

# CONTROL CENTRE FOR DUAL LINE GREASE LUBRICATION SYSTEM

CC1 MKII  
Art. No. 907479

## USER INSTRUCTIONS



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## 1. DESCRIPTION

The central control unit CC1 controls and monitors dual line grease lubrication systems.

### FUNCTIONS

- Settable pump and pause periods.
- Pressure settings, in cases where pressure transducers are used.
- All settings are password-protected.
- Optional extra lubrication.
- Optional manual operation.
- Control via the lubricated machine.
- Output for operation indicator.
- Output for alarms - issuing alarms when the set pressure has not been reached during the pump period, when there is a low level in the drum of lubricant, short circuit in the pressure transducer, at pressure acknowledgement from the wrong line or at too high rest pressure.

### DEFINITIONS

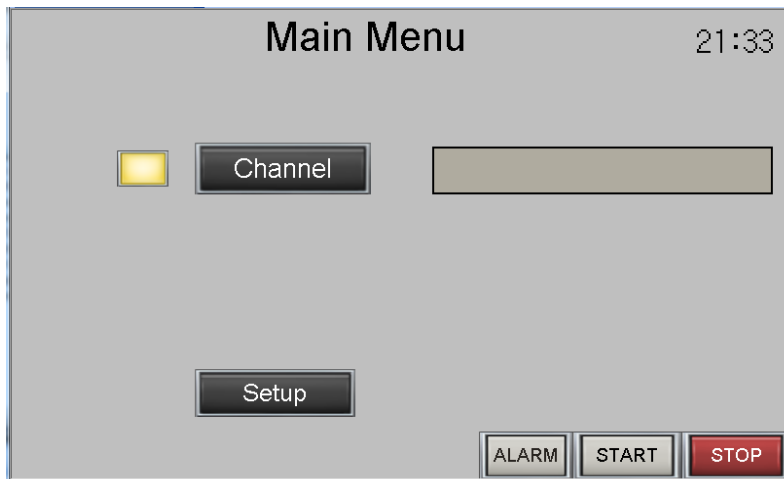
Line1, Line2	The two lines that are alternately pressurised in a 2 line lubrication system.
Pause time	Time from pump stop to pump start.
Pressure operating time	The time from pump start until its set pressure is achieved and the pump is stopped.
Extra pressure operating time	Settable extra time from pressure acknowledgement to depressurisation.
Pump time	Maximum pressure operating period before an alarm is issued.
Lubrication cycle	The time between lubrications of every individual lubrication point, i.e. two pressure operating periods and two pause periods.

## 2. DATA



Enclosure classification	IP 65
Dimension	400x400x200 (BxHxD)
Weight	12.5 kg
Power supply	100-240 VAC 1,8-0.9 A 50-60 Hz
Outputs:	Max load 80 VA resistiv load 100 W inductive load
	Alarm output Voltage-free change over contact
	Running output Voltage-free change over contact
	Voltage Built-in power source 24 V 3 A
Setting range	Pump time 1 - 9999 s
	Pause time 1 - 9999 min
	Pressure 1 - 250 bar

### 3. HANDLING

#### MAIN MENU








To get to the main menu, press  this button as available in all menus.

Start the control unit by pressing . The button becomes green () when the control unit is running.

The yellow lamp becomes green at ongoing lubrication.

#### PASSWORD

To make it impossible for any unauthorised persons to change the settings and configuration, these have been password-protected.

If the page is password protected you find an open  or closed  padlock in the lower left corner of the screen. If the padlock is closed  it is not possible to change any settings. Press the padlock  and type in the operator name and password. The padlock is then open  and it is possible to change the settings.

