

Quicklub®
Printed-Circuit Board 236-10697-1 & 236-10697-2
for Pump 203



T-PCB-000e10

Subject to modifications

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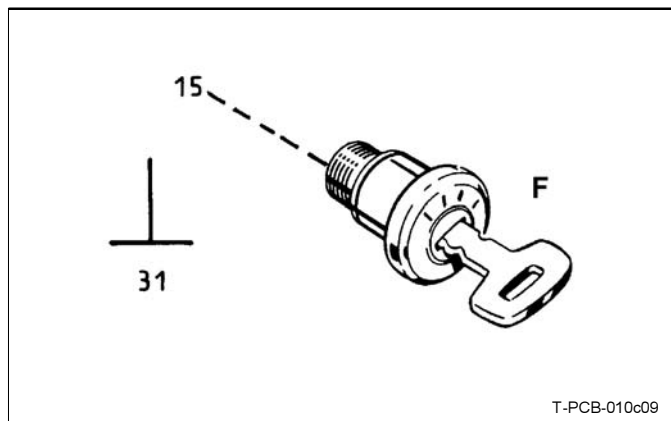
For further information refer to:

- Technical Description Progressive Metering Devices for Grease and Oil, model SSV, SSVM and SSVD
- Planning and Layout of Quicklub Progressive Systems with SSV and SSV D Metering Devices
- Technical Description for "Electronic Control Units" of pump 203:
 - Printed circuit board 236-13857-1 - Model H
 - Printed circuit board 236-13870-3 - Model M 08-M 15
 - Printed circuit board 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
- List of Lubricants

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.

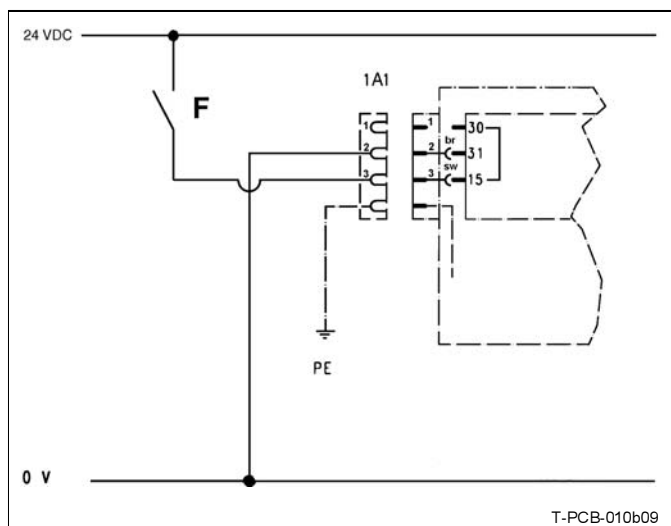
Applications



Driving switch F (mobile application)

The printed circuit boards can be used for the following applications:

1. Lubrication cycles **only** as a function of the machine working hours.
When the machine contact F (see connection diagrams) is switched on, the centralized lubrication system is ready for operation.
2. Lubrication cycles **only** as a function of the running hours of the commercial vehicle.
When the driving switch F (see connection diagrams) is switched on, the centralized lubrication system is ready for operation



Machine contact F, printed circuit board 236 10697 1 (V10 V13)
(industrial application)

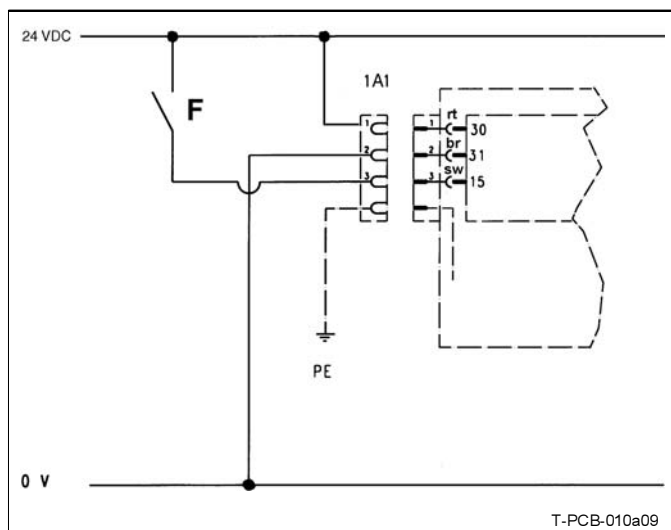
Printed circuit board V10-V13:



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IMPORTANT

On the PCB 236-10697-1 (V10-V13) do not connect the red core of the connecting cable to connection 1 (terminal 30) since terminal 30 is connected internally with terminal 15.



Machine contact F, printed circuit board 236 10697 2 (V20 V23)
(industrial application)

Printed circuit board V20-V23:

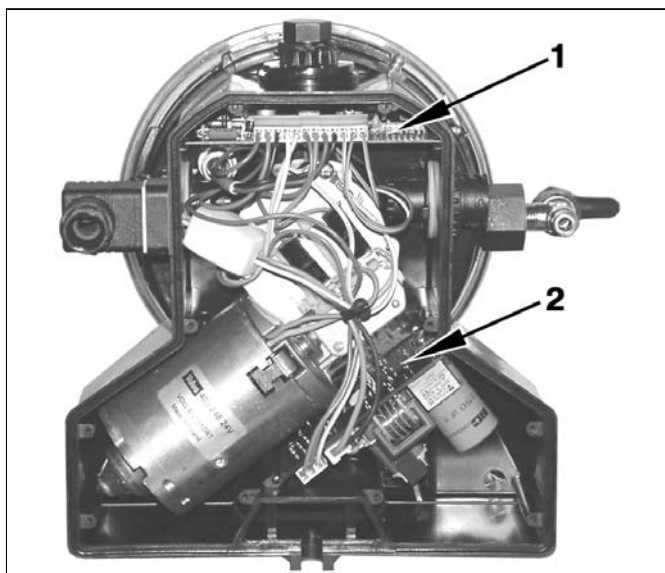


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IMPORTANT

The PCB's 236-10697-1 and 236-10697-2 (V20 - V23) differ only as regards their connection of the terminals. In the case of PCB 236-10697-2 the terminals 30 and 15 are not connected..

