

Quicklub®

***Pump Model 203 with power supply for 110-240 VAC
without and with printed circuit board V10-V13 / V20-V23***



T-P20315L-000d08

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**Keep this user information always at hand
at the place of work of the pump!**

For further information refer to:

- Technical Description Progressive Metering Devices for Grease and Oil, model SSV, SSVm and SSVD
- Technical Description for "Electronic Control Units" of pump 203:
 - Control p.c.b. 236-13857-1 - Model H
 - Control p.c.b. 236-13870-3 - Model M 08-M 15
 - Control p.c.b. 236-13870-3 - Model M 16-M 23
- External Control Unit 236-13894-1
- Installation Instructions
- Parts Catalogue
- Parts Catalogue Pump 203
- Technical Description P203 DC
- Technical Description P203 AC
- Technical Description P203 with 15 L reservoir
- Technical Description P203 with Follower Plate
- Lubricants

Introduction

Explanation of Symbols Used


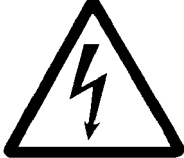

The following description standards are used in this manual:

Safety Instructions

Structure of safety instructions:

- Pictogram
- Signal word
- Danger text
 - Danger note
 - How to avoid danger

The following pictograms are used in this manual and are combined with the corresponding signal words:

		
1013A94	4273a00	6001a02
ATTENTION CAUTION WARNING	ATTENTION CAUTION WARNING	NOTE IMPORTANT

The signal words give the seriousness of danger if the following text is not observed:

ATTENTION	refers to faults or damages on machines.
CAUTION	refers to bad damages and possible injuries.
WARNING	refers to possible dangerous injuries.
NOTE	indicates improved operation of the device.
IMPORTANT	indicates special operating features of the device.

Example:



ATTENTION!

When making use of other than the tested spare parts, serious damage may affect your device.

Therefore, for the operation of your device always use original parts made by Lincoln GmbH.

Furthermore, you will find the following text symbols in this manual:

- Listing of applicable statements
 - Subpoint of applicable statements
- 1. Determination of the number or sequence of contents
- ➡ Procedural instruction

User's Responsibility

To ensure the safe operation of the unit, the user is responsible for the following:

1. The pump / system shall be operated only for the intended use (see next chapter "Safety Instructions") and its design shall neither be modified nor transformed.
2. The pump / system shall be operated only if it is in a proper functioning condition and if it is operated in accordance with the maintenance requirements.
3. The operating personnel must be familiar with this Owner Manual and the safety instructions mentioned within and observe these carefully.

The correct installation and connection of tubes and hoses, if not specified by Lincoln GmbH, is the user's responsibility. Lincoln GmbH will gladly assist you with any questions pertaining to the installation.

Environmental Protection

Waste (e.g. used oil, detergents, lubricants) must be disposed of in accordance with relevant environmental regulations.

Service

The personnel responsible for the handling of the pump / system must be suitably qualified. If required, Lincoln GmbH offers you full service in the form of advice, on-site installation assistance, training, etc. We will be pleased to inform you about our possibilities to support you purposefully. In the event of inquiries pertaining to maintenance, repairs and spare parts, we require model specific data to enable us to clearly identify the components of your pump / system. Therefore, always indicate the part, model and series number of your pump / system.

Safety Instructions

Appropriate Use

- Use the 203 pumps only for dispensing lubricants in centralized lubrication systems. The pump is designed for intermittent operation.

Misuse

Any use of the 203 pumps that is not expressly mentioned in this User Manual will be regarded as misuse. If the 203 pumps are used or operated in a different manner other than specified, any claim for warranty or liability will be null and void.



6001a02

NOTE

If personal injury or material damage occurs as a result of inappropriate operation, e.g. if the safety instructions are ignored or resulting from an incorrect installation of the 203 pumps, no claims or legal actions may be taken against Lincoln GmbH.

Exclusion of Liability

The manufacturer of the pumps 203 will not accept any liability for damages

- caused by a lack of lubricant due to an irregular refilling of the pump
- caused by the use of contaminated lubricants
- caused by the use of greases which are not or only conditionally pumpable in centralized lubrication systems (see User Manual „2.0-40001“)
- caused by chemical or biological modifications of the lubricant used
- caused by inadequate disposal of used or contaminated lubricants as well as of components that have been in touch with lubricant
- caused by unauthorized modification of the system components
- caused by the use of unapproved parts
- caused by incorrect installation, electrical connection or programming
- caused by inappropriate reaction (e. g. also ignoring) to malfunction indications
- ignoring this User Manual

Regulations for Prevention of Accidents

- To prevent accidents, observe all city, state and federal safety regulation of the country in which the product will be used.

Avoid the operation with

- unapproved parts.
- insufficient or contaminated lubricants.

General Safety Instructions

- Lincoln Quicklub centralized lubrication systems
 - are designed state-of-the-art.
 - can be assembled for safe operation
- Incorrect use may result in bearing damage caused by poor or over-lubrication.
- Unauthorized modifications or changes to an installed system are not admissible. Any modification must be subject to prior consultation with the manufacturer of the lubrication system.

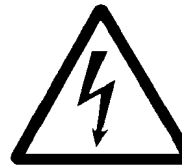
Operation, Maintenance and Repair



1013A94

ATTENTION!

Risk of bursting if the reservoir is over-filled! When filling the reservoir by means of pumps with a large delivery volume do not exceed the max. filling mark.



4273a00

WARNING!

Before maintenance or repair of pumps switch off their power supply.



1013A94

CAUTION!

It is not allowed to use the pump in potentially explosive fields.



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CAUTION!

Danger of squeezing in case of pumps to be filled from the reservoir top: Never put your hand into the open reservoir while pump is running!



1013A94

ATTENTION!

After the fault message * EE * the following programming may result in *poor lubrication*:

- Pause time (P1 & P2) < 6 hours
- Number of lube times (P3) > 1 / cycle

Safety Instructions, continuation



4273a00

VORSICHT!

The pump may be installed only by qualified personnel. The connection (N/L/PE) of the supply voltage must be made according to VDE 0100 and VDE 0160. Install a protective and lock out device for isolating and disconnecting the pump. **Before beginning the installation work, disconnect the electrical supply.**



4273a00

WARNING!

Failure to observe the safety instructions, e. g. touching electrically charged parts when the pump is opened, or improper handling of the pump may cause serious injury or **death**. If the values specified in the Technical Data are exceeded, the device may overheat. It may damage the pump and thus impair the electric safety.

Operation with bayonet plug



4273a00

CAUTION!

If the protective-conductor terminal is not connected or interrupted, dangerous touch voltages may occur on the equipment!

Protective measures to be applied for appropriate operation with bayonet plugs:

"Functional extra-low voltage with safe isolation" /
"Protective Extra-Low Voltage" (PELV)

Standards:

EN60204 Part1:1992 / IEC 204-1:1992, modified

DIN VDE 0100 Part 410 / IEC 364-4-41:1992

Repair

Repairs should only be performed by authorized personnel who are familiar with the repair instructions.

Disposal

Dispose of used or contaminated lubricants as well as of parts that were in touch with lubricant according to the legal regulations pertaining to environmental protection. Make sure to observe the safety data sheets of the lubricants used.

Installation

- Any safety equipment already fitted to the machine:
 - should not be modified or made ineffective;
 - should only be removed for the purpose of fitting the system;
 - must be reinstalled after fitting the system.
- Keep Quicklub centralized lubrication systems away from sources of heat. Adhere to the operating temperature.
- Use only original Lincoln spare parts (see Parts Catalog) or parts approved by Lincoln.
- Adhere to:
 - the installation instructions of the machine manufacturer as regards all drilling and welding procedures.
 - the specified minimum distances between the boreholes and the upper/lower rim of the frame or between two boreholes.



6001a02

IMPORTANT

- Route supply lines professionally.
- Firmly bolt together pressurized components.
- Consider the torsion torques.



4273a00

ATTENTION!

Control p.c.b. and motor always work with 24 VDC even if the pump is connected to alternating current.

Consider residual ripple of max. $\pm 5\%$ when connecting motor and control p.c.b. (in relation to the operating voltage acc. to DIN 41755).

Description

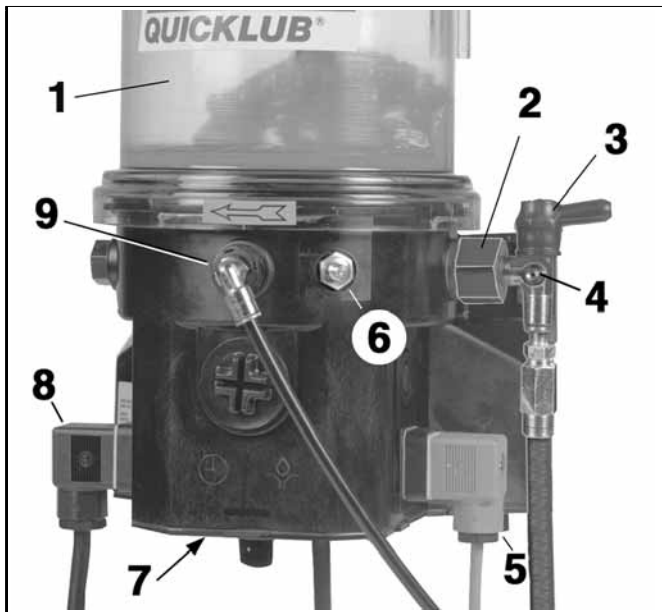


Fig. 1-1 Komponenten der Pumpe (Bsp. mit 2-Liter-Behälter)

00002618b

- | | |
|---|----------------------------|
| 1 - Reservoir | 5 - Connecting plug 2A1 |
| 2 - Pump element | 6 - Filling nipple, pump |
| 3 - Pressure relief valve | 7 - Control p.c.b. |
| 4 - Filling nipple, system emergency lubrication possible | 8 - Connecting plug 1A1 |
| | 9 - Return line connection |

The Quicklub 203 central lubrication pump

- is a compact multiline pump consisting of the following components:
 - Housing with integrated motor
 - Reservoir with stirring paddle
 - Pump element with pressure relief valve
 - Filling nipple
 - Electrical connection parts
- can be mounted right from the beginning or as a retrofit kit.
- can drive up to 3 pump elements.
- operates according to operating cycles (pause and lubricating times).
- can be equipped with a low-level control.
- can supply up to 100 lubrication points depending on the line lengths.
- is designed for the automatic lubrication of the connected lubrication points.
- is designed for the delivery of greases up to NLGI 2 at temperatures from - 25° C to 70° C or of mineral oils of at least 40 mm²/s (cST).
- can be used at low temperatures down to - 40 °C (depending on the used grease).

During the lubricating time the pump dispenses lubricant to the connected lubrication points via one or several metering devices.

Low-Level Control (optional)

- **Pump 203** can be equipped with a low-level control for the supply of oil or grease.
- The following versions are available:
 - Low-level control in conjunction with printed circuit board M08-M23¹⁾, V10-V13¹⁾ or H¹⁾
 - Low-level control for pumps **without printed circuit board**
- When the reservoir is empty, the signal lamp flashes, thus indicating the low level (see User Manual of the corresponding control p.c.b.).

¹⁾ The designation indicates the version of the printed circuit board. It is part of the pump type designation code mentioned on the nameplate of each pump, e. g. P203-2XN-1K6-24-1A1.10-M08, V12, H or ...