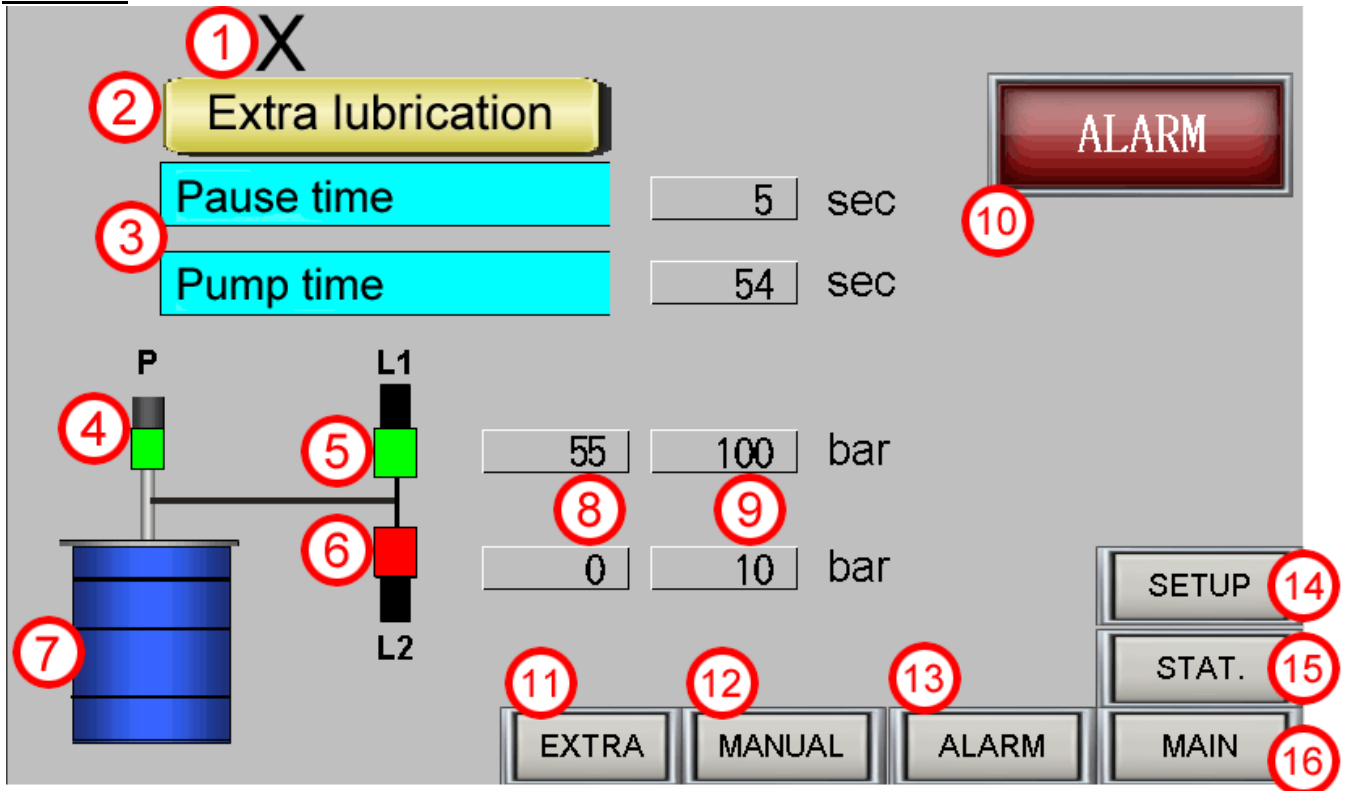
Press the padlock if you want to close it to protect the settings again.

At delivery the operator name is 1 and the password is 1234

## SUB MENUS

To reach the required sub menu press Channel or Setup

### CHANNEL



1. The name of the machine
2. Information text.  
Show if the lubrication is machine stopped, if an extra lubrication is running, or if the control unit is in manual mode. Not running is shown if the control unit is stopped.
3. Lubrication status.  
Show pump time and pause time.
4. Pump indication  
Show green when the pump is running, if not, red.
5. Line indication  
Show green when line 1 is open, if not, red.
6. Line indication  
Show green when line 2 is open, if not, red.
7. Grease indication  
Show blue when there are grease left, red at low level.
8. Pressure  
Shows the pressure in line 1 and line 2
9. Set pressure  
Shows the acknowledgement pressure and maximum rest pressure.
10. Alarm indication  
Shows that there are an active alarm.
11. Button for extra lubrication.
12. Button for manual lubrication.
13. Button for alarm list.
14. Button for settings.
15. Button for statistics.
16. Button for main menu.

## SETUP

The screenshot shows a 'Setup' window with a title bar. Below the title, there is a 'Name' label followed by a large empty text input field. Below this, there is a 'Funktion Interlock' button and a blue 'NC' button. At the bottom left, there are two small icons: a yellow padlock and a grey information icon. At the bottom right, there are three buttons labeled 'ALARM', 'RETURN', and 'MAIN'.

Set the lubricated machine's name

The function for machine stop can be changed between NO and NC contact.

## SETTINGS

The screenshot shows a 'Setup' window with a title bar. Below the title, there are seven rows of settings, each with a label, a numeric input field, and a unit: 'Pump Time' (0 sec), 'Pause Time' (0 min), 'Pressure' (0 bar), 'Extra pressuring time' (0 sec), 'Extra pause time' (0 sec), 'Extra machine stop time' (0 sec), and 'Max rest pressure' (0 bar). At the bottom left, there are two small icons: a yellow padlock and a grey information icon. At the bottom right, there are three buttons labeled 'ALARM', 'RETURN', and 'MAIN'.

Set the **pump time**, **pause time** and **pressure**.