Installation position of the printed circuit boards



PCB 1 Control and power supply board inside the housing

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- 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.



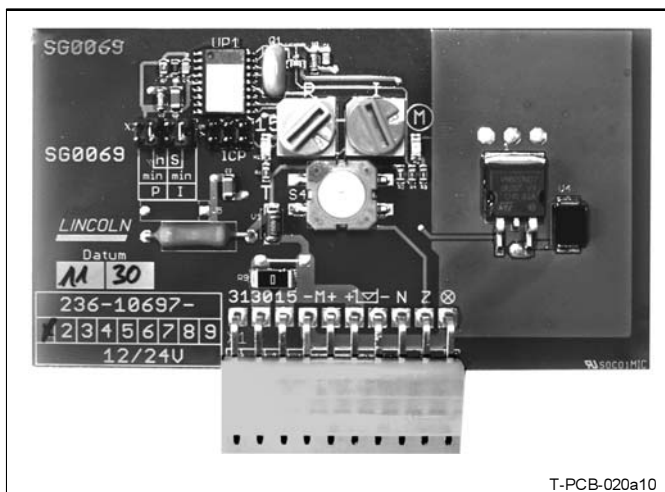
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IMPORTANT

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) |

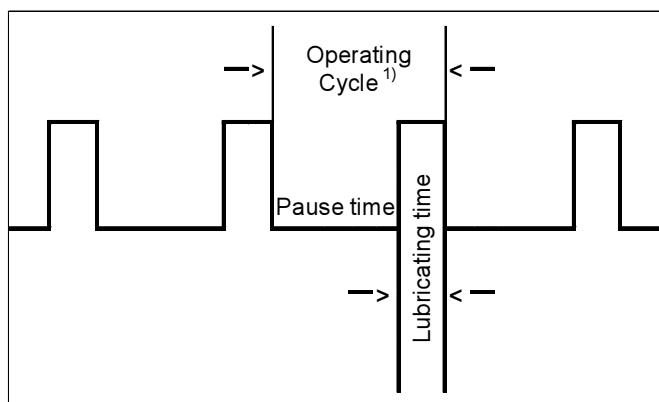
Mode of Operation



T-PCB-020a10

PCB 2 Printed circuit board 236 10697 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



PCB 3 Time sequence diagram

¹⁾ Operating cycle = Pause time + Lubricating time

- A operating 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 or the vehicle has been put into operation.
- During the lubricating time, the pump element dispenses the lubricant to the lubrication points via downstream 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.

Time Setting



PCB 4 Cover lid to the control PCB

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



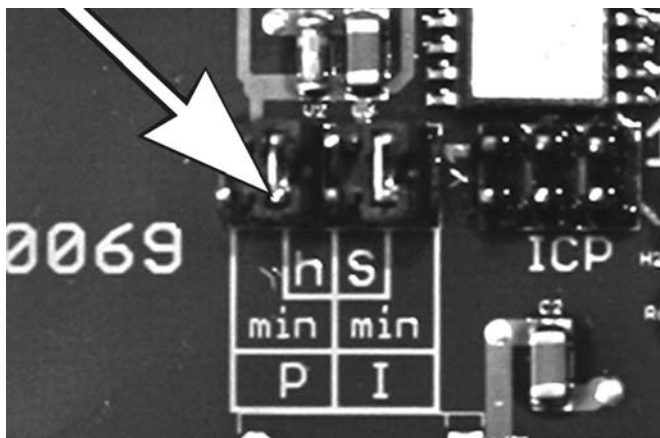
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IMPORTANT

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.
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.*



PCB 5 Jumper position:
Preselection of the time ranges

T-PCBv-020d10



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IMPORTANT

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

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

Factory Setting

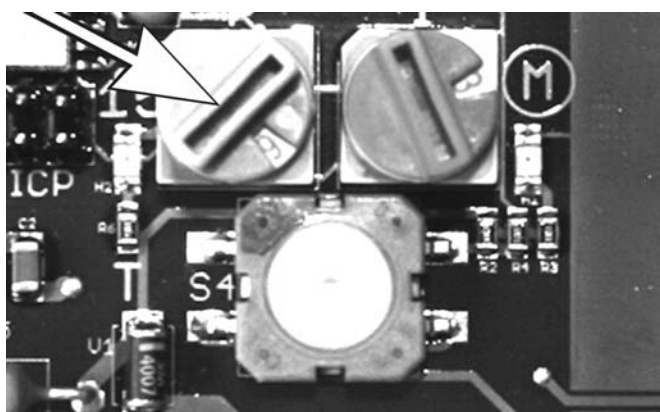
Control PCP	Pause time			Lubricating time		
	Factory setting	Rotary switch position	Jumper position (time range)	Factory setting	Rotary switch position	Jumper position (time range)
V10	6 h	6	H (1 15)	6 min.	3	min (2 30)
V11	6 h	6	h (1 15)	24 sec.	3	S (8 120)
V12	24 min.	6	min (4 60)	6 min.	3	min (2 30)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



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IMPORTANT

Adjacent ICP plug-in positions are used exclusively by the manufacturer.



PCB 6 Rotary switch for pause time, blue

T-PCBv-020c10

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).



