ILC Srl

CME

CME series electric gear pump for oil and soft grease
Use in single-line and air+ oil centralised lubrication systems

Translation of original instructions

Assalub Pump Unit 907939

CE

All ILC products must only be used for their intended purposes, as specified in this brochure and in all instructions. If the product is supplied together with user instructions, the user is required to read them and comply with them. Not all lubricants are suitable for centralised lubrication systems. ILC lubrication systems or relative components cannot be used together with gas, liquid gas, pressurised gas in solution and liquids with vapour pressure exceeding normal atmospheric pressure (1013 bar) by more than 0.5 bar, maximum temperature permitted. Any type of dangerous materials, in particular those classified as such by European Community Directive (EC) 67/548/EEC, Article 2 (2), can only be used in ILC centralised lubrication systems or relative components upon consultation with ILC and after having received written approval from the company.

I.L.C. srl - Via Garibaldi, 149 - 20155 Gorla Minore - Italy
Phone +39 0331 601697 - Fax +39 0331 365149 - www.ilclube.com - info@ilclube.it

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1. Introduction

This use and maintenance manual refers to the CME pump. Using this pump makes it possible to distribute oil or soft grease in lubrication systems.

The latest version can be obtained by contacting the Sales Technical Office.

The pump that this manual refers to must be used by qualified personnel with basic hydraulic and electrical knowledge.

This use and maintenance manual contains important information to protect the health and safety of personnel who intend to use this equipment. This manual must be read carefully and kept in good conditions so that it is always available to operators who intend to refer to it.

2. Application

The CME gear pump has been designed for use in single-line or air + oil centralised lubrication systems. These systems use the principle of pressure and release pulses and the lubricant is sent to the volumetric valves or to the mixers positioned near the points of the machine to be lubricated.

Any use other than described above shall not be in agreement with the specifications of I.L.C. srl (pump manufacturer), who shall not be held responsible for any damage resulting from a different use.

3. Operating principle

The pump sends pressurised lubricant through two side outlets. This way the customer can connect the main pipe to both outlets or to one only, plugging the unused one.

When the motor is powered on, by an internal timer or an external PLC, the gear pump is activated, which sends lubricant from the reservoir to the distribution network through the two outlets or through the selected one.

Pressurisation of the distribution network forces the volumetric valves, whose metering chamber has been filled since the last lubrication cycle, to send the volume of lubricant inside them to the points. Once all the valves have been actuated, the pressure will increase until a pressure switch is triggered and, after a short time, it will be possible to interrupt motor operation.

At this point the pressurised lubricant will activate a release valve, which will discharge the pressure inside the tank and enable the volumetric valves to be filled.

The process repeats each time the motor is switched on and off.

When the system is at rest, a check valve maintains the main line at a pressure of 0.5/0.6 bar, thus preventing air from entering.

The status change of the pressure switch during operating time allows us to ensure there are no oil leaks in the main line.

The lack of lubricant inside the tank is signalled by a minimum level sensor.

4. Technical specifications

Tank capacity	2L - 3L
Measured capacities (A)	100 cc/1' 50 Hz AC 120 cc/1' 60 Hz AC 200 cc/1' 24 V DC
Outlet connections	2 BSP 1/4" seats (standard supplied with 1 left-hand lock cap)
Electrical connections	1 cable gland for power supply 1 cable gland for signals
Filling	Cap with 200 µ load filter
Pressure gauge	0 - 60 bar
Operating pressure	from 22 to 30 Bar
Lubricants	Oils from 20 to 1000 mm²/s Soft greases NLGI 000 and 00
Operating temperature	0°C - 50°C
Protection rating	IP-65
Weight (empty tank)	3.5 Kg (2l) 4.3 Kg (3l)
Manual button amperage	1 A 250 V AC - 3 A 120 V AC
Storage temperature	10°C ÷ +40°C
Noise level	<70 db(A)
Operating humidity	90% max
Operating mode	S3, 20%
Max Operating Time	20% min×0.2 = 4 min. Pump cycle with subsequent down time of 16 min.

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5. Installation

Only install the pump in a horizontal position, fastening it to the wall by two M6 bolts.

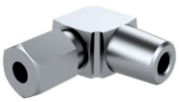
An area offering a view of the front panel, easy access in case of maintenance, easy access to the filling system and easy connection to the distribution network is recommended.

Arrange space below the unit for any tank disassembly.

The unit allows connection to the distribution network from two outlet ports and is supplied with a ¼" Gas cap installed on the left side. In case of supply from the left side, the cap must be moved to the right side. If the distribution network is present on both sides, the cap must be removed. The two outlets are both ¼" Gas and the 6 mm pipe fitting must be ordered separately (codes below).

03-257-2

03-257-4



ZZZ106-105-L

ZZZ106-005-L

The unit is supplied with two cable glands, one for voltage and the other for the controls.

All rigid pipes, flexible hoses and fittings must be compatible with the lubricant, the operating pressure and the surrounding environment. In general, try to install the unit in the lowest position (vertically) in relation to the rest of the distribution network, without creating pipe sections that go up and down. This is in case air enters the distribution lines. Air bubbles tend to rise towards the end of the distribution line and are not removed along the way. The presence of air bubbles along the distribution line prevents the correct operation of the metering valves and mixers.

Use the pressure switch to check for leaks in the main line during the lubrication cycles. For systems with a main line exceeding 8 m, we recommend installing a pressure switch at the end of the main line and not connecting the one on the unit.

Caution!
All electrical connections must be set up by qualified personnel and all requirements of local regulations must be followed. Refer to the electrical connection diagram for correct wiring.

Caution!
The unit must be protected by a differential magnetothermal switch with a breaking threshold of 0.03 A and a max time of 1 second (breaking power = 10 KV – rated current = 4 A).

6. Commissioning

The tank is filled with clean lubricant, without exceeding the MAX level, by means of the load cap complete with filter (in case of oil). It must be recommended by the machine manufacturer and must comply with the following viscosities

Oils from 20 to 1500 cSt	Soft greases NLGI 000 or 00

Loosen the cap in the distribution network furthest from the unit. Supply the pump until lubricant leaks, air-free, from the loose cap. Tighten the cap, run lubrication cycles until the lubricant comes out of the volumetric valves. Fill the secondary pipes with additional cycles. The system is now ready to lubricate all points.