Commissioning

Depending on its application, the pump is ready to operate, either:

- as soon as the machine contact is switched on (after the voltage supply is applied)



T-P2038L-011a08

Fig. 1-2 P203 with 8 litre reservoir

Mode of Operation

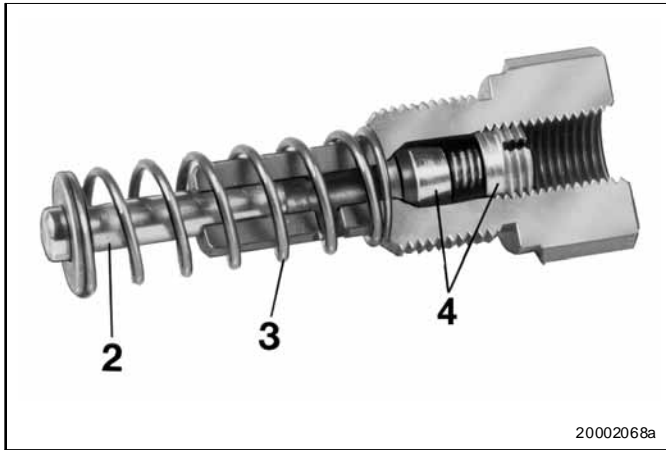


Fig. 2-1 Pump element

- 2 - Piston
3 - Return spring
4 - Check valve

Pump elements with fixed lubricant output

- The electric motor drives the eccentric 1 (fig. 2-2 and 2-3).
- During the lubricating time:
 - piston 2 sucks in lubricant from the reservoir (fig. 2-2).
 - piston 2 dispenses the lubricant to the connected lubrication points via the metering device (fig. 2-3).
- The following designs are available:
 - Piston diameter, K5 5 mm
Lubricant output approx. 2 cm³/min
 - Piston diameter K6 (standard) 6 mm
Lubricant output approx. 2.8 cm³/min
 - Piston diameter, S7 ¹⁾, K7 7 mm
Lubricant output approx. 4 cm³/min
 - Piston diameter, B7 7 mm
Lubricant output approx. 2 cm³/min

¹⁾ suitable for lubricants containing silicone

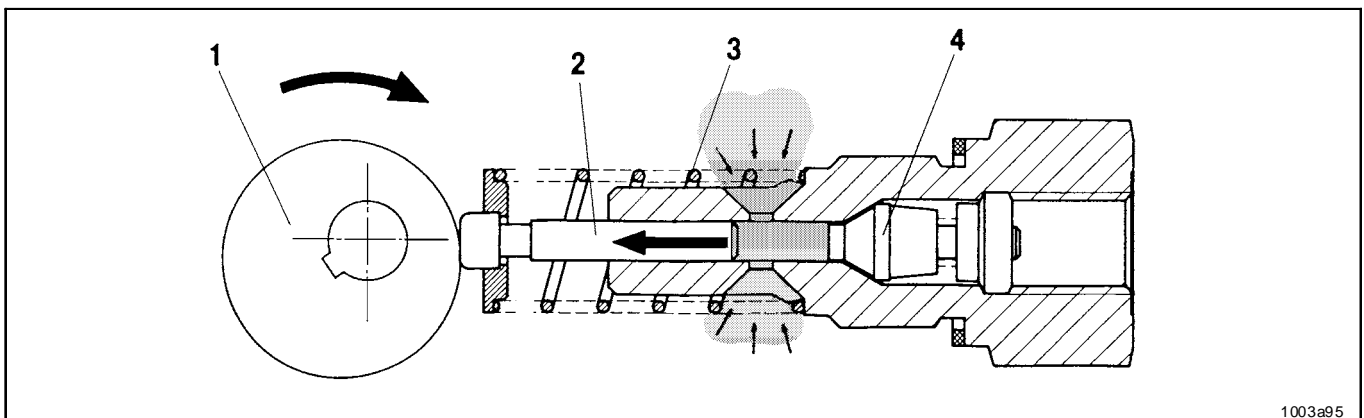


Fig. 2-2 The pump element sucks in lubricant

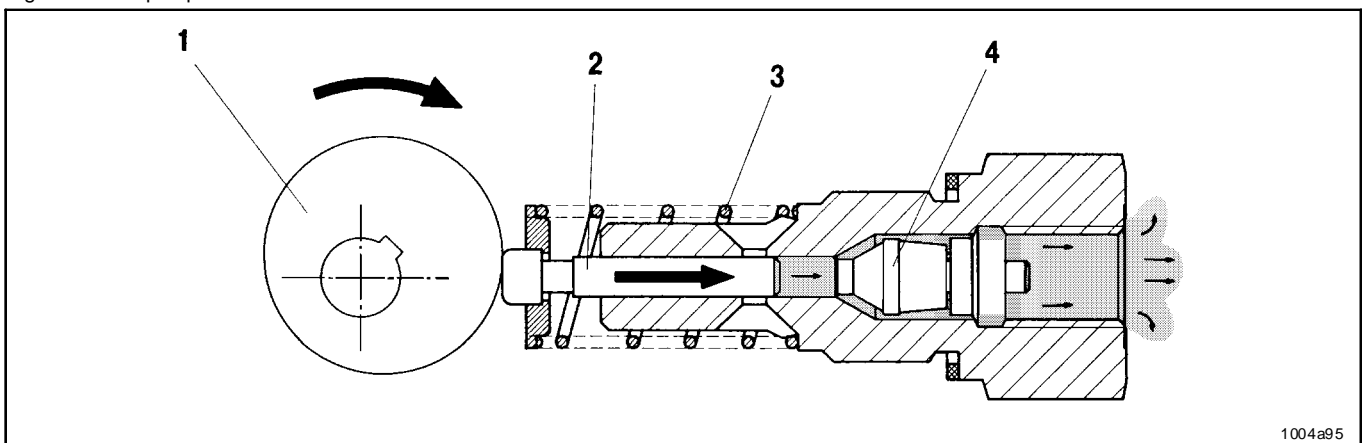


Fig. 2-3 The pump element dispenses lubricant

- 1 - Eccentric
2 - Piston
3 - Spring
4 - Check valve

Mode of Operation, continuation

Pump elements with fixed lubricant output, continuation

Pump element B7 with bypass check valve



Fig. 2-4 Pump element B7

- Pump element B7 suits especially applications in contaminated environments as the supplied lubricant is passing through a bypass bore 2 (fig. 2-5) on the check valve 1.
- The output is 2 cm³/min.

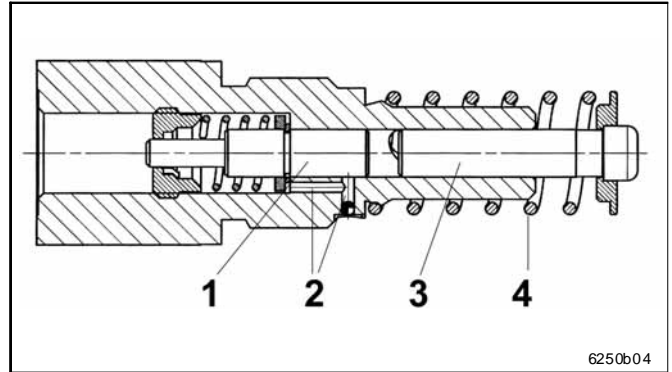


Fig. 2-5 Sectional diagram - pump element B7

- 1 - Check valve
- 2 - Bypass
- 3 - Pump piston
- 4 - Return spring

Check valve

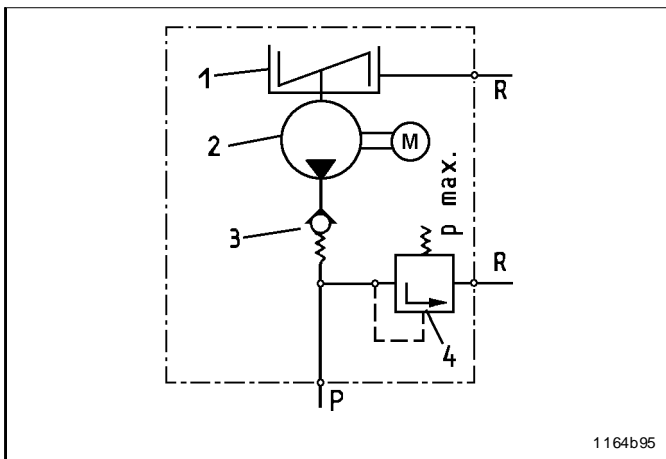


Fig. 3-1 Hydraulic diagram of the pump

- 1 - Reservoir with stirring paddle
- 2 - Pump
- 3 - Check valve, spring-loaded
- 4 - Pressure relief valve
- R - Return line
- P - Pressure line

- The check valve:
 - closes the pressure line during suction stroke.
 - prevents the lubricant from flowing back to the housing or reservoir.

Arrangement of the pump elements

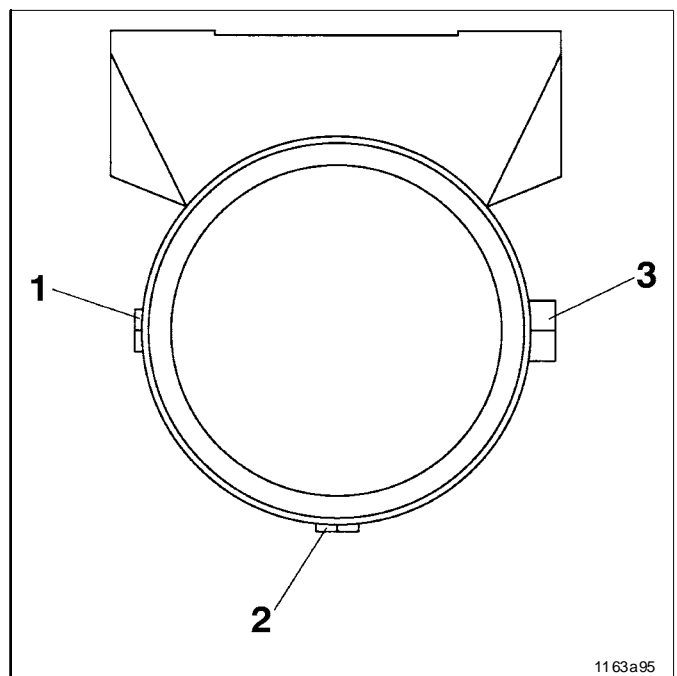


Fig. 3-2 Arrangement of the pump elements

- If several pump elements are to be installed, the installation arrangement shown in fig. 3-2 must be adhered to.
- If there is only one pump element, it can be installed in any position. Standard position is no. 3.
- If there are two elements, install one in position 3 and the other in position 1.