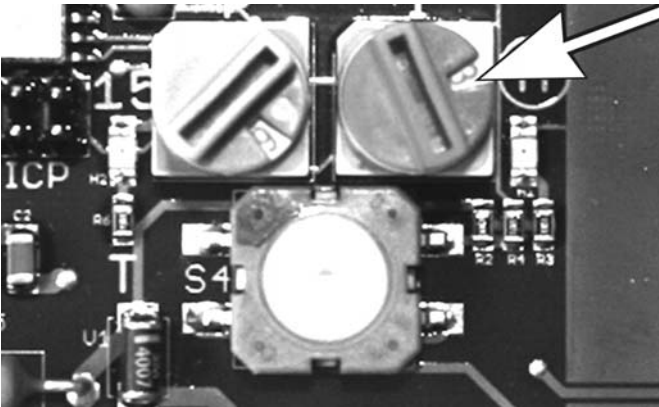
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NOTE

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-020e10

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).



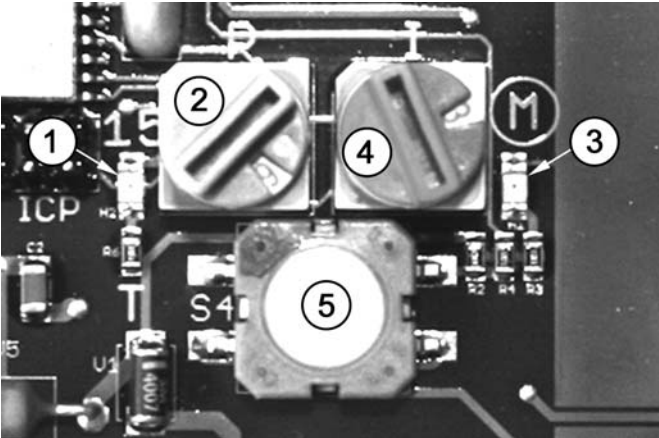
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NOTE

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

Operational Test / To Trigger an Additional Lubrication

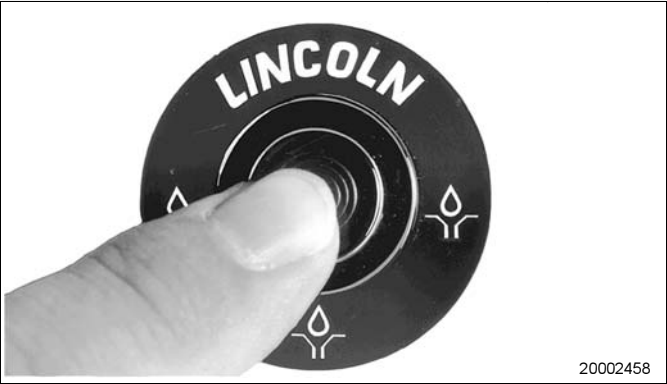


PCB 8 Components of the control p.c.b. T-PCBv-020f10

- ➔ 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 operating cycle.
- Additional lubrications are possible at any time by triggering the illuminated pushbutton.

- 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

External triggering of an additional lubrication cycle



PCB 9 Pushbutton for external triggering of an additional lubrication cycle

- Press pushbutton > 2 seconds.

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
2)

To remedy a fault



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IMPORTANT

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

- 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").

Troubleshooting



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NOTE

The pump operation can be stated from the outside by:

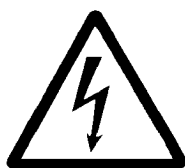
- the rotating stirring paddle (e.g. by triggering an additional lubrication cycle)
- the LEDs of the control p.c.b. (see chapter "Fault indication")
- the signal lamp of the illuminated pushbutton (option)

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 ...



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- ➔ 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.

- ➔ 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").

by service personnel

Fault: Right-hand LED 3 (see fig. 9) flashes

Cause:

- One of the two rotary switches 2, 4 is on „0“.
Signal: 4 flashes
- Short circuit at pushbutton of the control p.c.b. or, if present, at the external illuminated pushbutton or at their connecting parts.
Signal: 3 flashes

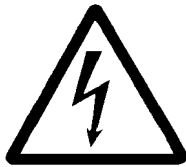
Remedy: ...

- ➔ Set rotary switch to a number or a letter.
- ➔ Check whether the short circuit is at the PCB or, if present, at the illuminated pushbutton. If necessary, exchange the PCB or the illuminated pushbutton.

by service personnel

Maintenance and Repair

Electrical Connection



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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.



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NOTE

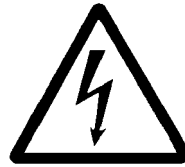
The protection IP6K9K is guaranteed when the socket (X1:, X2: & X3:) is tightened on the housing cover with flat packing.

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 pump.
 - type of connection (VDC / VAC)
 - low-level indication
 - type of connection plug
- Connect the electrical wires according to the following electrical connecting diagrams (see chapter „Technical Data“).

Operation with bayonet plug



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CAUTION!

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

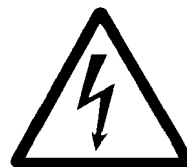
Protective measures to be applied for appropriate operation with bayonet plugs:

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

Standards:

DIN EN 60204 Part 1: 2007-07 / IEC 204-1 /

DIN VDE 0100 Part 410: 2007-06 / IEC 364-4-41



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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).

Printed Circuit Boards



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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.