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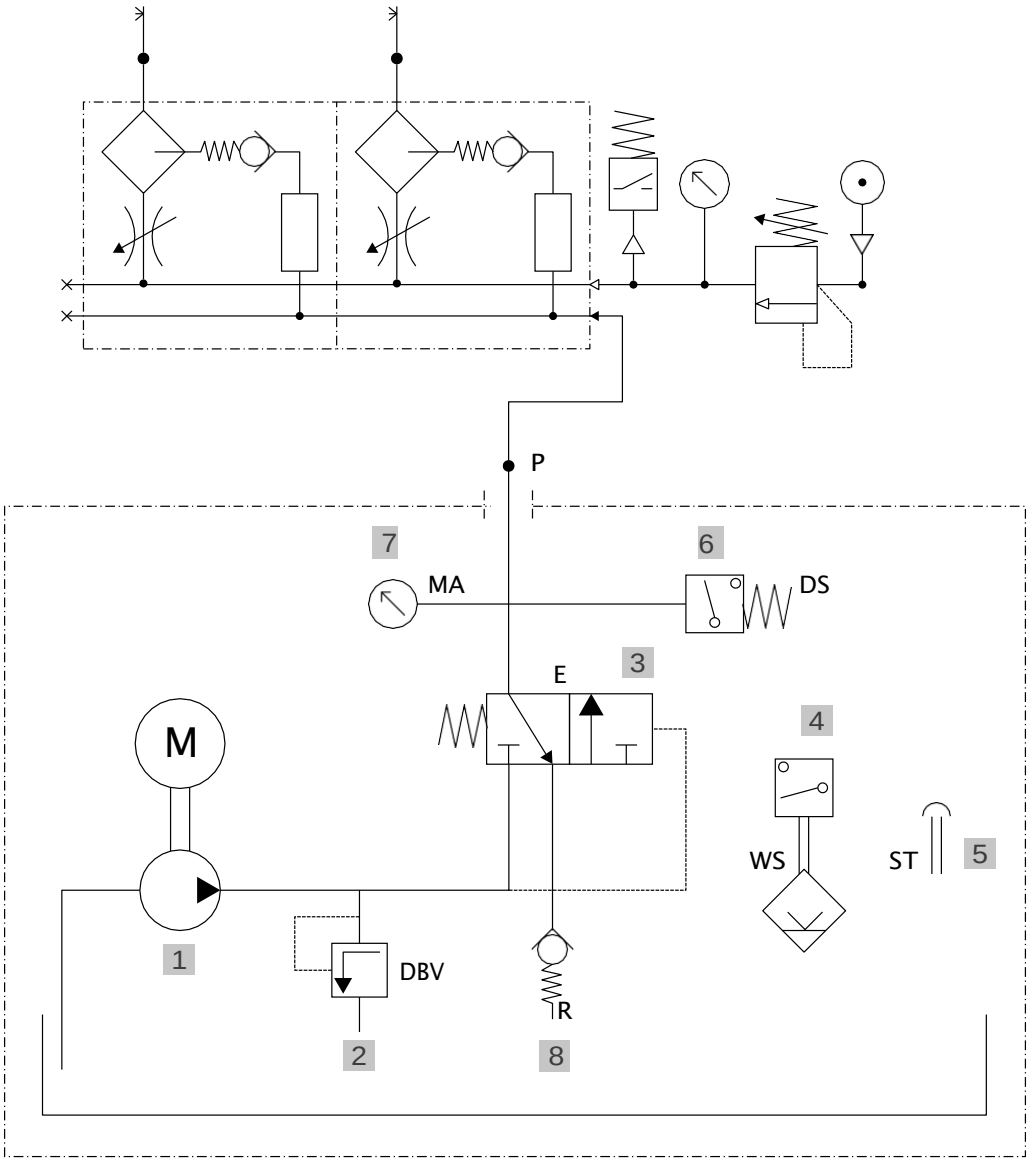
7. Hydraulic diagram



1	gear pump	6	pressure switch for controlling the main line
2	pressure relief valve	7	pressure gauge
3	release valve	8	intake valve
4	minimum level of lubricant check	9	electric motor
5	lubricant loading filter		

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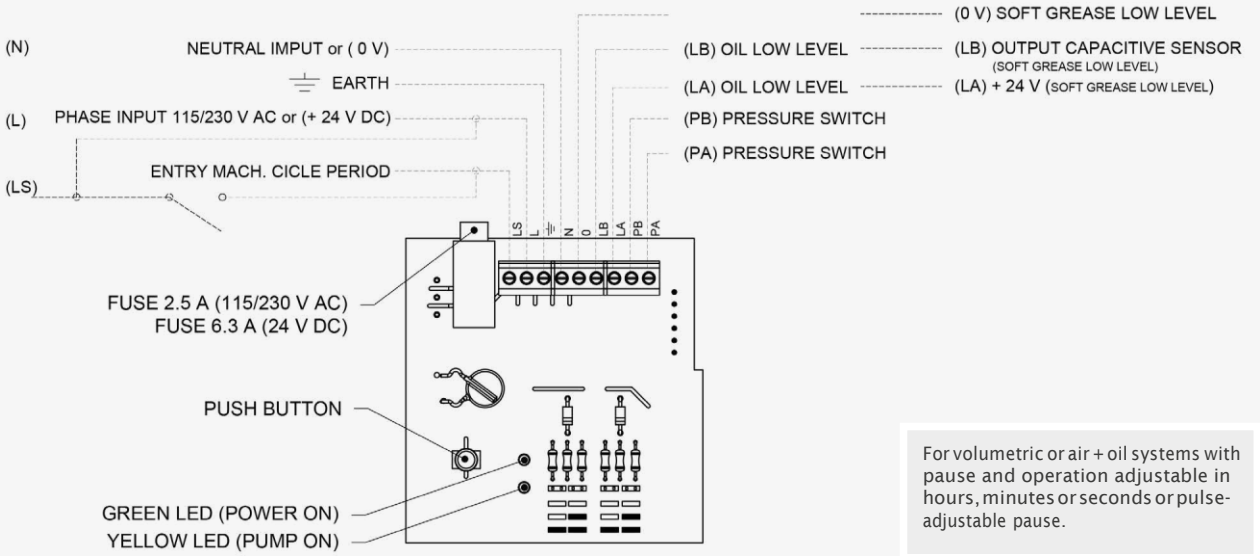
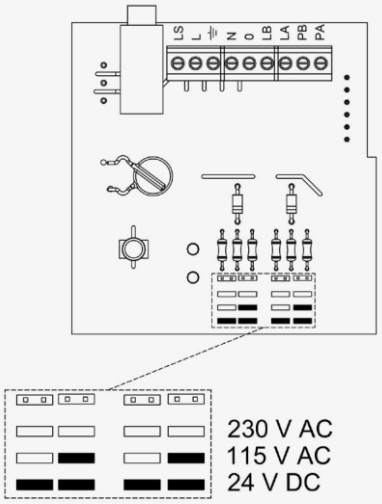
8. Version without electronic board