Mode of Operation, continuation

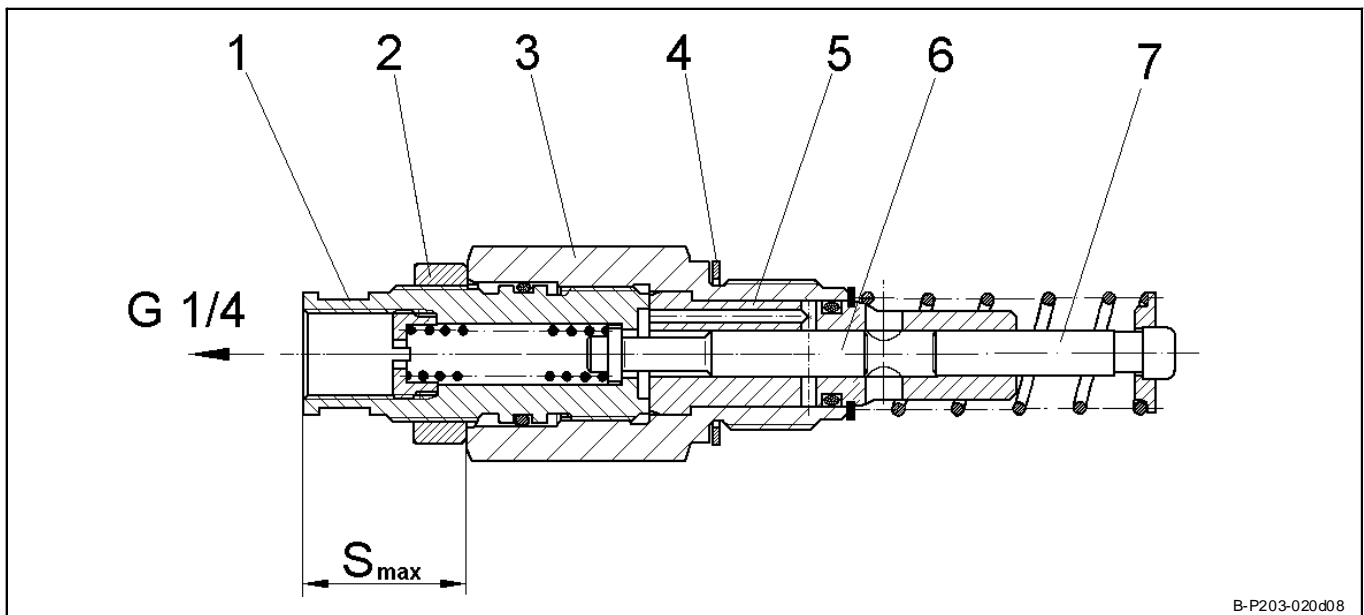
Pump element with adjustable lubricant output



Fig. 4-1 Adjustable pump element

- The mode of operation (suction and supply phase) is the same as that of the pump elements with an invariable lubricant output.
- The lubricant outputs are adjustable from 0.04 to 0.18 m³/stroke, or 0.7 to 3 cm³/min.
- The pump elements are factory-adjusted to the maximum lubricant output; the adjusting dimensions "S" should be 29 ± 0.1 mm (see fig. 4-2).

Adjustment of the lubricant output



B-P203-020 d08

Fig. 4-2 Sectional view: adjustable element

- 1 - Adjusting spindle SW 16 (width over flats)
2 - counternut SW 24
3 - pump element body SW 27
4 - gasket
5 - pump cylinder
6 - control piston
7 - delivery piston
 S_{max} - max. adjusting measure of the adjusting spindle

Determine deviation for maximum adjusting measure " S_{max} ":

- Loosen counternut 2 (fig. 4-2).
- Unscrew adjusting spindle 1 out of pump element body 3.
- Screw counternut 2 completely onto the adjusting spindle 1.
- Determine and note down maximum adjusting measure " S_{max} ".
Deviation = $S_{max} - 29$ mm



6001a02

IMPORTANT

Before adjusting the output volume exactly, determine the maximum adjusting measure " S_{max} ".



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IMPORTANT

The determined deviation must be considered for each adjusting measure:

max. adj. measure " S_{max} ", e.g. 29.5 mm
- deviation + 0.5 mm
required output volume, e.g. 0.14 cm³/stroke
- adjusting measure "S" (fig. 4-3) 28 mm

$$S_{0,14} = S + \text{deviation}$$

$$\text{Adj. measure "S}_{0,14}\text{" } 28 + 0,5 = 28,5 \text{ mm}$$

Mode of Operation, continuation

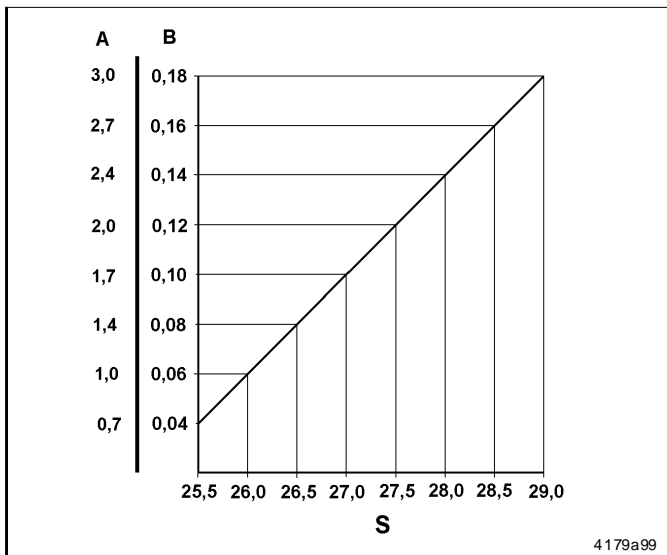


Fig. 4-3 Lubrication output diagram

- A - Lubrication output cm³/min
B - Lubrication output cm³/min
S - Adjusting measure in mm (without deviation)

Adjustment of the lubrication output:

- Remove pressure relief valve from pump element KR.
- Determine adjusting measure S (including deviation) for the required output volume by means of the output diagram (fig. 4-3).
- Loosen counter nut 3 (fig. 4-2) while holding in position pump element body 2.
- Adapt adjusting measure S at the adjusting spindle 1.
 - Increase "S" increase output
 - Reduce "S" reduce output
- Fix pump element body 3 and secure position of adjusting spindle with counter nut 2.

Pressure Relief Valve

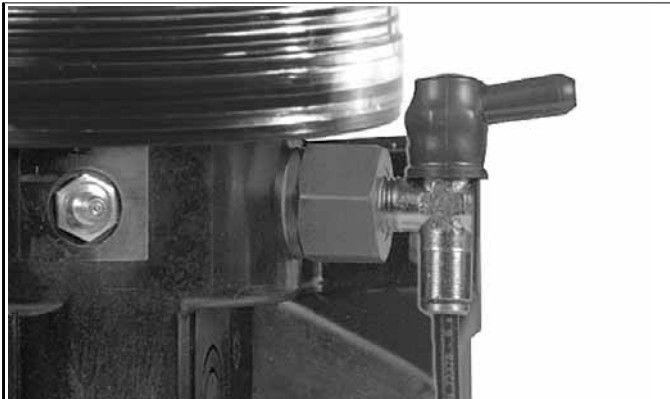


Fig. 5-1 Pressure Relief Valve

B-P203M-020c08

without grease return



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IMPORTANT

*Each pump element must be secured with a pressure relief valve.
The pressure relief valve is not contained in the scope of supply of the pump 203.*

- The pressure relief valve
 - limits the pressure build-up in the system.
 - opens, if the specific overpressure is reached.
 - is to be selected according to the requirements to the lubrication plant (see different opening pressures; 200, 270, 350 bar).
- If lubricant is leaking at the pressure relief valve, this indicates that the system is malfunctioning.
- Despite existing fault monitoring devices a regular visual and function control must be carried out on the lubrication system.

... with grease return (optional)

- If the system is blocked, grease will leak from the pressure relief valve. This grease quantity is returned to the reservoir via the return line connection (fig. 6-1).
- In the case of a blockage in the system, the grease pushes out the red pin (arrow, fig. 5-2) at the pressure relief valve, thus indicating that there is a fault.
- Afterwards the fault has been removed the pin has to be pressed back to its starting position.



Fig. 5-2 Pressure relief valve with grease return

T-P203Fp-020d08
B-P603M-030e08

Mode of Operation, continuation

Return Line Connection



Fig. 6-1 Return Line Connection

T-P203Fp-020e08

- The lubricant quantities which cannot be dispensed by the metering device must be returned to the pump via the return line connection.

Low Level Control

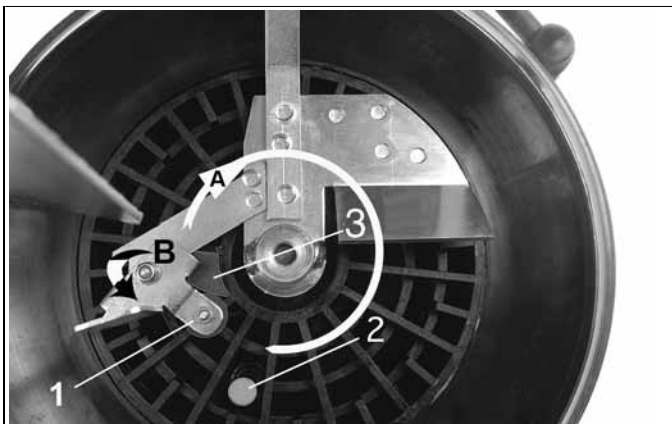


Fig. 8-1 Switching parts of the low-level control (reservoir filled)

B-P203M-030a08

- | | |
|---------------------------------------|---|
| 1 - Guiding plate with round solenoid | A - Inner orbit of the round solenoid |
| 2 - Electromagnetic switch | B - Position of the guiding plate (entered) |
| 3 - Control cam | |

Reservoir filled

- The stirring paddle rotates **clockwise** during the lubricating time.
- The entry of the stirring paddle B (fig. 8-1) into the lubricant presses the pivoted guiding plate with the round solenoid 1 inwards to orbit A.
- The solenoid switch 2 **cannot** be activated contact-free.
- Control cam 3 guides the round solenoid with the pivoting guiding plate automatically outwards, in the direction of the reservoir wall. When leaving the control cam, the lubricant presses against the guiding plate and moves the solenoid inwards again (B).



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NOTE

The switch parts of the low-level control (items 1 to 3) cannot be used with fluid greases.

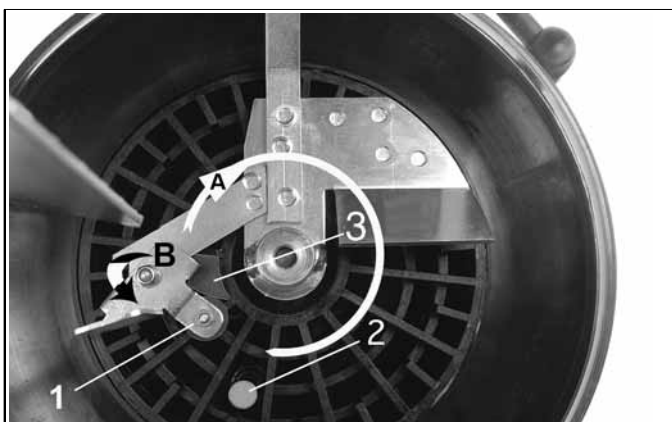


Fig. 8-2 Switching parts of the low-level control (reservoir empty)

B-P203M-030b08

- | | |
|---------------------------------------|---|
| 1 - Guiding plate with round solenoid | C - Outside orbit of the round solenoid |
| 2 - Electromagnetic switch | B - Position of the guiding plate (unentered) |
| 3 - Control cam | |

When the reservoir is empty



6001a02

NOTE

*The flashing signal *LL* starts as soon as the solenoid has activated the solenoid switch six times contact-free.*

- When passing the control cam 3 (fig. 8-2) the solenoid remains in the outer orbit C and thereby passes the solenoid switch 2. The solenoid activates the solenoid switch contact-free and so initiates a low-level indication.
- When the stirring paddle rotates on the outer orbit C there is no counterpressure by lubricant.
- The guiding plate with the round solenoid 1 remains unentered (D).

Mode of Operation, continuation

for grease: Electromagnetic switch

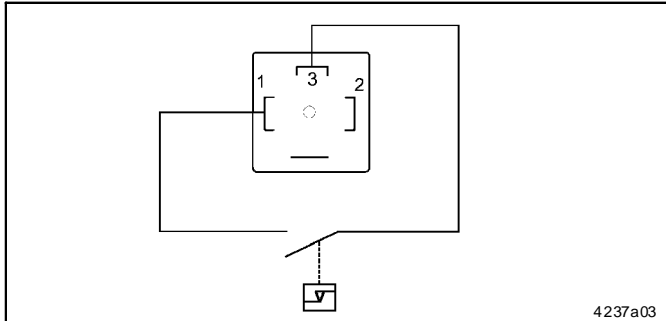


Fig. 8-3 Connection diagram without control unit, low-level control for grease

- The electromagnetic switch is activated free of wear and free of contact by means of the magnetic field of the solenoids on stirring paddle.