Technical Data

Electrical Data

Rated voltage 24 VDC
Operating voltage at 12/24 VDC 9 ... 30 V
Residual ripple in relation to the operating voltage ¹⁾ DIN 41755: ± 5%
Output motor Transistor 7A / short-circuit proof
Reverse polarity protection of the operating voltage inlets yes
Adm. operating temperature -25 °C ... +70 °C
Lamp electricity (design 2A) max. 2A
Output fault / readiness for service Transistor 10A / short-circuit proof
Protection:
Control p.c.b. installed in housing IP6K 9K

EMC ¹⁾

EMC 2009/19/EC (vehicles)
EMC 2004/108/EC
a) for industrial environment:
- Emitted interference acc. to ²⁾ DIN EN 61000-6-4
- Noise immunity acc. to DIN EN 61000-6-2
b) for residential, commercial and light industry:
- Emitted interference acc. to ²⁾ DIN EN 61000-6-3
- Noise immunity acc. to DIN EN 61000-6-1

Time Setting

Range of pause time 4, 8, 12, ..., 60 minutes
- or 1, 2, 3, ..., 15 hours
Range of lubricating time 2, 4, 6, ..., 30 minutes
- or 8, 16, 24, ..., 120 seconds
Timer memory indefinite over EEPROM

Factory setting

- Pause Time 6 hours
- Lubricating time 6 minutes



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NOTE

In order to protect the printed circuit board against condensation, it has been covered with a protective varnish.



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¹⁾ NOTE

The pumps correspond to the following EMC directives:
- for vehicles ^{A)} EMC 2009/19/EC
- for industry EMC 2004/108/EC

^{A)} *marked with the EC approval symbol (e icon) on the type identification plate.*



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²⁾ NOTE

The emitted interference meets the requirements for the industrial sector, if used in the residential sector this may possibly lead to interference.

Terminals of the printed circuit board

Signal lamp ¹⁾
Additional lubrication ¹⁾
Level control ¹⁾
- Low-level control ¹⁾
+ Low-level control ¹⁾
+ Motor
- Motor
Machine contact or driving switch (+ VDC)
Contact 30 (Example: bridged with contact 15)
Earth (- 0 VDC)
¹⁾ Option

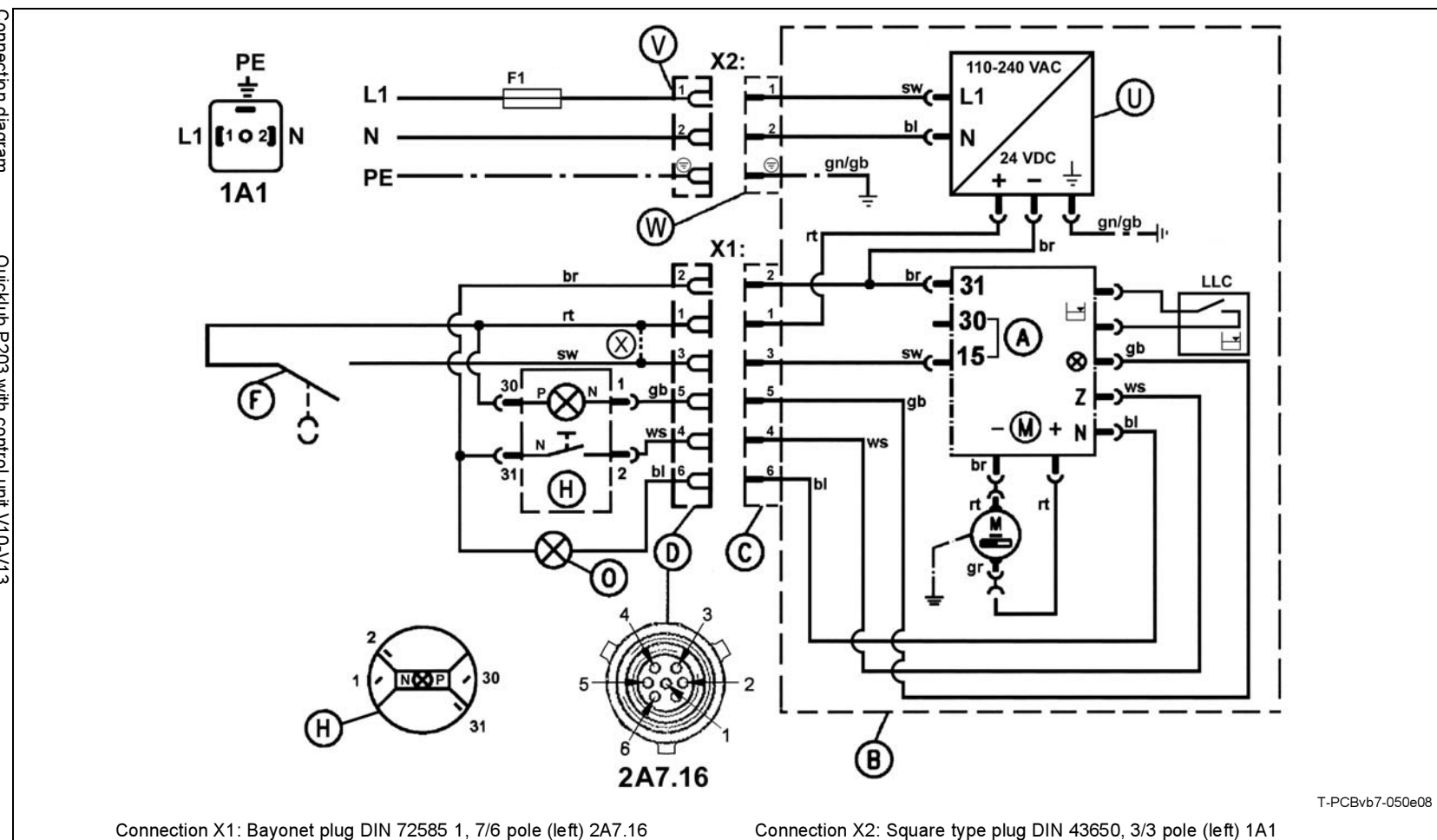
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Terminals of the printed circuit board V10 V13 (contact 15/30 bridged)

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)
(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 6A (T)