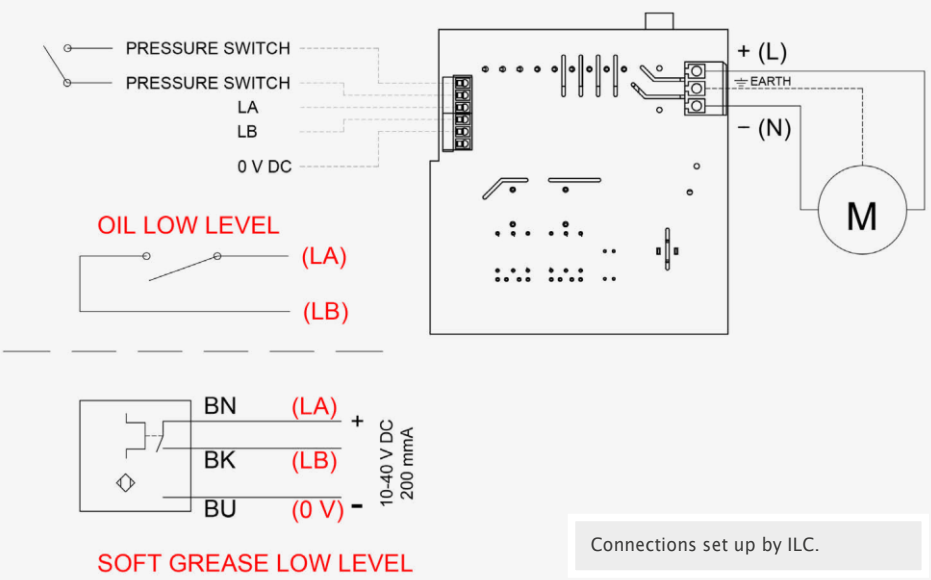
The lubrication cycles are programmed by an external PLC. The pump is equipped with a board in which all electrical connections merge and is equipped with a manual button for extra-cycles. Furthermore it will be possible to connect the contact of the minimum lubricant level and the pressure switch to the PLC to generate any alarms.

Electrical connections



For volumetric or air + oil systems with pause and operation adjustable in hours, minutes or seconds or pulse-adjustable pause.





Connections set up by ILC.

pause = the stop period of the pump / operation = the running time of the pump

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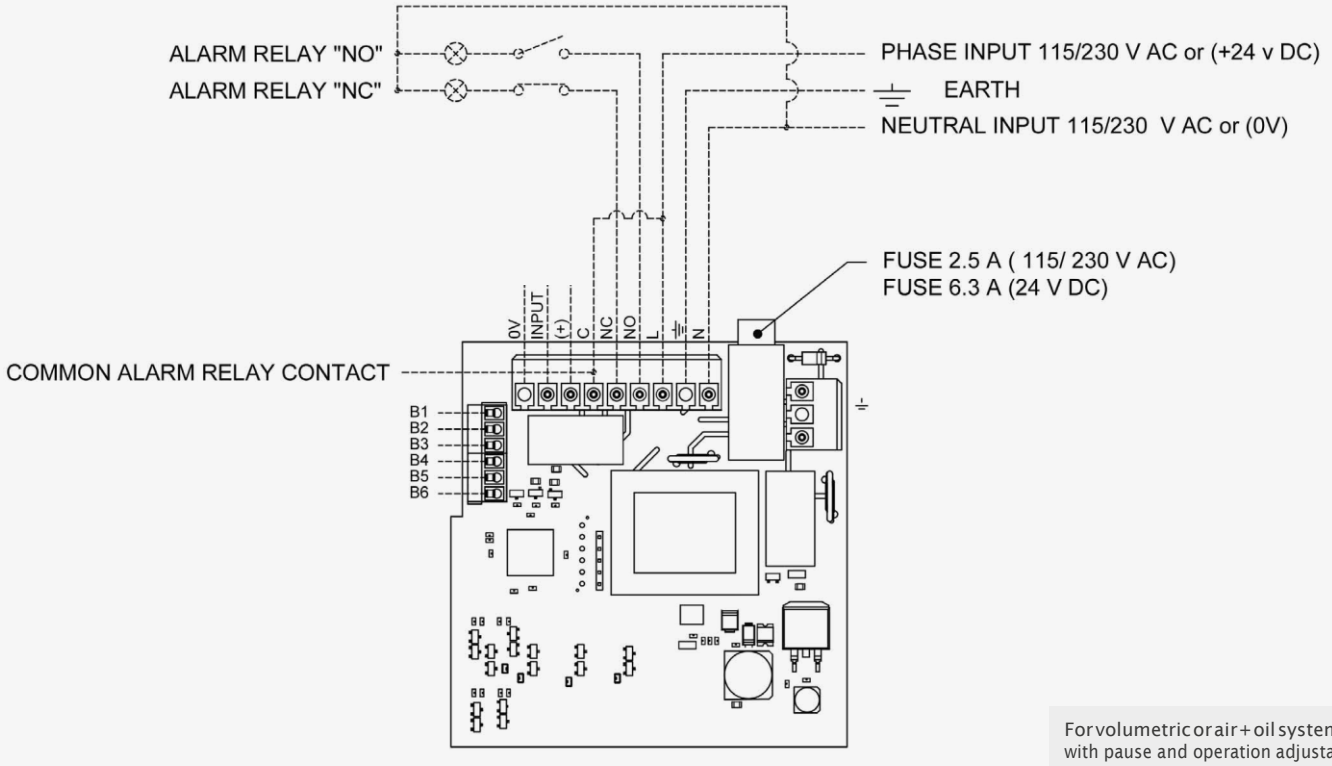
9. Version with electronic board

An electronic board is installed inside the pump which controls and checks the operation of the entire system. The board is equipped with a display with 4 digits and 4 programming buttons, including the extra-cycle button. In this version, the pump is delivered with level alarm activated (AL-1), oil pressure switch alarm activated (AO-1) and prelube on (the pump starts when it is switched on and operates for the set operating time) PL-1.

The pump can be programmed to:

- immediately run a lubrication cycle when the motor is switched on (which we will call PRELUBE) or not.
- Set a pause time (the pump stops) and an operating time (the pump operates)
- Alternatively the pause (pump stopped) can be established in number of pulses instead of in hours/minutes/seconds. Once the set number of pulses is reached, the pump starts running for the selected operating time.
- Set the minimum electrical level control function of the lubricant.
- Set the oil pressure switch control function to check system operation.
- Set the air pressure switch control function in the air + oil systems to check that air is always present in the system.
- Adjust the warm-up depending on customer needs.

Electrical connections



For volumetric or air + oil systems with pause and operation adjustable in hours, minutes or seconds.

