now detect the power loss and generate an alarm.



Reassemble the grease collection basin and reset the alarm by pressing ESC + \blacktriangle .



MODBUS COMMUNICATION

Local PC	Modbus Master 192.168.0.50					
Modbus Connection	Device name: LOG IP Address 192. PORT: Assi @ C	0! 8.FS4 168. 0. 3 gned lient Server	IP Address 1 PORT: 5	92.168. 0. 50 02) Client () Server		
Data transfer	Longth	Direction	Chart Address	Leasth		Link TD
1 V T 8.0	1 bit	<	Coil ¥ 40002	1 hit	255	START (FXTERN)
2 Q ¥ 1	1 bit	>	Coil • 40001	1 bit	255	LARM UV

LOGO! Handles up to 16 connections simultaneously over the Profinet or Modbus protocols. This means that it is possible for example to connect 16 Modbus slaves under one logo, or that 16 Modbus masters communicate with the same LOGO!

Default is LOGO! Configured in slave mode.

Modbus adgress 40001 is a bool and is set "one" in the event from the UV unit to the master.

Modbus address 40002 is a bool and starts the UV unit when the master sets the address "one".

The maximum updating time for Modbus communication is 100 ms.

Default IP Address: 192.168.0.3

Netmask: 255.255.255.0



6. CONTACT

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UV TUDUU by Jeven