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

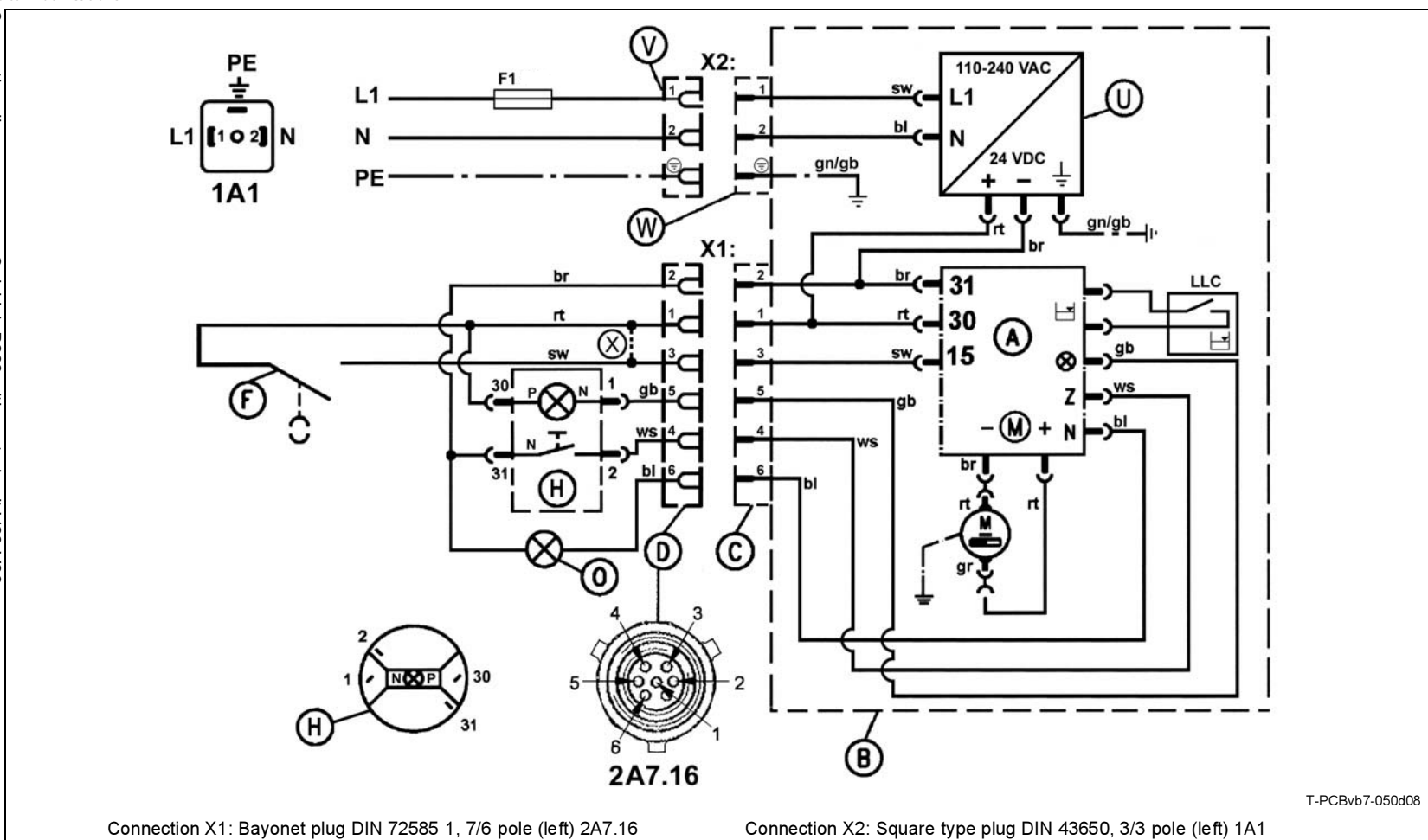
W Connection plug 1A1 at the pump housing

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) (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 6A (T)