pause = the stop period of the pump / operation = the running time of the pump

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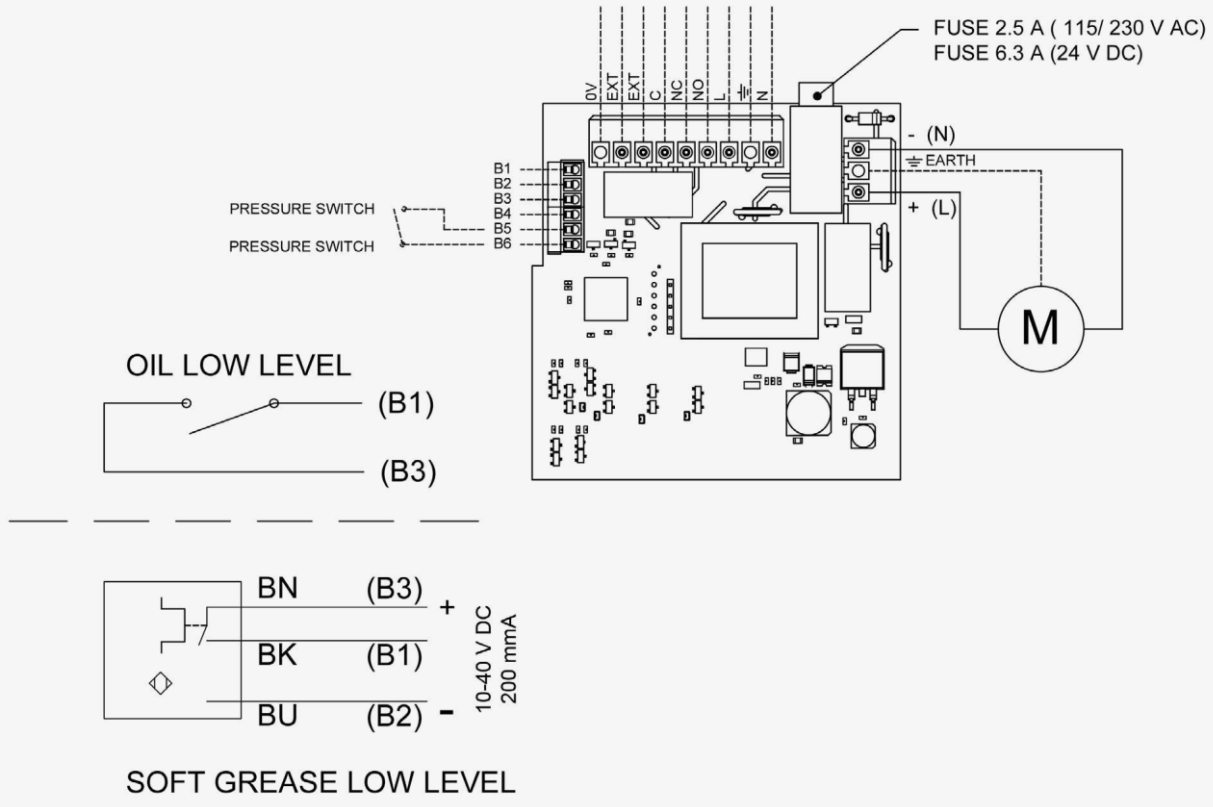
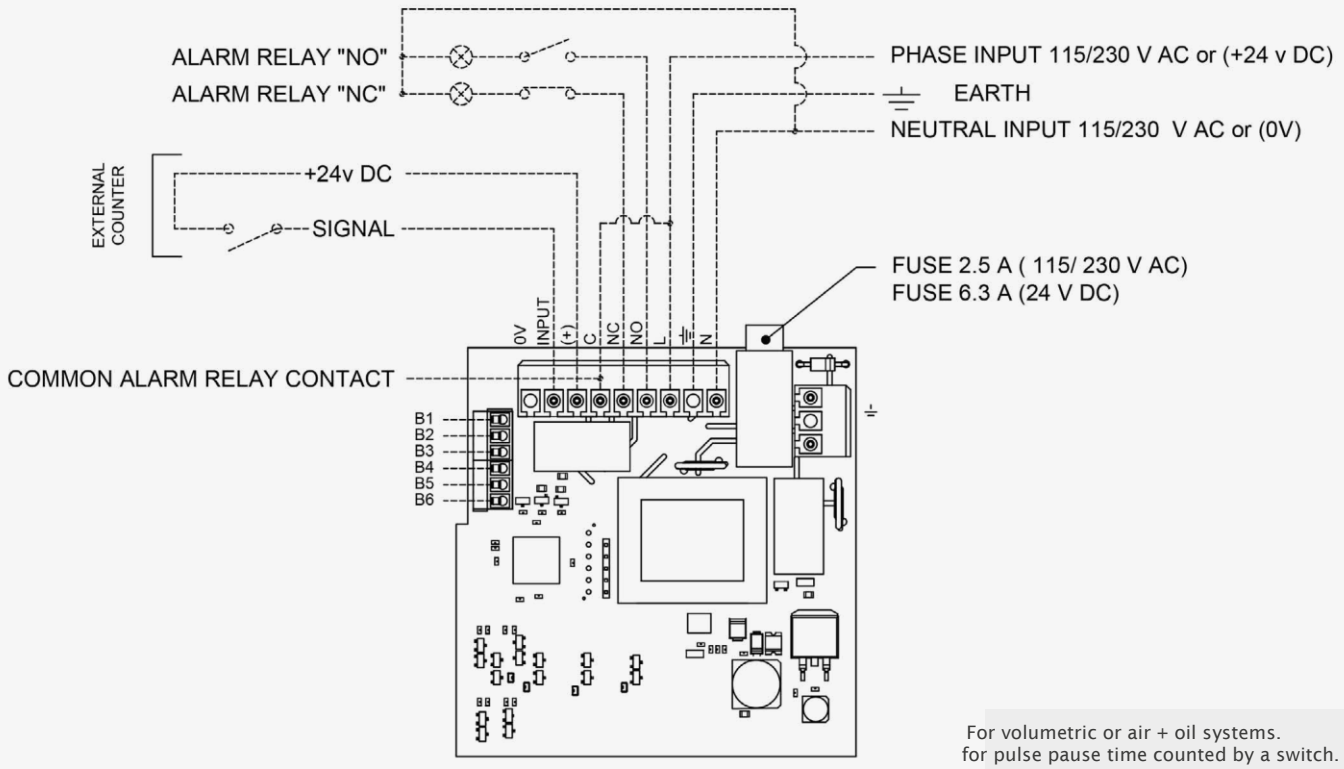
Electrical connections (continued)



Connections set up by ILC.



For volumetric or air + oil systems.
for pulse pause time counted by a switch.