Technical data

Maximum switching capacity	60VA
Maximum switching voltage	230 V
Current switched	3 A



6001a02

NOTE

The life of the float magnetic / magnetic circuit breaker strongly depends on the conditions under which it is loaded. Since the data relative to the maximum switching capacity refer to strictly resistive loads, which cannot be always guaranteed in practice, it is necessary to take the corresponding contact protection measures in the case of deviating loads.

... for oil: Float magnetic switch

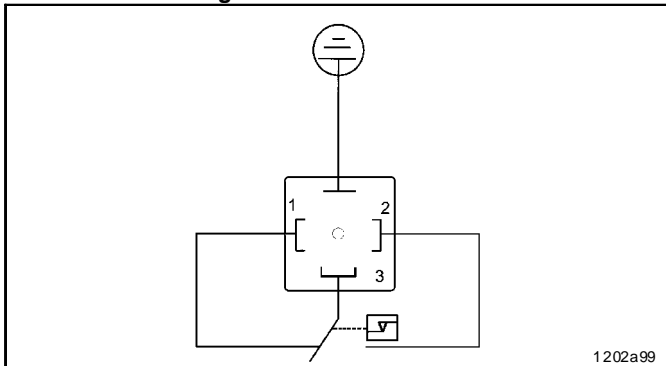


Fig. 8-4 Connection diagram, low-level control for oil

Operating mode

Float magnetic switches are equipped with hermetically sealed reed contacts. The reed contacts are activated by the magnetic field of a ring solenoid included in the float totally free of wear and without contact. The only movable component of the float magnetic switch is the float that moves up and down with the liquid reliably on the slide tube.

Technical data

Maximum switching capacity	60VA
Maximum switching voltage	230 V
Current switched	3 A

Contact protection measures

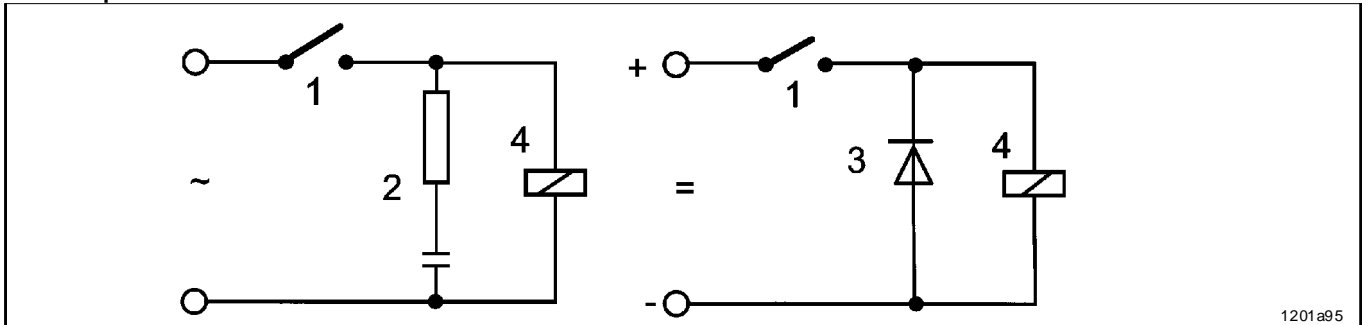


Fig. 8-5 Contact protection measures

1 - Electromagnetic switch

2 - RC element

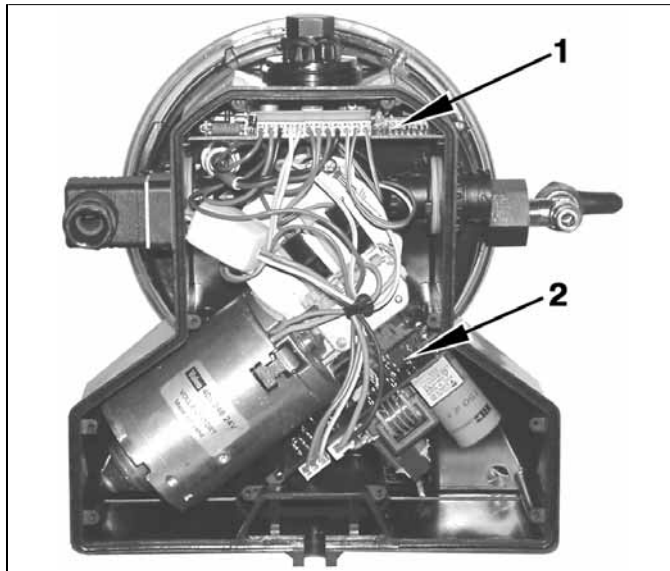
3 - Diode

4 - Load

Printed Circuit Board V10-V13 ¹⁾ (V20-V23)

¹⁾ This designation shows the version of the PCB installed in the pump. It forms part of the pump designation on the nameplate on each pump.

Installation position of the printed circuit boards



PCB 1 Control and power supply board inside the housing

6344b04

- The **printed circuit board 1** (for VDC & VAC pumps) and the **power supply board 2** (only for VAC pumps) are integrated in the pump housing.



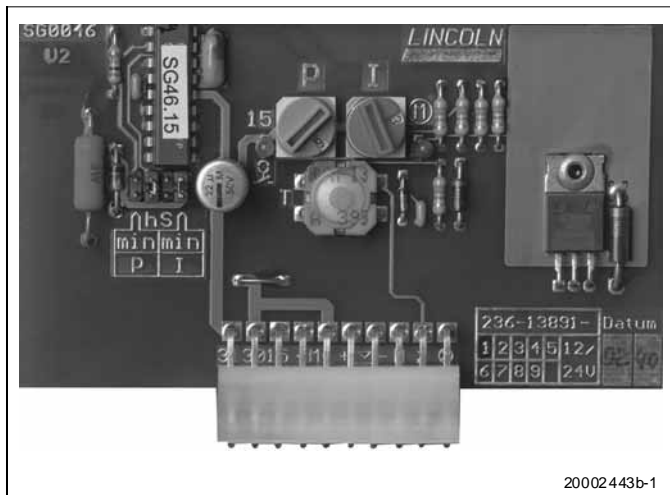
6001a02

IMPORTANT

Whenever the pump housing has been opened (e. g. for replacing of the p.c.b.), the housing cover (including the foamed seal) must be replaced.

- | | | |
|---|---------------------------------|-------------------------|
| 1 | - control printed circuit board | (input VDC) |
| 2 | - power supply board | (input VAC, output VDC) |

Mode of Operation

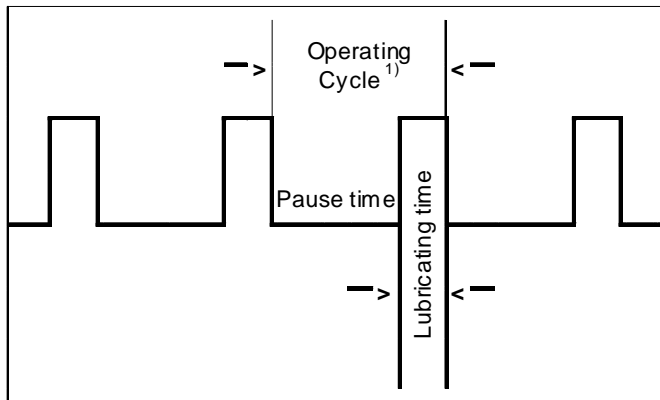


20002443b-1

PCB 2 Printed circuit board 236-13891-1

- The printed circuit board automatically controls the sequence of the pause and lubricating times of the central lubrication pump.
- The sequence of the pause and lubricating times is activated when the power supply is switched on:
 - via machine contact for VDC or VAC pumps industrial application
 - via driving switch only for VDC pumps mobile applicaiton

Printed Circuit Board V10-V13 (V20-V23), continuation



PCB 3 Time sequence diagram

¹⁾ Operating cycle = Pause time + Lubricating time

- A lubrication cycle consists of one pause time and one lubricating time. Once the pause time has elapsed, the lubricating time starts to run. This operating cycle is repeated permanently after the machine has been put into operation.
- During the lubricating time, the pump element dispenses the lubricant to the lubrication points via progressive metering devices.

Pause time

- determines the frequency of the lubricating times (lubrication cycles) as long as the machine/ vehicle is in operation.
- is started and stopped via the machine contact or driving switch.
- is adjustable.

Data backup:

The present operating status and the part of the pause time already lapsed are stored when the machine contact/ignition switch is disconnected/switched off.

Reconnection:

When reconnecting the machine contact/ignition switch, the remaining pause time will continue lapsing from where it had been interrupted. It will continue lapsing until the pause time set on the blue rotary switch (see fig. PCB 6) will be reached.

Pause time settings should be adapted to the operating cycles required for the respective application (see chapter "Pause time setting", PCB 6).

Lubricating time

- depends on the system's lubricant requirement.
- is started and stopped via the machine contact or driving switch.
- is adjustable.

Data backup:

The present operating status and the part of the lubricating time already lapsed are stored when the machine contact/ignition switch is disconnected/switched off.

Reconnection:

When reconnecting the machine contact/ignition switch, the remaining lubricating time will continue lapsing from where it had been interrupted. It will continue lapsing until the lubricating time set on the red rotary switch (see fig. PCB 7) will be reached.

Lubricating time settings should be adapted to the lubricant requirement of the respective application (see chapter "Lubricating time setting", PCB 7).

Time storage

Data backup:

Even if the operating voltage is switched off, the times lapsed will be stored indefinitely (in the EEPROM).

Reconnection:

When the power supply is switched on again the control unit continues to operate from the point where it had been interrupted.

Printed Circuit Board V10-V13 (V20-V23), continuation

Time Setting



PCB 4 Cover lid to the control PCB

00002617a

- To set the pause or lubricating time, remove the cover on the pump housing.



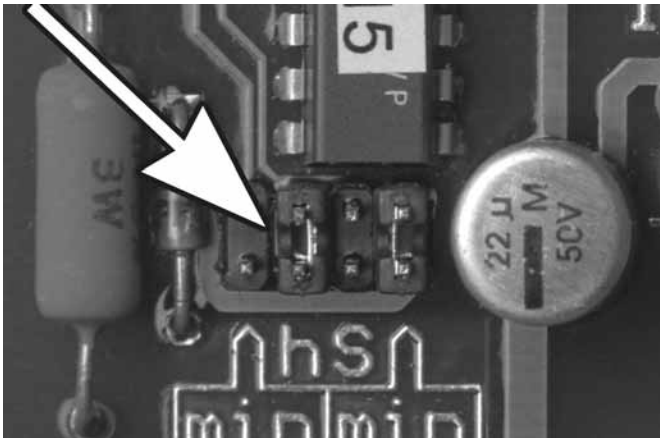
6001a02

IMPORTANT

Upon completion of the time setting, make sure to firmly close the cover lid again.

NOTE

To reset a jumper (see fig. PCB 5) remove the printed circuit board.