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

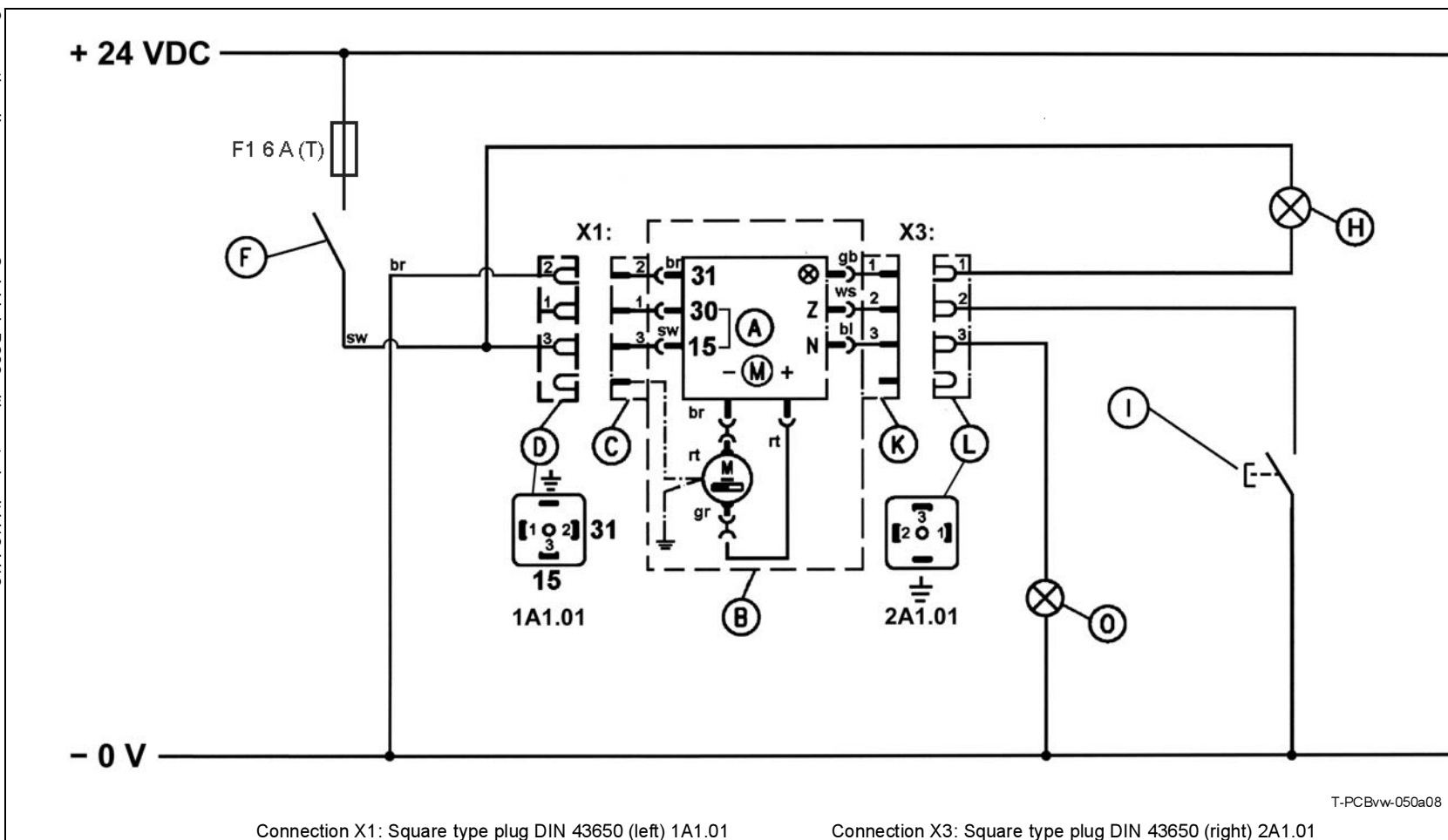
W Connection plug 1A1 at pump housing

Z Operational test / additional lubrication

Technical Data, continuation

VDC Connection diagram for industrial application

Type of connection 2A1.01 Square-type plug (3/2-pole) with socket without cable (X1 & X3)
Control unit V10-V13 (15/30 bridged)



1A1.01: Socket with cable, 3 core for power supply 24 VDC

2A1.01: Socket to connect the illuminated pushbutton (for additional lubrication and functional test) and the signal lamp in case of 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 1A1.01 at pump housing
- D Socket X1
- F Machine contact
- H external lamp for functional test

- I external key for operational test and additional lubrication
- K Connection plug 2A1.01 at pump housing
- L Socket X3
- M Electric motor
- N Level control
- O external signal lamp in case of low level indication
- Z Operational test / additional lubrication

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



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IMPORTANT

Do not connect the socket D with contact 30, since the control p.c.b. is connected internally

5 30

2.6EN-28006-A15

Type of connection	2A 01	Square-type plugs (3/2-pole) with socket without cable (X1 & X3)
Control unit	V10-V13	(15/30 bridged)

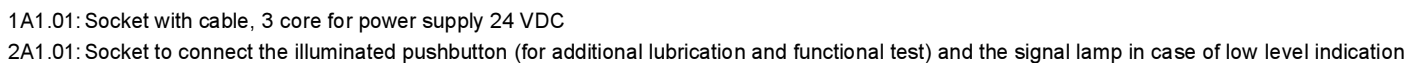


- | | | | |
|----|-------|----|--------|
| br | brown | gb | yellow |
| sw | black | ws | white |
| rt | red | bl | blue |
| | | gr | grey |



Do not connect the socket D with contact 30, since the control p.c.b. is connected internally between 15 and 30.

Type of connection	2A1 01	Square-type plugs (3/3-pole) with socket without cable (X1 & X3)
Control unit	V20-V23	(15/30 not bridged)