pause = the stop period of the pump / operation = the running time of the pump

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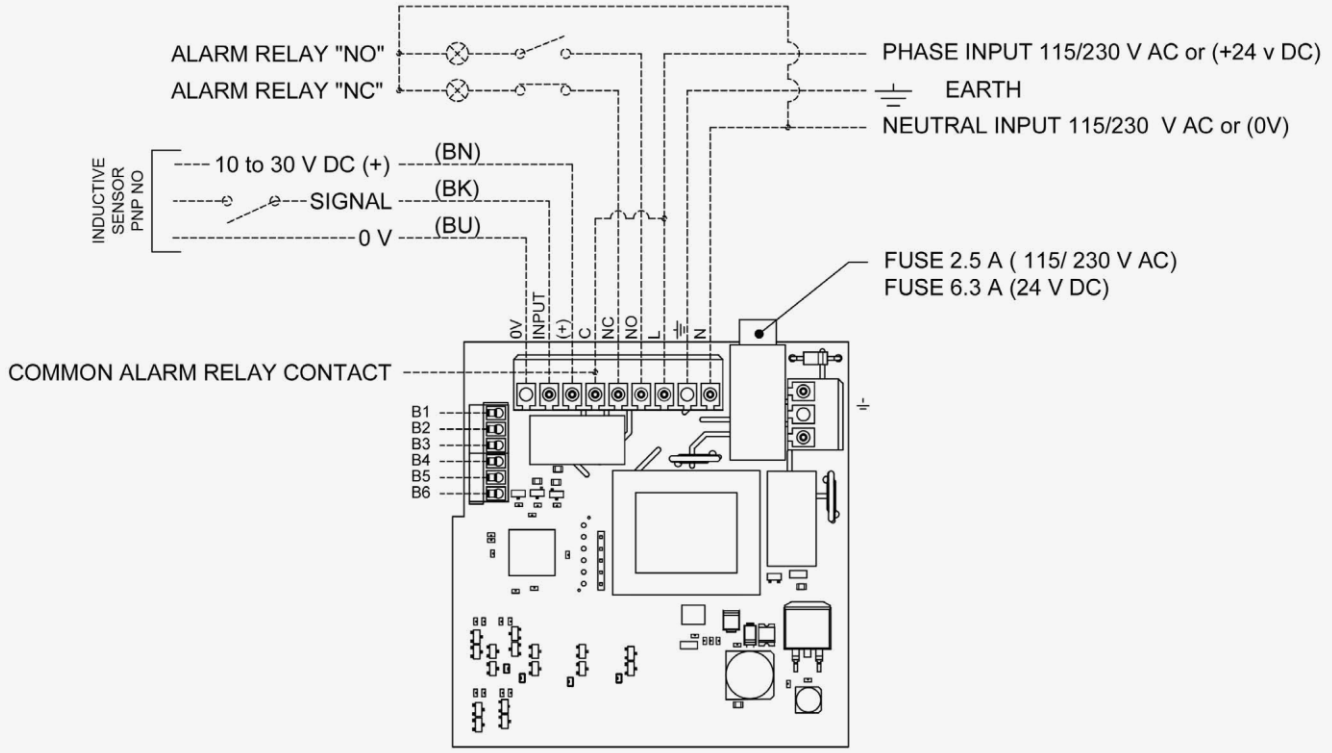
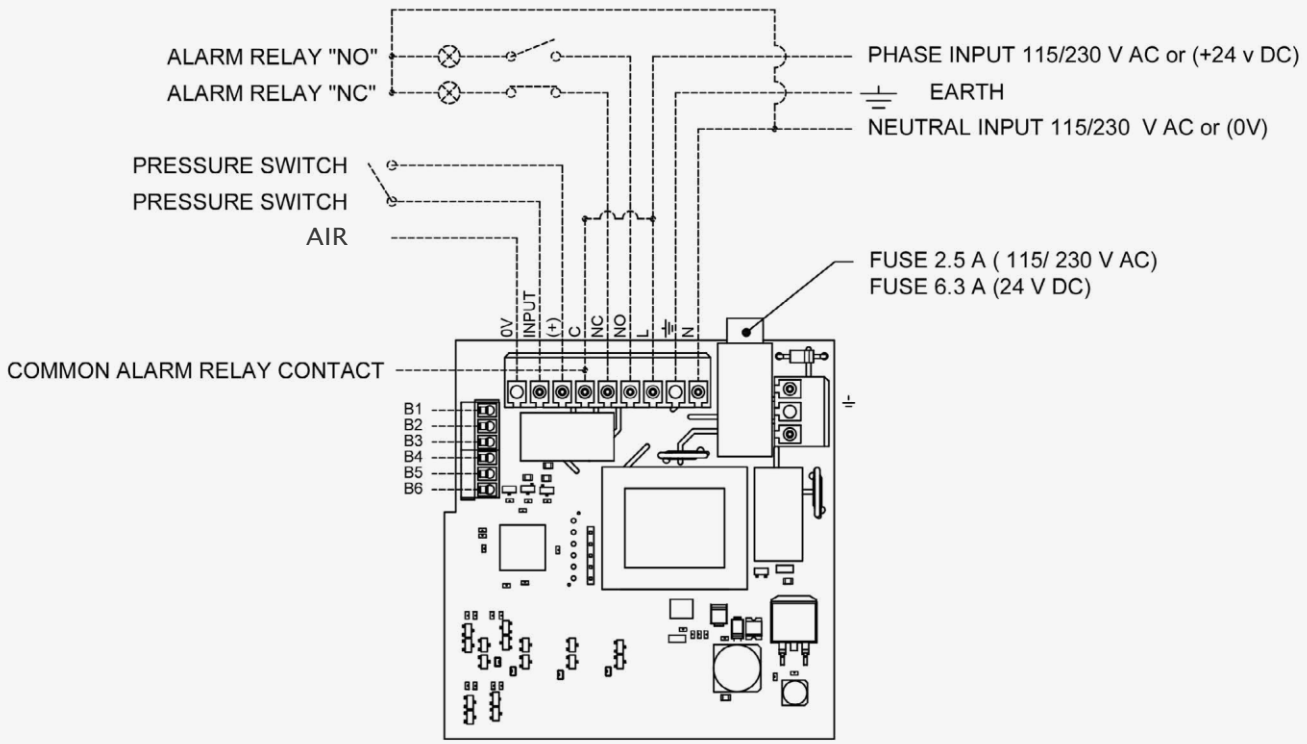
Electrical connections (continued)



For volumetric or air + oil systems.
For pulse pause time counted by a proximity sensor.



for air oil systems with air control through a pressure switch. By checking the air pressure switch, the pause cannot be adjusted in pulses.

pause = the stop period of the pump / operation = the running time of the pump

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10. Operating mode

10.1 Operating Mode

In operating mode, the board controls the pump by alternating work cycles with pause cycles. The duration of the work stage can be configured as time while the duration of the pause can be counted in time (PL mode) or in number of pulses, which the board reads via the dedicated input (IL mode).

Key	Function
↓	Circularly scrolls the menus downwards
↑	Circularly scrolls the menus upwards
↵	Enters programming mode if pressed for 3+ seconds
M	Immediately starts an extra work cycle for the set time Resets all alarms

10.2 Programming Mode

Programming mode is accessed by holding the ENT key for 3s. This mode allows the user to access and change all the setting parameters of the board and alarms.

Caution! In order to memorise the programming of all entered changes, hold the **Enter key for at least 5 seconds** after the changes have been made.
Then, the pump will automatically start for one cycle.

Key	Function
↓	Circularly scrolls the parameters downwards Increases the value of a parameter
↑	Circularly scrolls the parameters upwards Decreases the value of a parameter
↵	If held for 5+ seconds, saves changes and switches to Operating mode
M	Accesses the parameter edit / validates a set parameter and goes back to the overall parameter list.

11. Menu type selection

11.1 Setting Reduced Menu

Hold the ↵ key down for 3 seconds to start programming

The word E-CM appears with the 3 LEDs flashing on the left.
Press the button M

Select CM-b using ↑ ↓
Press M

E-CM appears. E-CM is now in Reduced Menu mode.

11.2 Setting Complete Menu

Hold the ↵ key down for 3 seconds to start programming

The word E-CM appears with the 3 LEDs flashing on the left.
Press the button M

Select CM-F using ↑ ↓
Press M.

E-CM appears. E--CM is now in Complete Menu mode.

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12. Pause and operating Mode setting** (complete and reduced menu)

12.1 Program Pause time in h/m/s (FU-PL)

From E-CM Press ↓. E-FU appears
Press M.

Select FU.PL using ↑↓.
Press M to confirm and return to E-FU.