PCB 5 Jumper position:
Preselection of the time ranges

T-PCBv-020d08

Factory Setting

Control PCB	Pause time			Lubricating time		
	Factory setting	Rotary switch position	Jumper position (time range)	Factory setting	Rotary switch position	Jumper position (time range)
V10	6 h	6	H (1-15)	6 min.	3	min (2-30)
V11	6 h	6	h (1-15)	24 sec.	3	S (8-120)
V12	24 min.	6	min (4-60)	6 min.	3	min (2-30)
V13	24 min.	6	min (4-60)	24 sec.	3	S (8-120)



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IMPORTANT

*If the operating voltage is < 120 VAC the pause time **must not fall below 16 minutes**.*

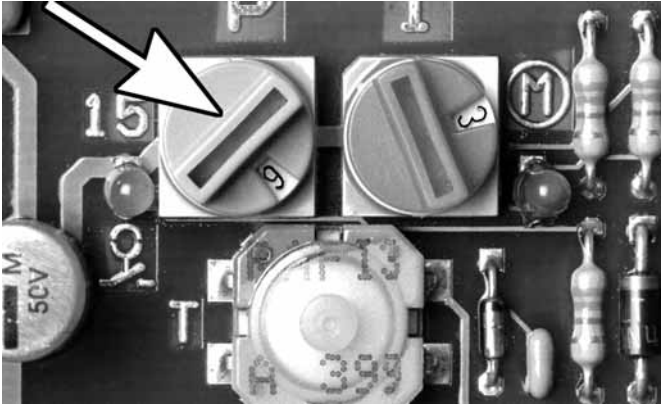


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IMPORTANT

*If the operating voltage is < 120 VAC the lubricating time **must not exceed 8 min.***

Printed Circuit Board V10-V13 (V20-V23), continuation



PCB 6 Rotary switch for pause time, blue

T-PCBv-020c08

Pause time setting

- The pause time can be set to 15 different settings by means of the **blue rotary switch**. Depending on the position of the jumper (see fig. PCB 5) the necessary time interval is adjustable (4-60 minutes or 1-15 hours).

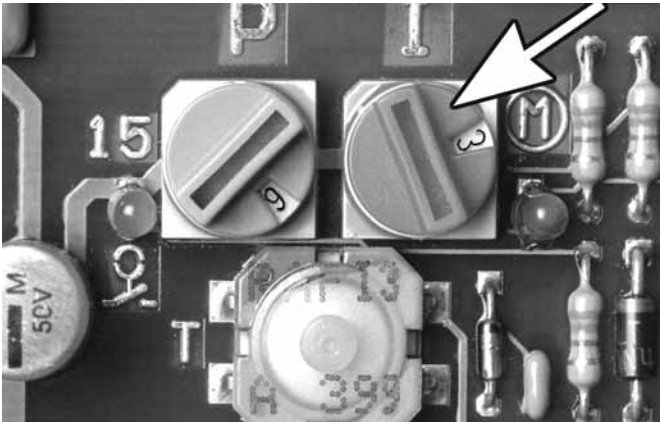


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NOTE

During switching position 0 a failure report at the light emitting diode takes place on the right LED 3 (see fig. PCB 8). At the same time the factory-set pause time is accepted.

Switch position	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Minutes	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
Hours	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15



PCB 7 Rotary switch for lubricating time, red

T-PCBv-020e08

Lubricating time setting

- The lubricating time can be set to 15 different settings by means of the **red rotary switch**. Depending on the position of the jumper (see fig. PCB 5) the necessary time interval is adjustable (8-120 seconds or 2-30 minutes).



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NOTE

During switching position 0 a failure report at the light emitting diode takes place on the right LED 3 (see fig. PCB 8). At the same time the factory-set lubricating time is accepted.

Switch position	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Seconds	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
Minutes	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30

Printed Circuit Board V10-V13 (V20-V23), continuation

Operational Test / To Trigger an Additional Lubrication Cycle



PCB 8 Components of the control p.c.b.

T-PCBv-020f08

- 1 - LED, left-side
- 2 - Rotary switch to set pause time
- 3 - LED, right-side
- 4 - Rotary switch to set lubricating time
- 5 - Pushbutton to trigger additional lubrication cycle

- ➔ Switch on the power supply (machine contact / driving switch).
- To check whether power is applied to the printed circuit board, observe whether the LED 1 is lit.
- ➔ To check the pump operation it is possible to perform an operational test.
Press illuminated pushbutton 5 on p.c.b. **> 2 sec.** until the right-side LED 3 is lit.
- Then the pause time lapses shorter and is followed by a normal lubrication cycle.
- Additional lubrication cycles are possible at any time by triggering the illuminated pushbutton.

Fault indication

The signal output takes place with the right-side LED (pos. 3)¹⁾ and is implemented as follows:

4 times flashing signal

System	Rotary switch (pos. 2 or 4) LED, right-side (pos. 3)
Fault:	Rotary switch on switching position 0
Signal output	4 times flashing signal, motor runs along with flashing frequency
Change to the factory setting if signal is ignored	

3 times flashing signal

System	Pushbutton (pos. 5) LED, right-side (pos. 3)
Fault:	Short-circuit at the pushbutton or at the connection to the external illuminated pushbutton.
Signal output	3 times flashing signal, motor runs along with flashing frequency

¹⁾ see fig. PCB 8

To remedy a fault



IMPORTANT

The pump must be checked by triggering an additional lubrication cycle.

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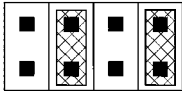
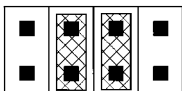
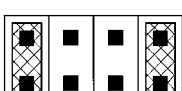
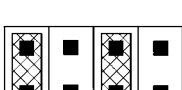
- ➔ In the case of a fault, check whether the centralized lubrication pump and the connected system are malfunctioning.
- ➔ Eliminate the cause of the fault (see chapter "Troubleshooting").

Repair

- ➔ see paragraph „Control p.c.b.“ / „Repair“ / „Maintenance, Repair and Tests“).

Printed Circuit Board V10-V13 (V20-V23), continuation

JUMPER Position Combinations - Survey

Possibilities of preselection		Range of pause time P		Range of lubricating time I		Jumper position
		4 to 60 min	1 to 15 h	8 to 120 sec.	2 to 30 min	(see fig. PCB 5)
Combination no.	V10 Standard		X		X	 6290b04
	V11		X	X		 6291b04
	V12	X			X	 6292b04
	V13	X		X		 6293b04

Maintenance, Repair and Tests

Maintenance

- The maintenance is essentially limited to refilling the reservoir with clean lubricant in good time. However, check regularly whether the lubricant is really dispensed to all the lubrication points.
- Also check the main lines and lubricant feed lines for damage and replace them, if necessary.



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NOTE

Whenever work is done on the centralized lubrication system, particular attention should be paid to absolute cleanliness. Dirt in the system will cause problems.

- For cleaning the system use benzine or petroleum. Do not use tri-, perchloroethylene or similar solvents. Also do not use polar organic solvents such as alcohol, methylacohol, acetone or similar.

Pump Filling



Fig. 9-1 Fill pump reservoir

6347b04

A - Vent bore

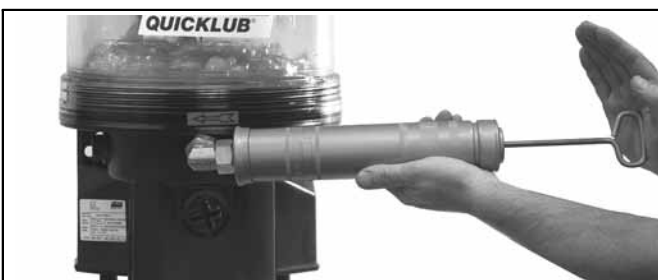


Fig. 9-2 Manual bottom filling of pump reservoir

T-P2034L-040b08



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IMPORTANT

When filling the reservoir, vent bore A (fig. 9-1) must not be closed in order not to impede the proper suction behaviour of the pump during operation.



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IMPORTANT

The grease or oil must be free from impurities and must not be liable to change its consistency in the course of time.



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NOTE

If the reservoir has been completely emptied, the pump may require up to 10 minutes before it operates at full output.



6445b05

CAUTION!

Danger of squeezing in case of pumps to be filled from the reservoir top: Never put your hand into the open reservoir while pump is running!



1013A94

ATTENTION!

Risk of bursting if the reservoir is over-filled! When filling the reservoir by means of pumps with a large delivery volume do not exceed the max. filling mark.

Maintenance, Repair and Tests, continuation

Repair

Pump

- Use only original Lincoln spare parts for repair on the pumps.
- The pump should be returned to the factory for warranty work or major repairs.
- Defective printed circuit boards should be suitably packed and returned to the factory.

Replace pump element

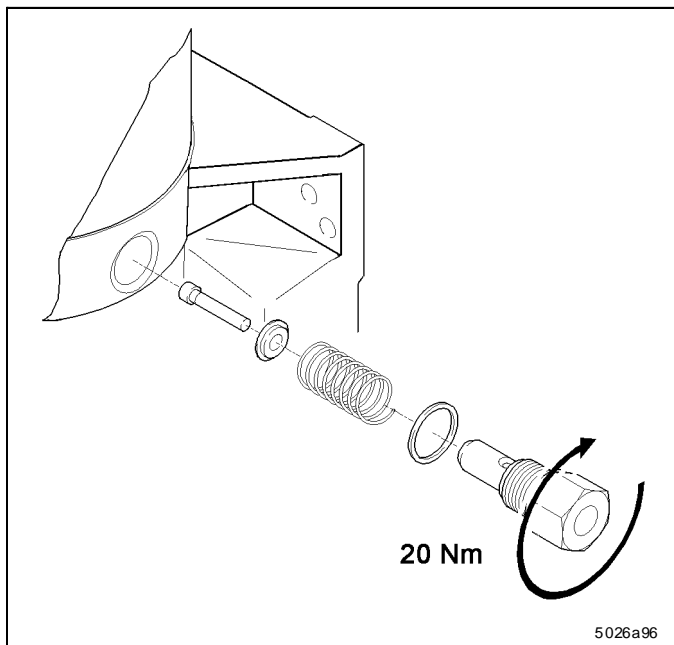


Fig. 9-3 Replace pump element

- Remove the pressure relief valve from the pump element.
- Unscrew the pump element.



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IMPORTANT

Take care that the piston, the pull-back spring and the washer are not left lying in the grease. If these parts remain in the lubricant, the motor may seize. In the case of a later removal of the parts, the reservoir will have to be disassembled.

NOTE

Pump elements with adjustable lubricant output are to be set to the required output before installation.

- Install a new pump element with a new sealing ring.

Printed Circuit Boards



6001a02

IMPORTANT

Whenever the pump housing has been opened (e. g. for replacing of the p.c.b.), the housing cover (including the foamed seal) must be replaced.

- Disassemble defective control p.c.b.
- Note down the jumper positions of the defective control p.c.b. To do so, follow instructions given in paragraph „Jumper Configuration“.
- Pack the defective control p.c.b. properly so that it will reach the factory without any further damages.
- In the case of a replacement of the control p.c.b., there will always be supplied a standard version (V10) of the p.c.b.
- Set the jumper configuration on the new control p.c.b. according to the one noted down from the old control p.c.b.
- Connect the new control p.c.b. and install it properly.

Maintenance, Repair and Tests, continuation

Maintenance and Repair

Electrical Connection



4273a00

WARNING!

Before maintenance or repair of pumps switch off their power supply.

Consider the safety instructions (page 5 and 6)!

CAUTION!

Before starting, make sure that the general power supply is off. The device must never be connected or disconnected when the power is on. The protective conductor must always be connected. Take care that this line section is undamaged and conforms to standards and the contacts are safe.



6001a02

NOTE

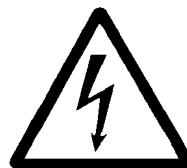
The protection IP6K9K is guaranteed when the socket (X1:, X2: & X3:) is tightened on the housing cover with flat packing.

NOTE

Consider the contact protection measures for connecting the high- or low-level control (see chapter "Mode of Operation" / paragraph „Low- or High-level Control“).

- Make sure of the connection and the type of construction of your QLS 401.
 - type of connection (VDC / VAC)
 - low-level indication
 - type of connection plug
 - monitoring of metering device via external or internal cycle switch
- Connect the electrical wires according to the following electrical connecting diagrams (see chapter „Technical Data“).