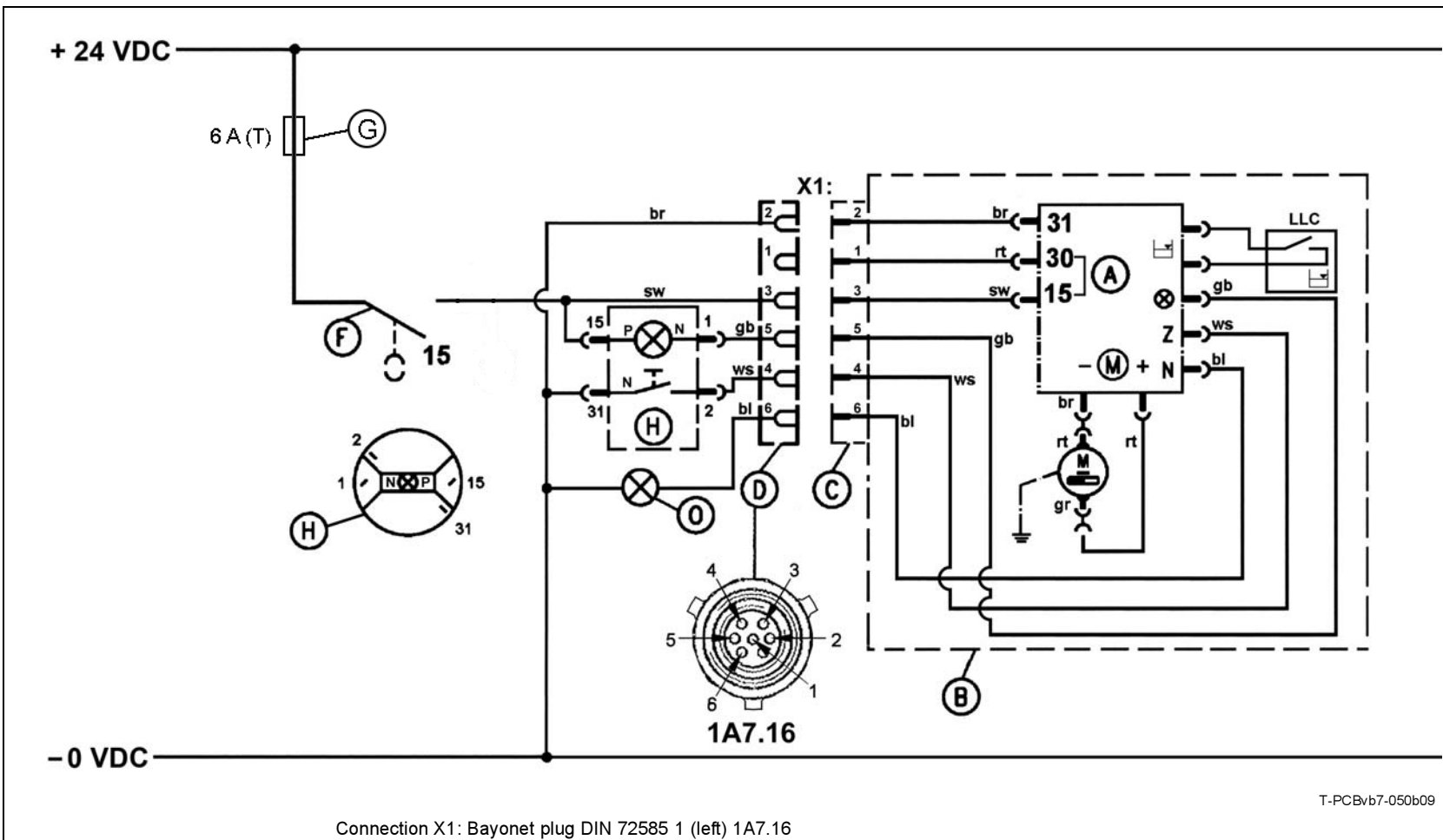
- | | |
|---|--|
| G | Fuse 6A (T) |
| H | External illuminated pushbutton |
| K | Connection plug 2A1.01 at the pump housing |
| L | Socket X3 |
| N | Level control |
| O | external signal lamp in case of low level indication |
| P | Battery cut off |
| Z | Operational test / additional lubrication |

br	brown	gb	yellow
sw	black	ws	white
rt	red	bl	blue
		gr	grey

Technical Data, continuation

VDC Connection diagram for industrial application

Type of connection 1A7 16 Bayonet plug (7/5-pole) with socket and 10 m cable 6-core (X1)
Control unit V10-V13 (15/30 bridged)



1A7.16: Socket with 10 m cable, 6 core for power supply 24 VDC,

& 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

30 bridged with 15

31 0 VDC

M Electric motor

A Control p.c.b. V20 V23

B Pump housing

C Connection plug 1A7.16 at pump housing

D Socket X1

F Machine contact

G Fuse 6A (T)

H External illuminated pushbutton

N Level control

O external signal lamp in case of low level indication

Z Operational test / additional lubrication

br brown gb yellow

sw black ws white

rt red bl blue

gr grey

Type of connection	1A7 16 Bayonet p ug (7/6-po e) wth socket and 10 m cab e 6-core (X1)
Control unit V20-V23	(15/30 not brdged)



Connection X1 Bayonet plug DIN 72585 1 (left) 1A7.16

br	brown	gb	yellow
sw	black	ws	white
rt	red	bl	blue
		gr	grey

- | | |
|---|--|
| G | Fuse 6A (T) |
| H | External illuminated pushbutton |
| N | Level control |
| O | external signal lamp in case of low level indication |
| Z | Operational test / additional lubrication |

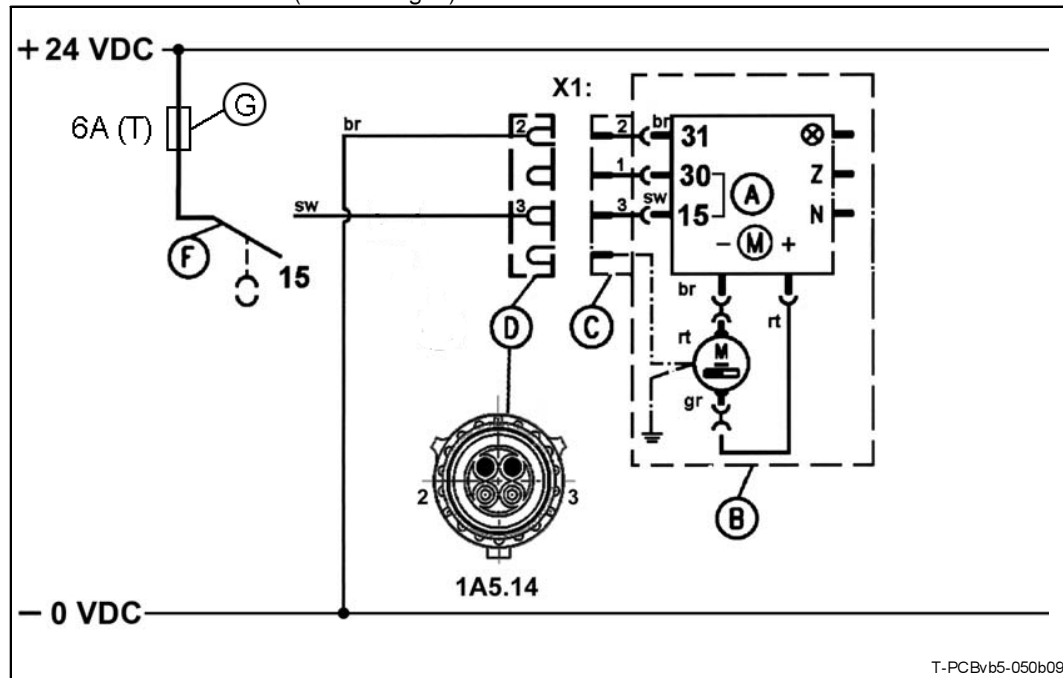
Technical Data, continuation

VDC Connection diagram for industrial application

Type of connection 1A5.14: Bayonet plug (4-pole) with 10 m cable, 3-core (X1)