From E-FU, press ↓

E-LS appears. Press M. Adjust the operating time in seconds from 1 to a 60 using ↑↓ Press M to confirm.

Press ↓. E-PS appears. Press M. Set a pause time from 150 to 999 [1] seconds using ↑↓. Press M to confirm.

Press ↓. E-PM appears. Press M.
Set a pause time from 0 to 999 minutes using ↑↓. Press M to confirm.

Press ↓. E-PH appears. Press M. Set a time from 0 to 999 hours using ↑↓.
Press M to confirm.

12.2 Program Pause time in pulses (FU-IL)

From EC-M Press ↓ E-FU appears.
Press M.

Select FU.IL using ↑↓.
Press M to confirm and return to E-FU.

From E-FU, press ↓

E-LS appears. Press M. Adjust the operating time in seconds from 1 to a 60 using ↑↓ Press M to confirm.

Select E-IP. Press M.
Set the pause in pulses from 1 to 9999 using ↑↓. Press M to confirm.

13. Advanced programming (complete menu)

13.1 Set warm-up cycles operating Seconds*

From E-PH or E-IL, press ↓. E-ML appears. Press M

Set the operating seconds for warm-up cycles (1-60) using ↑↓.
Press M to confirm.

13.2 Set warm-up cycles pause seconds*

From E-ML, press ↓. E-MS appears.
Press M

Set the pause seconds for warm-up cycles (1-60) using ↑↓.
Press M to confirm.

[1] *With E-PM=0 and E-PH=0 E-PS can only be adjusted from 150 to 999.*
With E-PM or E-PH are different from 0 E-PS can only be adjusted from 0 to 999.

**functions only for air+oil systems exclusively for use by ILC*

*** pause = the stop period of the pump / operation = the running time of the pump*

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13.3 Set warmup cycles number*

From E-MS, press ↓. E-MC appears.
Press M.

Set the warm-up cycles number (1-99) using ↑↓. Press M to confirm.

13.4 Warm-up enabling*

From E-MC, press ↓. E-MP appears.
Press M.

Select mode with ↑↓
MP-0 indicates Warm-up not enabled.
MP-1 indicates Warm-up enabled.
Press M to confirm.

13.5 Pre-lubrication enabling

From E-MP, press ↓. E-PL appears.
Press M.

Select with ↑↓
PL-0 prelube not enabled
PL-1 prelube enabled
Press M to confirm.

13.6 Level alarm enabling

From E-PL, press ↓. E-AL appears.
Press M.

Select with ↑↓
AL-0 alarm not enabled
AL-1 alarm enabled
Press M to confirm.

In the event of an alarm, the display will show 1.1AL. This alarm does not block the pump if triggered.

13.7 Pressure switch alarm enabling

From E-AL, press ↓. E-AO appears.
Press M.

Select with ↑↓
AO-0 alarm disabled
AO-1 alarm enabled
Press M to confirm.

In the event of an alarm, the display will show bloc.
This alarm blocks the pump if triggered.

13.8 Air pressure switch alarm enabling**

From E-AO, press ↓. E-AA appears.
Press M.

Select with ↑↓
AA-0 alarm not enabled
AA-1 alarm enabled
Press M to confirm.

In the event of an alarm, the display will show bloc.
This alarm blocks the pump if triggered.

Parameter	Description	Default	Parameter	Description	Default
E-CM	Menu type	b	MS	Warmup pause seconds	20
FU	Operating Mode	PL	MC	Warmup cycles	2
LS	Operating seconds	5	MP	Warm-up enabling	0
PS	Pause seconds	150	PL	Prelube enabling	0
PM	Pause minutes	0	AL	Level alarm enabling	1
PH	Pause hours	0	AO	Oil alarm enabling	1
IP	Pause pulses	2	AA	Air alarm enabling	0
ML	Warmup operating seconds	10			

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***to be enabled only if a pressure switch to control the air is required*

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14. Maintenance

Premature wear of pump gears and other moving parts is caused by contaminated and dirty lubricants.
Failure of the volumetric valves which, as a consequence, do not send lubricant to the points, is caused by the presence of air in the distribution network or by contaminated lubricant. The unit does not require special maintenance if you avoid using contaminated lubricant and injecting air into the hydraulic circuit. Before performing any operation, make sure you have disconnected the power supply.

The maintenance table shows the main faults, causes and solutions. If the problem cannot be solved after consulting it, contact the technical office at ILC.

14.1 Maintenance table

Symptoms	Potential causes	Potential solutions
1. The pump does not dispense lubricant	1.1 Internal fittings loose or damaged 1.2 Gear pump worn 1.3 Release or intake valve dirty or damaged	1.1 Tighten the fittings 1.2 Replace the pump 1.3 Clean the valves
2. The pump does not dispense lubricant at the operating temperature	2.1 Pump worn 2.2 The pressure relief valve is not calibrated correctly or is dirty and the lubricant returns to the tank 2.3 Release valve dirty or damaged	2.1 Replace pump 2.2 Replace the pressure relief valve 2.3 Replace the release valve
3. The release valve does not open at the end of the operating cycle and the main line remains pressurised	3.1 Release valve dirty or damaged	3.1 Replace the release valve
4. The main line is emptied during the pause time	4.1 Loose fittings at pump outlet or along the distribution line 4.2 check valve dirty or damaged 4.3 Release valve dirty or damaged	4.1 Tighten the loose fittings 4.2 Replace the check valve 4.3 Replace the release valve
5. The lubrication cycle is not performed	5.1 Main line damaged or loose fittings 5.2 Uncalibrated pressure switch 5.3 The pump does not dispense oil 5.4 The pump does not dispense lubricant at the operating temperature	5.1 Repair the main line or tighten the fittings 5.2 Replace the pressure switch 5.3 See point 1. 5.4 See point 2.

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15. Transport

The products of I.L.C. Srl are packaged to market standard according to the regulations in force in the country of destination. Proceed with caution during transport. The product must be protected against impact. There are no restrictions for transportation by land, air or sea.

Caution!
Do not spill or throw away the product

15.1 Delivery

After receiving the shipment it is necessary to check the integrity of the products based on the accompanying documents. Packaging materials must be kept until any discrepancies have been clarified.

15.2 Storage

The following storage conditions apply for I.L.C. Srl products:

Storage of lubrication units

- Environmental conditions: dry and dust-free environment, storage in a well-ventilated and dry location
- Storage period: max. 24 months
- Admissible air humidity: <65%
- Storage temperature: from 10° C to 40° C
- Light: avoid direct exposure to sunlight or UV rays, isolate heat sources located in the vicinity

Storage of electronic and electrical equipment

- Environmental conditions: dry and dust-free environment, storage in a well-ventilated and dry location
- Storage period: max. 24 months
- Admissible air humidity: <65%
- Storage temperature: from 10° C to 40° C
- Light: avoid direct exposure to sunlight or UV rays, isolate heat sources located in the vicinity

General notes for storage

- Dust-protected storage by covering the devices with plastic film is recommended
- Protection against floor humidity, by storing on shelves or on wooden structures
- Before storage, it is recommended to protect the polished metal surfaces, specifically the friction components and the assembly surfaces, by treating them with a long-term anticorrosion product
- Approx. every 6 months: check for corrosion. If signs of corrosion are visible, it is recommended to eliminate them immediately and treat again with the anticorrosive agent
- The drives must be protected against mechanical damage

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16. Operation

16.1 General information

The pump operates automatically. However, the flow of the lubricant inside the piping must be checked periodically.