Operation with bayonet plug



4273a00

CAUTION!

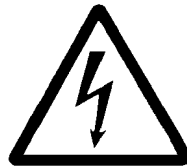
If the protective-conductor terminal is not connected or interrupted, dangerous touch voltages may occur on the equipment!

Protective measures to be applied for appropriate operation with bayonet plugs:

„Functional extra-low voltage with safe isolation" /
"Protective Extra-Low Voltage" (PELV)

Standards:

EN60204 Part1:1992 / IEC 204-1:1992, modified
DIN VDE 0100 Part 410 / IEC 364-4-41:1992



4273a00

ATTENTION!

Control p.c.b. and motor always work with 24 VDC even if the pump is connected to alternating current.

Consider residual ripple of max. ± 5 % when connecting motor and control p.c.b. (in relation to the operating voltage acc. to DIN 41755).

Maintenance, Repair and Tests, continuation

Tests

Operational Test / Triggering an Additional Operating Cycle

- To check the pump operation it is possible to perform an additional test (see fig. "PCB 8").

Check the Pressure Relief Valve

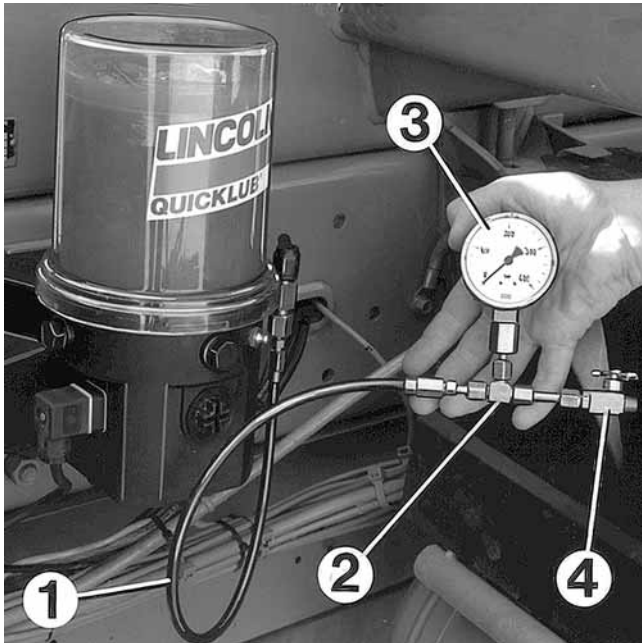


Fig. 9-4 Check the pressure relief valve

1005a93

- 1 - Hose line, min. length 1m
- 2 - T-piece
- 3 - Pressure gauge
- 4 - Relief cock

1st option

- ➔ Connect the pressure gauge (0-600 bar; 0-8708 psi) to the pressure relief valve (see fig. 2-1).



6001a02

IMPORTANT

Do not connect the pressure gauge directly to the pump element. Use a hose line of min. 1 m length. High pressure may exceed the above-mentioned range, causing the motor to stall. The motor is designed in such a way that it can stall for about 30 minutes without being damaged.

- ➔ Trigger an additional operating cycle.

2nd option

- ➔ Connect the manual pump of the pressure and checking set 604-36879-1 to the pressure relief valve and check the opening pressure by means of the manual pump.
- ➔ The pressure relief valve should open at a pressure of 200, 270 or 350 bar depending on its design.

Functional Check of the control p.c.b.s



6001a02

NOTE

See chapter „Control p.c.b. V10-V13“, paragraph „Operational Test ...“ (fig. "PCB 8").

Troubleshooting



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NOTE

The pump operation can be stated from the outside by:
- the rotating stirring paddle (e.g. by triggering an additional lubrication cycle)
- the LEDs of the control p.c.b. (see chapter "Troubleshooting")
- the signal lamp of the illuminated pushbutton (option)

Fault: The pump motor does not run

Cause:

- Power supply to the pump interrupted
- Power supply to the control p.c.b. interrupted
- Control p.c.b. defective
- Electric motor defective

Remedy ...



4273a00

- ➔ Check the power supply and fuses.
- ➔ If necessary rectify the fault and/or replace the fuses.
- ➔ Check the line leading from the fuses to the pump plug.
- ➔ Check the line leading from the pump plug and the control p.c.b.
- ➔ If the power supply is connected, the left-side LED is lit (see fig. "PCB 8").
- ➔ Check the function of the p.c.b. (see fig. "PCB 8"). If necessary replace the p.c.b.
- ➔ Check the power supply to the motor. If necessary, replace the motor.

by service personnel

Fault: The pump does not deliver lubricant

Cause:

- Reservoir empty

Remedy ...



6001a02

- ➔ Fill up the reservoir with clean grease. Let the pump run (see fig. „PCB 8“) until lubricant shows at all lube points.

NOTE

If a lubricant low-level is available, the low level is indicated by the flashing light of the signal lamp in the case of pumps without printed circuit board (see fig. 8-1 & 8-2).



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NOTE

Depending on the ambient temperature and/or sort of lubricant it may take 10 minutes of operation before the pump elements reach their full lubricant output. Therefore, trigger several additional lubrications.

Cause:

- Air bubbles in the lubricant

Remedy ...

- ➔ Trigger additional lubrication cycle (siehe fig. "PCB 8"). Loosen the outlet fitting or the main line at the pressure relief valve. The lubricant must issue without air bubbles.



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NOTE

When push-in type fittings are used, the high-pressure plastic hose that is under pressure cannot be easily disconnected from the pressure relief valve. For this purpose, loosen the safety valve or, if available, the filler fitting on the safety valve in order to relieve the high-pressure hose.

by service personnel

- Unsuitable lubricant has been used ➔ Renew the lubricant (see User Manual „Lubricants“, 2.0-40001-).
- Suction hole of the pump element clogged ➔ Remove pump element. Check suction hole for foreign particles. If there are any, remove them.
- Pump piston worn ➔ Replace pump element.
- Check valve in the pump element defective or clogged ➔ Replace pump element.
- Other damages ➔ For repair return the pump to the factory.

Technical Data

Rating ⁴⁾

Pump

Admissible operating temperature	-40° C to 70 °C ¹⁾
Number of outlets	1, 2 or 3
Reservoir capacity	2 l, 4 l, 8 l
Refilling	via hydraulic lubrication fitting or from top
Lubricant	greases up to NLGI grade 2
..... & mineral oils of at least 40 mm ² /s (cST) at 40° C	
Type of protection	IP6K 9K acc. to DIN 40050 T9
.....	UL type 4X only for indoors, 12 and 13



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¹⁾ NOTE

The pump is designed for the above mentioned temperature range. However, most times the lubricants are pumpable up to -25°C only. For lower temperatures use low-temperature lubricants.

IMPORTANT

The pump reservoirs are factory-primed with lubrication grease Renocal FN745 and EP additives make Fuchs. This composition is compatible to most of the commercial greases and helps to prevent faults. If requested by the customer, the pumps can either be primed with another type of lubrication grease or be supplied without priming.

Pressure Relief Valve

SVETVT-350-G 1/4A-D6	624-28894-1
SVETVT-350-G 1/4A-D8	624-28774-1

Torsion torques

Install pump	18 Nm
Electric motor on housing	12 Nm
Pump element in housing	20 Nm
Closure plug in housing	12 Nm
Return line connector in housing	10 - 12 Nm
Tie rods for 15-l reservoir	10 Nm

Pump element with fixed lubricant output

Piston diameter, K5	5 mm
- Lubricant output ⁴⁾	approx. 2 cm ³ /min
Piston diameter, (Standard) K6	6 mm
- Lubricant output ⁴⁾	approx. 2.8 cm ³ /min
Piston diameter, K7, C7 ²⁾ , S7 ³⁾	7 mm
- Lubricant output ⁴⁾	approx. 4 cm ³ /min
Piston diameter, B7	7 mm
- Lubricant output ⁴⁾	approx. 2 cm ³ /min
max. operating pressure	350 bar
Connection thread	G 1/4"
- suitable for tube DIA	6 mm

Pump element KR with adjustable lubricant output

Piston diameter	7 mm
- Lubricant output ⁴⁾	0,04 to 0,18 cm ³ /stroke
.....	0,7 to 3 cm ³ /min
max. operating pressure	350 bar
Connection thread	G 1/4"
- suitable for tube DIA	6 mm
- suitable for tube DIA	8 mm

Weights

The weights below include the following "individual weights":

- Pump kit with one pump element, safety valve, grease filling (0.75 kg, 1.5 kg)	
- Packing (cardboard box)	
- Attaching parts	
- Operating Instructions	
- 2 l reservoir, standard (0,75 kg)	
Pump 203 without connection cable	5.4 Kg
Pump 203 version „1A1.10“	6.5 Kg
Pump 203 version „2A1.10“	7.1 Kg
- 4 l reservoir, standard (1,5 kg)	
Pump 203 without connection cable	8.3 Kg
Pump 203 version „1A1.10“	9.3 Kg
Pump 203 version „2A1.10“	9.9 Kg
- 8 l reservoir, standard (1,5 kg)	
Pump 203 without connection cable	8.6 Kg
Pump 203 version „1A1.10“	9.6 Kg
Pump 203 version „2A1.10“	10.2 Kg
- 15 l reservoir, standard (1,5 kg)	
Pump 203 without connection cable	9.2 Kg
Pump 203 version „1A1.10“	10.2 Kg
Pump 203 version „2A1.10“	10.8 Kg

In the case of pump versions deviating from those mentioned, add the weights of the following components to the mentioned weights:

- per pump element	+0.2 kg
- per pressure relief valve	+0.1 kg
- 10 m monitoring cable, 5-wire (microprocessor) 2A 4.13	+1.1 kg
- 10 m monitoring cable, 4-wire (microprocessor) 2A 4.12	+0.4 kg
- Connection cable with piston detector	+0.1 kg
- Reservoir version "Filling from top" (only 2 l) ³⁾	+0.15 kg
- 2 l flat-type reservoir	+0.5 kg



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⁴⁾ IMPORTANT

The rating listed refers to grease of NLGI grade 2 measured at 20°C, backpressure 100 bar and nominal voltage 12/24 V (motor). Any differing pressures or temperatures result in different lubricant outputs. Any system design must be based on the above values compete.

²⁾ suitable for chisel paste; contact the manufacturer of the lubrication system.

³⁾ suitable for lubricants containing silicone.

Technical Data, continuation

Electrical Data

PUMP

Input

Rated voltage 110-240 VAC $\pm 10\%$; 50/60 Hz $\pm 5\%$
Max. current input 200 mA at 230 VAC
Max. current input < 3 A
Class of protection T 1,25 A/250 V internal



6001a02

NOTE

If the internal fuse must be replaced, only use the original fuse type.

Output

Output voltage, internal 24 VDC $\pm 1\%$

Protection and Monitoring

Current limiting resistant to sustained short circuit
Overload-proof yes
Idling-proof yes
Mains buffering time > 15 ms at 230VAC

Safety VDE 085 / 11.93 / EN 60950 / IEC 950, EN 60204

Output safety extra-low voltage (SELV)
Class of protection class 1
Discharge current < 0,25 mA (47-63 Hz and U_{ON} max.)

EMC

Radio interference suppression VDE 0875 T 11, EN 55011 class A
Emitted interference acc. to EN 50081/2
Noise immunity acc. to EN 50082/2



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NOTE

The emitted interference meets the requirements for industrial zones; if used in residential zones it may possibly lead to disturbances.

CONTROL P.C.B.