(without low-level control, without external key for additional lubrication, without external signal lamp)

Control unit V10-V13 (15/30 bridged)



- A Control p.c.b. V10 V13
- B Pump housing
- C Plug 1A5.14 at PCB housing
- D Socket X1
- F Machine contact
- G Fuse, 6A (T)
- M Electric motor

sw black
br brown
rt red
gr grey

IMPORTANT

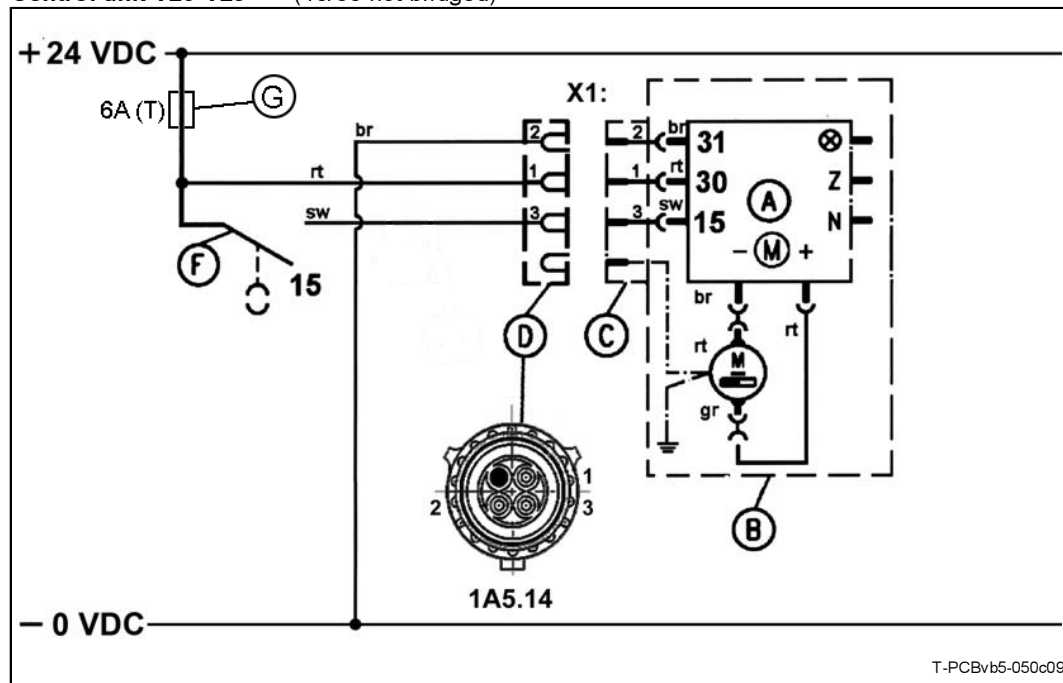
Do not connect the socket D with contact 30, since the control p.c.b. is connected internally between 15 and 30.

Connection diagram: Quicklub P203 (VDC)
Connection X1: Bayonet plug DIN 72585 1 (left) 1A5.14, 4/2 pole

T-PCBvb5-050b09

15 Power supply + (24 VDC) via machine contact 30 bridged with 15 31 0 VDC

Control unit V20-V23 (15/30 not bridged)



- A Control p.c.b. V20 V23
- B Pump housing
- C Plug 1A5.14 at PCB housing
- D Socket X1
- F Machine contact
- G Fuse, 6A (T)
- M Electric motor

sw black
br brown
rt red

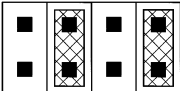
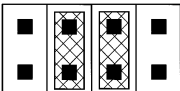
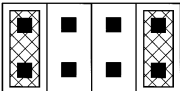
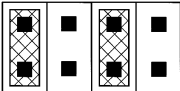
Connection diagram: Quicklub P203 (VDC)
Connection X1: Bayonet plug DIN 72585 1 (left) 1A5.14, 4/3 pole

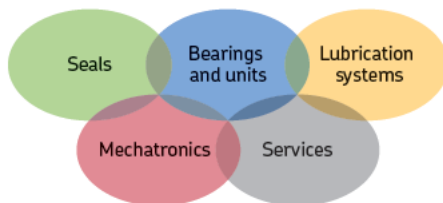
T-PCBvb5-050c09

15 Power supply + (24 VDC) via machine contact 30 + 24 VDC 31 0 VDC

Technical Data, 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



The Power of Knowledge Engineering

Drawing on five areas of competence and application-specific expertise amassed over more than 100 years, SKF brings innovative solutions to OEMs and production facilities in every major industry worldwide. These five competence areas include bearings and units, seals, lubrication systems, mechatronics (combining mechanics and electronics into intelligent systems), and a wide range of services, from 3-D computer modelling to advanced condition monitoring and reliability and asset management systems. A global presence provides SKF customers uniform quality standards and worldwide product availability.



Important information on product usage

All products from SKF may be used only for their intended purpose as described in this brochure and in any instructions. If operating instructions are supplied with the products, they must be read and followed.

Not all lubricants are suitable for use in centralized lubrication systems. SKF does offer an inspection service to test customer supplied lubricant to determine if it can be used in a centralized system. SKF lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.

Hazardous materials of any kind, especially the materials classified as hazardous by European Community Directive EC 67/548/EEC, Article 2, Par. 2, may only be used to fill SKF centralized lubrication systems and components and delivered and/or distributed with the same after consulting with and receiving written approval from SKF.

Status of information:

11/2015

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