The filling level of lubricant in the reservoir, being installed, must be visually checked periodically. If an excessively low lubricant level is detected, it must be topped up to the maximum marking as described in the "Commissioning" chapter.

The information provided by the manufacturer of the machinery and of the lubricants must be strictly complied with.

Caution!
Only fill clean lubricant using a suitable device. The use of contaminated lubricants may cause very severe system malfunctions. The lubricant reservoir must be filled avoiding the formation of bubbles.

Caution!
Do not mix different types of lubricants, as damage may occur, resulting in expensive cleaning operations of the product/ central lubrication system. To avoid confusion, it is recommended to apply a note on the reservoir identifying what lubricant was used.

16.2 Commissioning

Before commissioning the product, it is recommended to check all electrical and hydraulic connections and, if applicable, the pneumatic connections.

The lubricant must be supplied without bubbles. For this purpose, fill the reservoir with clean lubricant. Then, run the pump until the lubricant comes out of all lubrication points without bubbles.

The purge cycle of the central lubrication system is carried out by opening the ends of the main pipe, so that lubricant comes out from this point without bubbles.

The inclusion of air in the lubricant greatly affects system operation, with potential damage due to the lack of lubrication of moving parts.

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17. Decommissioning

17.1 Temporary decommissioning

Temporary decommissioning of the product described occurs by disconnecting the electrical, pneumatic and/or hydraulic power supply connections.

For prolonged product decommissioning, please refer to the information in the "Transport and storage" chapter in these assembly instructions.

For product recommissioning, please refer to the information in the "General information" and “Commissioning” chapter in these assembly instructions.

17.2 Definitive decommissioning

For definitive product decommissioning, the regional legal regulations and the laws on the disposal of contaminated operating equipment must be strictly complied with.

Caution!
Lubricants may pollute the soil and groundwater. Therefore, it is recommended to properly use and dispose of the lubricants. Regional regulations and laws regarding disposal of lubricants must be complied with.

17.3 Disposal

During maintenance or demolition of the machine, do not release polluting parts into the environment. Refer to local regulations for correct waste disposal. When dismantling the pump, the identification plate and every other document must be destroyed.

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18. Precautions for use

It is necessary to carefully read the warnings on the risks related to using a lubricant pump. The operator must know how it functions and clearly understand the hazards of pumping pressurised lubricants.

18.1 It is recommended to

- Check the chemical compatibility of the materials that the pump is built with, with the fluid to be pumped. A wrong choice may cause, in addition to damage to the pumps and pipes, serious risks for people (leakage of irritating and harmful products to health) and for the environment.
- Never exceed the maximum operating pressure value allowed by the pump and by the components connected to it. In case of doubt, refer to the data on the machine plate.
- Only use original spare parts.
- Should it be necessary to replace components with others, make sure that they are suitable for operating at the maximum operating pressure of the pump.
- Never attempt to stop or divert any leaks with your hands or other parts of your body.
- Note: Personnel must use protective devices, clothing and tools that comply with the regulations in force in relation to the location and to the use of the pump both during operation and maintenance operations.

18.2 Flammability

The lubricant used in lubrication circuits is not a normally flammable liquid. However, it is crucial to adopt all precautions possible to prevent it from coming into contact with very hot parts or open flames.

18.3 Pressure

Before every operation, make sure there is no residual pressure in any branch of the lubricant circuit, which could cause oil to spray when disassembling fittings or components.

After long periods of inactivity, check the tightness of all the parts subject to pressure. Do not subject the fittings, pipes and pressurised parts to violent impact. Damaged flexible hoses or fittings are DANGEROUS, replace them. We recommend only using original spare parts.

18.4 Noise

Under normal operating conditions, the noise emission does not exceed a value of 70 dB "A" at a distance of 1 metre (39.3 inch) from the pump.

Use of the pump with NLGI00 consistency greases must be evaluated on a case by case basis, due to the extreme difference in the pour properties of the compound, depending both on the viscosity of the base oil but also on the soaps and additives used.

For further information about the technical features and the necessary safety measures, refer to the Product Safety sheet (Directive 93/112/EEC) regarding the type of lubricant chosen and supplied by the manufacturer.

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19. User instructions

Conformity to essential safety requirements and to the provisions in the machinery directive has been checked by filling out the prepared checklists contained in the technical file.

19.1 Lists used

- Risk assessment (UNI EN ISO 14121-1).
- Conformity to essential safety requirements (Machinery Directive –EC 06/42).

Risks not fully eliminated, but considered acceptable:

- Electrocution: this can only occur in the event of serious user carelessness.
- Use of unsuitable lubricant: the types of fluids that are not compatible with correct pump operation are listed below.*
- Contact with harmful fluids.

19.2 Inadmissible fluids

Liquids	Hazards
1. Lubricants with abrasive additives	Wear of the internal pump components
2. Lubricants with silicone additives	Pump seizing
3. Petrol - solvents - inflammable liquids	Fire - explosion - damaged gaskets
4. Corrosive products	Pump corrosion - injury to persons
5. Water	Pump oxidation
6. Food products	Contamination of said products

* For more detailed information on product compatibility with particular fluids, contact the I.L.C. Technical Office