Rated voltage 24 VDC
Operating voltage 9 to 30 V
Residual ripple in relation
- Operating voltage $\pm 5\%$ acc. to DIN 41755
Output motor Transistor 7A/short-circuit proof
Reverse polarity protection operating voltage inputs
..... protected against reverse polarity
Temperature range $-25\text{ }^{\circ}\text{C}$ to $+70\text{ }^{\circ}\text{C}$
- Output: Malfunction / Readiness for service
..... Transistor 3A/short-circuit proof
Class of protection
Printed circuit board installed in housing IP 6 K 9 K

The printed circuit board is protected against condensate by a protective paint coating.

The printed circuit boards comply with the EMC (electromagnetic compatibility) guidelines for road vehicles following DIN 40839 T1, 3 and 4.

Emitted interference acc. to DIN EN 61000-6-4

Noise immunity acc. to DIN EN 61000-6-2

Time Setting

- Pause time
..... 4, 8, 12, ... 60 minutes
or 1, 2, 3, ... 15 hours
- Lubricating time
..... 2, 4, 6, ... 30 minutes
or 8, 16, 24, ... 120 seconds
- Factory settings
Pause time 6 hours
Lubricating time 6 minutes

Mode of operation



6001a02

IMPORTANT

Pump 223, 233 is suitable for interval operation only, not for permanent operation!

Motor

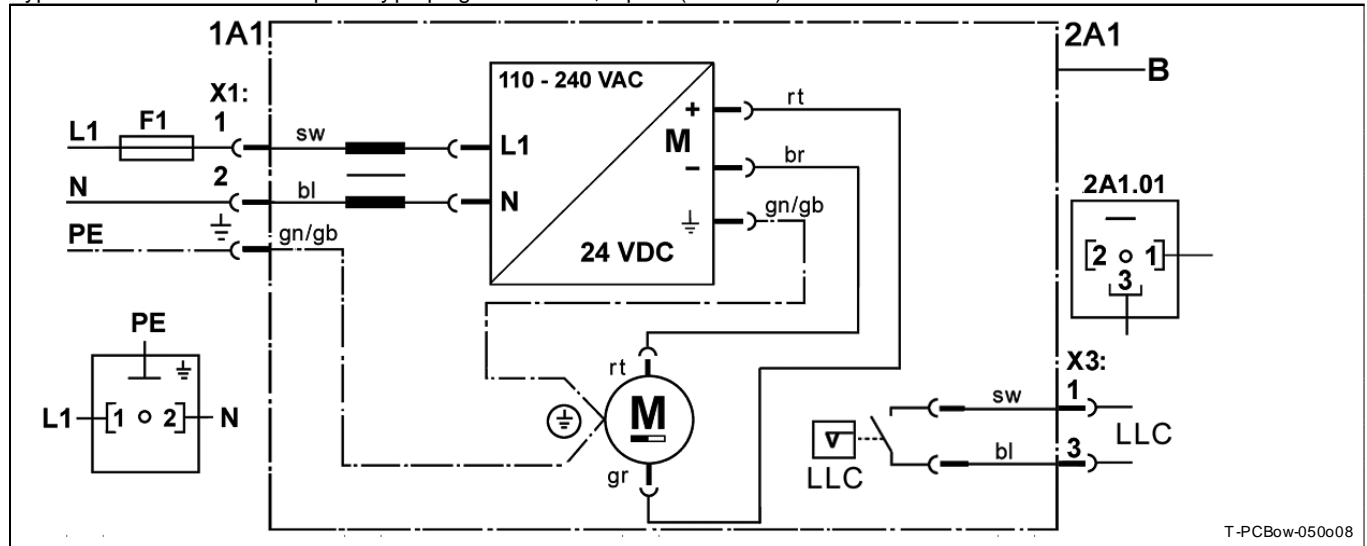
DC gear motor (interference-suppressed)
- Operating voltage 24 VDC
- Max. current input 3 A
- Speed 21 ± 3 U/min

Technical Data, continuation

VAC connecting diagrams for industrial application

without control unit

Type of connection 2A1 square-type plug DIN 43650, 3 pole (X1 & X3)

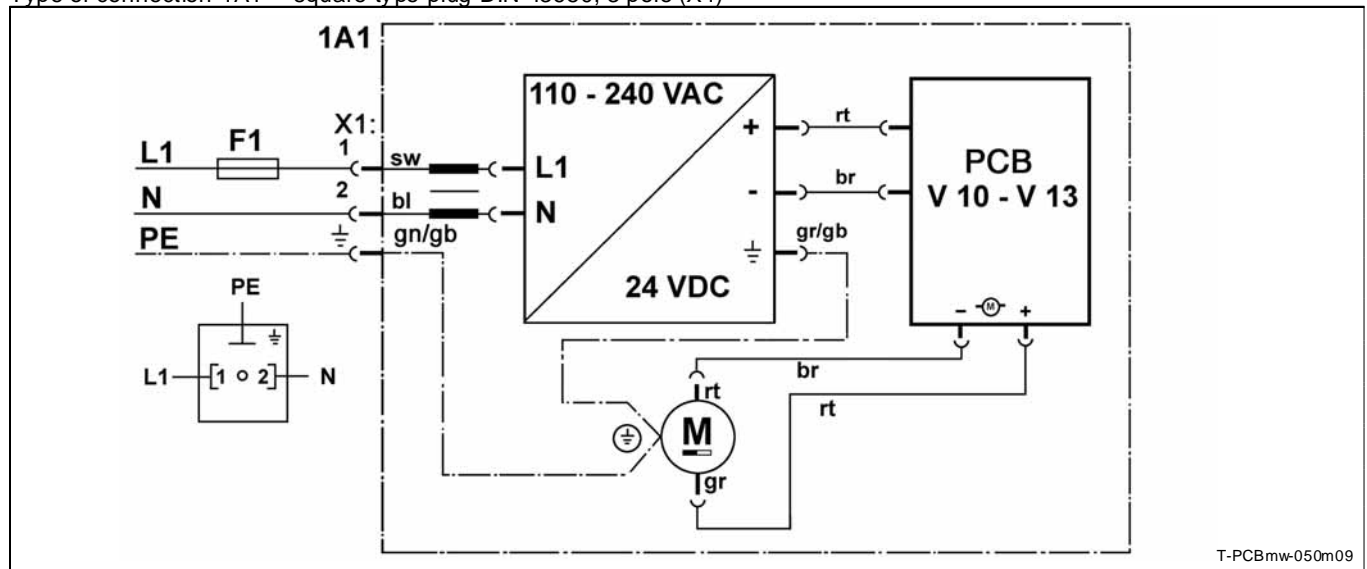


Connecting diagram

Quickclub P203 (VAC) without control unit, with low-level indication

with control unit

Type of connection 1A1 square-type plug DIN 43650, 3 pole (X1)



Connecting diagram:

Quickclub P203 (VAC) with control unit, without low-level indication

Connection X1: square-type plug (left) 1A1, 3/3 pole
Connection X3: square-type plug (right) 2A1, 3/2 pole

- B - Pump housing
- F1 - Fuse 2A (to be provided by owner)
- M - Electric motor
- M + - + 12/24 VDC
- M - - 0 VDC
- L1 / N - Power supply 110-240 VAC $\pm 10\%$, 50/60 Hz $\pm 5\%$
- LLC - Low-level control (Maximum switching capacity 60 W/VA, Maximum switching voltage 230 VAC, Current switched 1 A)

bl - blue
gr - grey

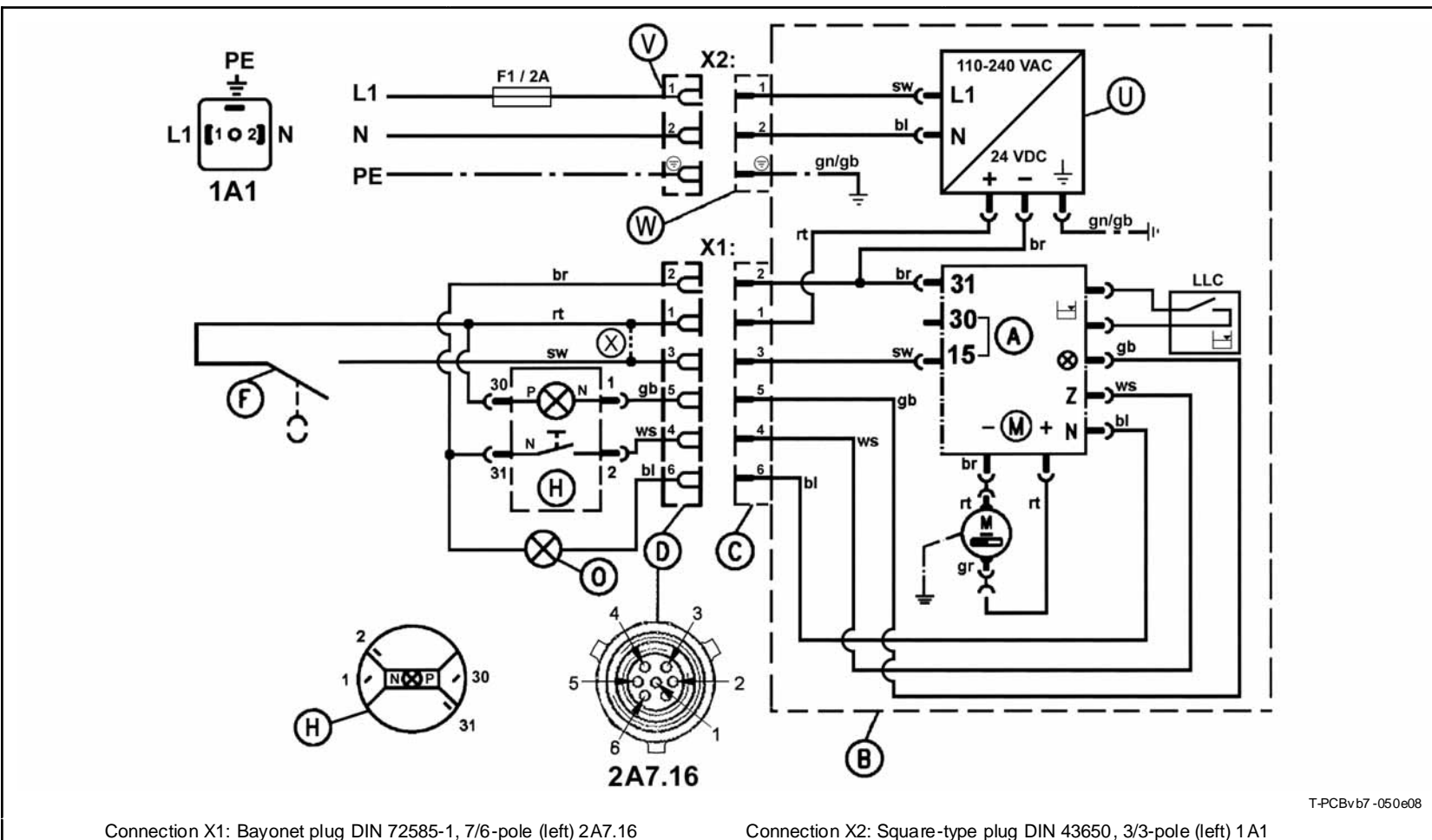
br - brown
rt - red

gn/gb - green / yellow
sw - black

Technical Data, continuation

VAC Connection diagram for industrial application

Type of connection 2A7.16: Square-type plug (3/3-pole) with socket, without cable (X2) & Bayonet plug with socket (7/6-pole) and 10 m cable, 6-core (X1)
Control unit V10-V13 (15/30 bridged)



1A1: Socket (without cable) for power supply 110-240 VAC $\pm 10\%$, 50/60 Hz $\pm 5\%$

2A7.16: Socket to connect the illuminated pushbutton (for additional lubrication and functional test) and the machine contact as well as the control light for the low level indication