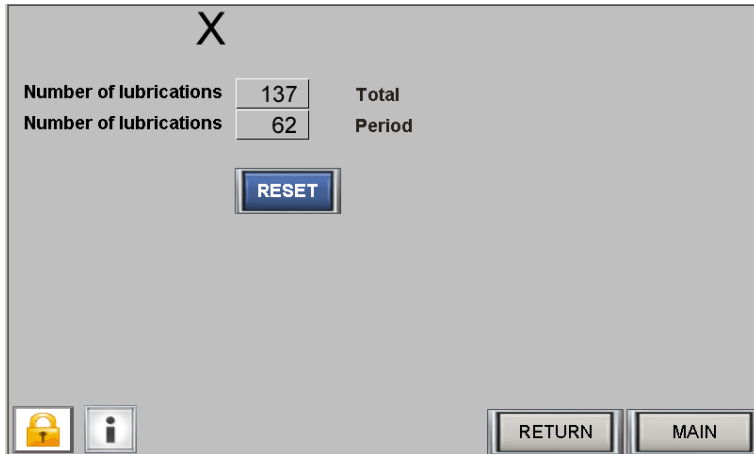
**Extra pressuring time** is the extra pressure operating period, must not be 0

**Extra pause time** is the time between pressurisations of both lines in the event of extra lubrication.

**Extra machine stop time** is the time the lubrication remains after machine stop.


**Max rest pressure** is the maximum pressure in line 2 when the lubrication of line 1 start (or the maximum pressure in line 1 when the lubrication of line 2 start.)

## STATISTICS



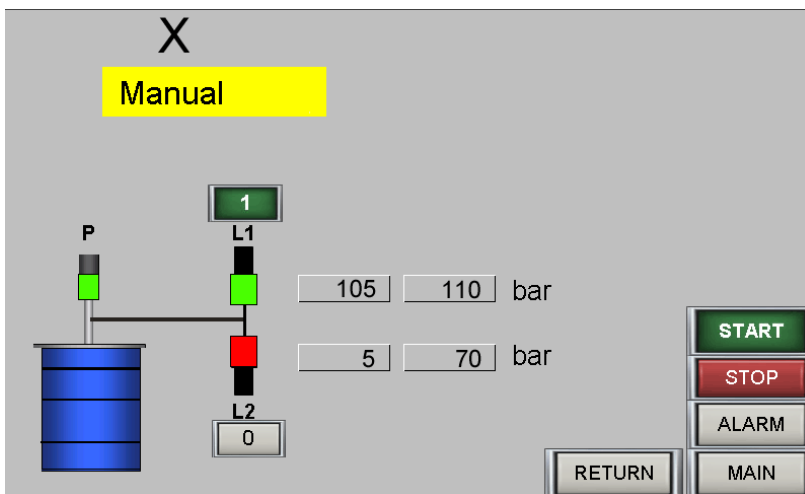
The number of lubrications are displayed on this screen.

The top row displays the total number of lubrications since the central control unit has been in operation.



The lower row shows the number of lubrications since the last zeroing. To reset the number of lubrications, press: .

## MANUAL OPERATION

Both of the lines can be pressurised manually on this screen to facilitate troubleshooting etc.




Start the manual operation by pressing  that becomes green (.

Press the button  to pressurize the line., the button changes to .

Press the button again to release the pressure.

The pump starts once a line has been pressurised. The pump stops when the set pressure has been reached and the pressure is maintained. If the pressure should drop the pump is started again.

Conclude manual operations by pressing  . \_\_\_\_\_

## ALARM



Alarm events are listed on this screen.

**Low grease level.** Show that the level is low in the drum of lubricant.

**Pump time line 1.** Show that there has been no pressure acknowledgement during the pump period


**Pressure sensor line 1.** Show abnormal pressure from line 1, indicating broken pressure sensor or short circuited cables.

**Wrong line.** Show pressure acknowledgement from wrong line, indicating that the pressure transducers wrongly connected.

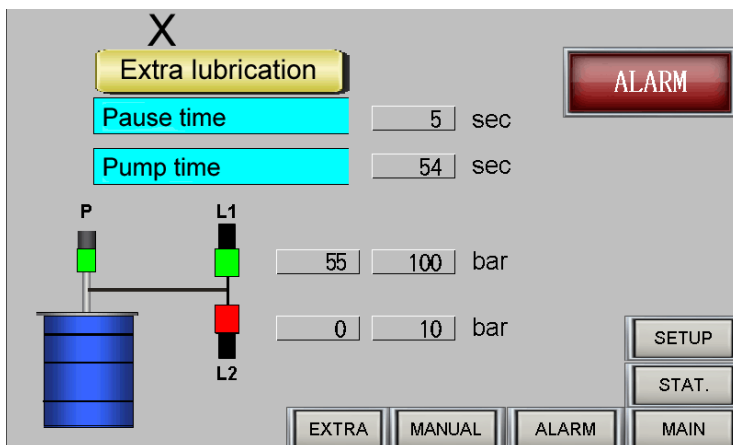
**High rest pressure line 1.** Show too high remaining pressure in line 1 when the lubrication of line 2 started.

Acknowledgement is carried out by pressing .

## ALARM HISTORY

By pressing  a screen with the alarms is shown with information when they occurred.

## EXTRA LUBRICATION



The extra lubrication is started by pressing .