15 - Power Supply + 24 VDC via machine contact

30 - bridged with 15

31 - - 0 VDC

A - Control p.c.b. V10-V13

B - Pump housing

C - Connection plug 2A7.16 at pump housing

D - Socket X1

F - Machine contact

X - Bypass as an option to machine contact F

G - Fuse 10 A

H - External illuminated pushbutton

M - Electric motor

N - Level control

O - external signal lamp in case of low-level indication

br - brown gb - yellow

sw - black ws - white

rt - red bl - blue

gn/gb - green/yellow gr - grey

U - Power supply board

V - Socket X2

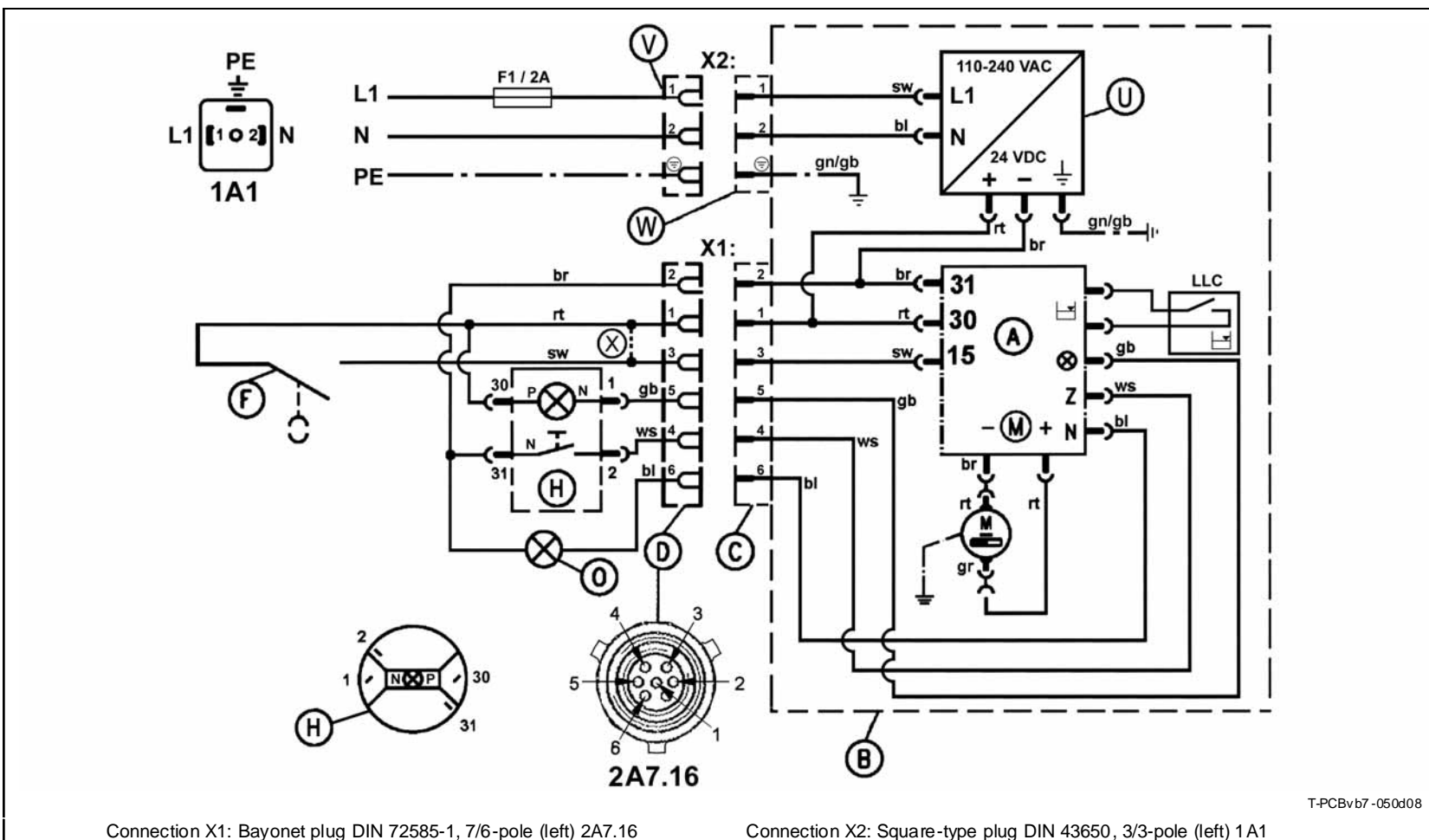
W - Connection plug 1A1 at the pump housing

Z - Operational test / additional lubrication

Technical Data, continuation

VAC-Connection Diagram for industrial application

Type of connection 2A7.16: Square-type plug (3/3-pole) with socket, without cable (X2) & Bayonet plug with socket (7/6-pole) and 10 m cable, 6-core (X1)
Control unit V20-V23 (15/30 not bridged)



1A1: Socket (without cable) for power supply 110-240 VAC $\pm 10\%$, 50/60 Hz $\pm 5\%$

2A7.16: Socket to connect the illuminated pushbutton (for additional lubrication and functional test), the machine contact and the signal lamp in case of low-level indication

- 15 - Power supply + 24 VDC via machine contact
- 30 - + 24 VDC
- 31 - - 0 VDC
- A - Control p.c.b. V20-V23
- B - Pump housing
- C - Connection plug 2A7.16 at pump housing
- D - Socket X1
- F - Machine contact
- X - Bypass as an option to machine contact F

- G - Fuse 10 A
- H - External illuminated pushbutton
- M - Electric motor
- N - Level control
- O - external signal lamp in case of low-level indication

- br - brown
- sw - black
- rt - red
- gn/gb - green/yellow
- gb - yellow
- ws - white
- bl - blue
- gr - grey

- U - Power supply board
- V - Socket X2
- W - Connection plug 1A1 at pump housing
- Z - Operational test / additional lubrication

[illegible]

Declaration by the manufacturer

D	GB	F	I
Hers tellererklärung im Sinne der EG-Richtlinie Maschinen 2006/42/EG, Anhang II B	Declaration by the manufacturer as defined by machinery directive 2006/42/EEC Annex II B	Déclaration du fabricant conformément à la directive 2006/42/CEE, annexe II B	Dichiarazione del costruttore ai sensi della direttiva 2006/42/CEE in materia di macchinari, Appendice II B
Hiermit erklären wir, dass die Bauart von	Herewith we declare that the supplied model of	Par la présente, nous déclarons que le produit ci- dessous	Si dichiara che il prodotto da noi fornito

Product: Pump 203 for 110-240 VAC with and without Control p.c.b.

in der von uns gelieferten
Ausführung zum Einbau in eine
Maschine bestimmt ist und dass
ihre Inbetriebnahme solange
untersagt ist, bis festgestellt
wurde, dass die Maschine, in die
das o.g. Produkt eingebaut
werden soll, den Bestimmungen
der oben genannten Richtlinie –
einschließlich deren zum Zeit-
punkt der Erklärung geltenden
Änderungen – entspricht.

Angewendete harmonisierte
Normen, insbesondere

is intended to be incorporated
into machinery covered by this
directive and must not be put into
service until the machinery into
which it is to be incorporated has
been declared in conformity with
the provisions of the above
mentioned directive – including
all modifications of this directive
valid at the time of the
declaration.

Applied harmonized standards
in particular

dans l'exécution dans laquelle
nous le livrons, est destiné à
être installé sur une machine,
et que sa mise en service est
interdite tant qu'il n'aura pas
été constaté que la machine
sur laquelle il sera installé est
conforme aux dispositions de
la directive ci-dessus, y
compris les modifications qui
y auront été apportées et qui
seront valides à la date de la
déclaration.

Normes harmonisées,
notamment

è destinato all'installazione
su di un macchinario e che la sua
messa in funzione non sarà
autorizzata fino a quando non
sarà stata accertata la
conformità del macchinario,
sul quale esso dovrà essere
installato, in relazione alle
disposizioni della direttiva
2006/42/CEE – comprese tutte
la rettifiche di questa direttiva
al momento della
dichiarazione.

Norme armonizzate applicate
in particolare

07/17/2002 Z. Paluncic



Standards: DIN EN ISO 12100-1; DIN EN ISO 12100-2; DIN EN 809

(Datum / Unterschrift)	(date / signature)	(date / signature)	(date / signature)	(date / firma)
GR	E	P	NL	DK
Δηλώση του κατασκευαστή του συμπ. με τις προδιαγραφές: 2006/42/ΕΟΚ, παρ. II Β	Declaración del fabricante conforme con la Directiva CE sobre máquinas 2006/42/CEE, Anexo II B	Declaração do Fabricante segundo directiva CE 2006/42/CEE, Anexo II B	Verklaring van de fabrikant inzake de richtlijn betreffende machines, (2006/42/EEG, bijlage II B)	Fabrikantens erklæring i henhold til EF-lovgivning om maskiner 2006/42/EØF bilag II b
Δια του παρόντος σας γνω- στοποιούμε, ότι το προϊόν	Por la presente, declaramos que el modelo suministrado	Em anexo declaramos que o modelo fornecido	hiermede verklaren wij, dat de	Hermed erklæres, at

Product: Pump 203 for 110-240 VAC with and without Control p.c.b.

προορίζεται για τοποθέτηση
εντός μηχανήματος, και ότι
δεν επιτρέπεται να τθεθεί σε
λειτουργία μέχρις ότου
διαπιστωθεί, ότι το μηχανήμα
εντός του οποίου προκειται
να τοποθετηθεί ανταποκρίνε-
ται στις προαναφερομενες
ισχύουσες προ-
διαγραφές (συμπεριλαμβανο-
μένων των αλλαγών που ισχύ-
ουν και που έγιναν στο χρον-
ι-κό αυτό διάστημα).

Προσέτα προς εφαρμογήν
χρησιμοποιήθησες ενάρμο-
νισμένες προδιαγραφές

es destinado a ser
incorporado en una máquina
y que su puesta en servicio
está prohibida antes de que
la máquina en la que vaya a
ser incorporado haya sido
declarada conforme a las
disposiciones de la Directiva
en su redacción
2006/42/CEE
– incluso las modificaciones
de la misma vigentes a la
hora de la declaración.

Normas armonizadas
utilizadas, particularmente

deverá ser incorporado na
maquinaria coberta por esta
directiva e não poderá ser
colocado em serviço até a
maquinaria na qual é para
ser incorporado for
declarada em conformidade
com as provisões da
directiva acima mencionada
/ incluindo todas as
modificações desta directiva
válida desde a emissão
desta declaração.

Normas harmonizadas
utilizadas, em particular

ertoe bestemd is, ingebouwd
te worden in een machine en
dat een inwerkstelling
verboden is, voordat
vastgesteld is, dat de
machine, waarin deze
machine wordt ingebouwd, in
overeenstemming met de
bepalingen van de richtlijn
2006/42/EEG – ingesloten de
tot dit tijdstip geldende
veranderingen van deze
richtlijn – verklaard is.

Gebuijkte geharmoniseerde
normen, namelijk

er bestemt til inkoopning i en
maskine og at igangsætningen
forbydes indtil der er
konstateret, at maskinen, som
skal inkoopnges i denne
maskine, er bragt i
overensstemmelse med alle
relevante bestemmelser, samt
ændringer gældende på
deklarationstidspunktet

Harmoniserede standarder, der
blev anvendt, i særdeleshed

07/17/2002 Z. Paluncic



Standards: DIN EN ISO 12100-1; DIN EN ISO 12100-2; DIN EN 809

(ημερομηνία / υπογραφή) (fecha / firma) (Data / assinatura) (Datum / handtekening) (dato/underskrift)

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