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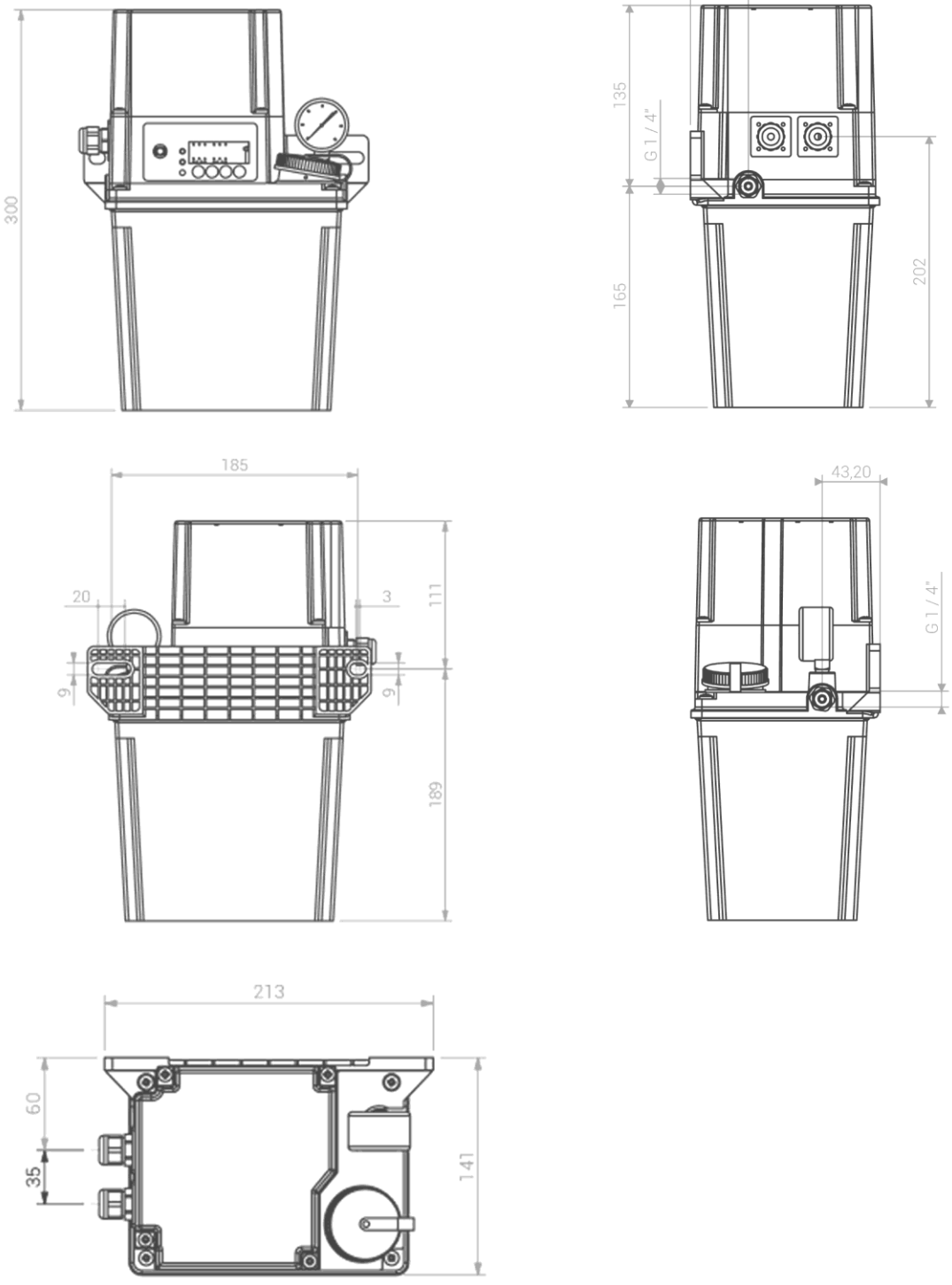
20. Dimensions CME 2L



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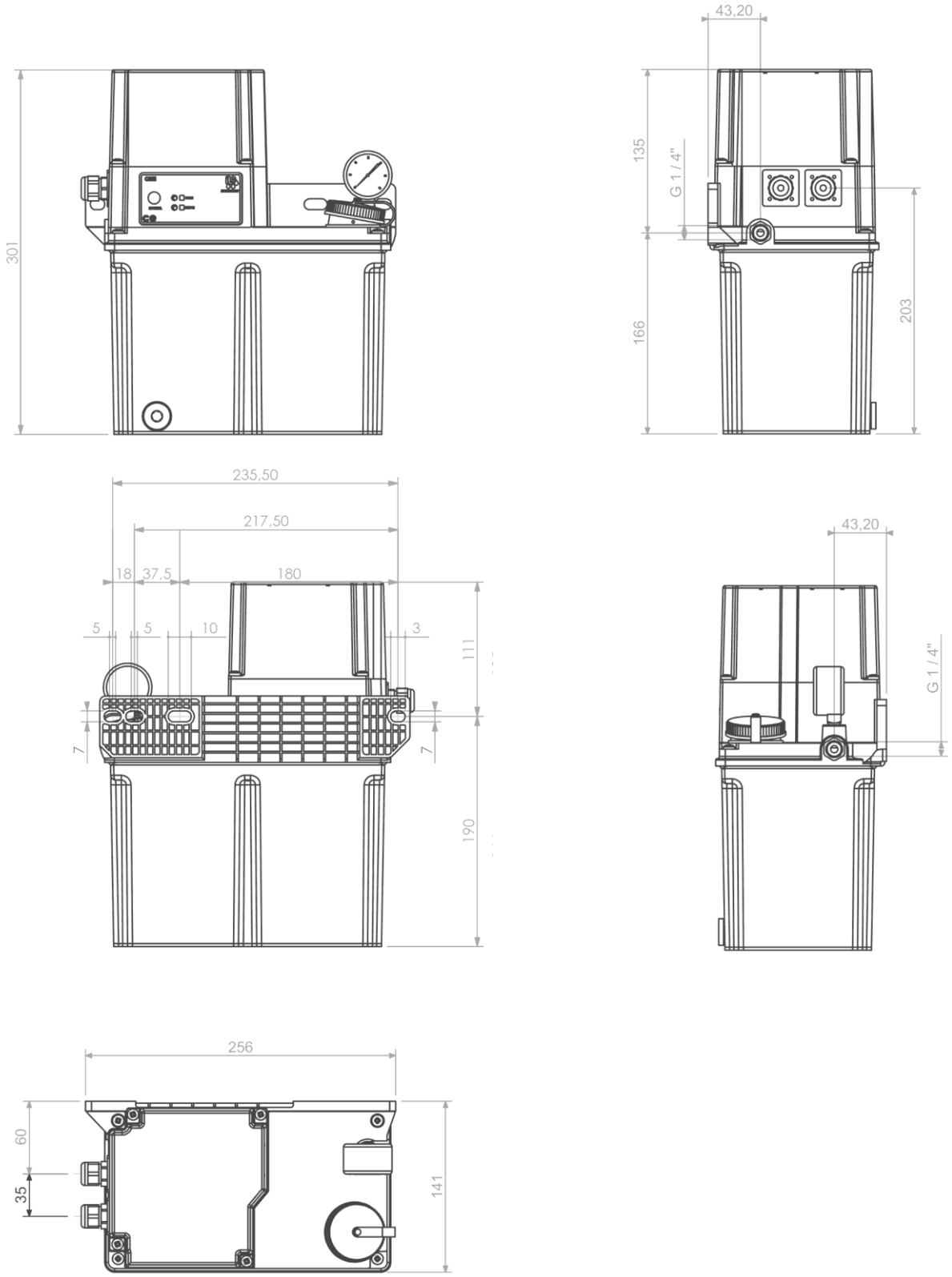
21. Dimensions CME 3L



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22. CME order code configurator

81	-	G 2	-	C T	-	24V
		A B		C		D

A (Lubricants)		B (Reservoir)		C (Control)		D (Power supply voltage)	
Soft grease	G	2L	2	External control	CE	24 V DC	24V
Oil	O	3L	3	Internal electronics	CT	115 V AC	115
						230 V AC	230

23. Fittings order codes

Compression fittings

Code	Figure	Pipe	Thread conical
ZZZ106-005	straight	6	BSP 1/4”
ZZZ106-105-L	90°	6	BSP 1/4”

Push-in fittings

Code	Figure	Pipe	Thread conical
03.257.4	straight	6	BSP 1/4”
03.257.2	90°	6	BSP 1/4”

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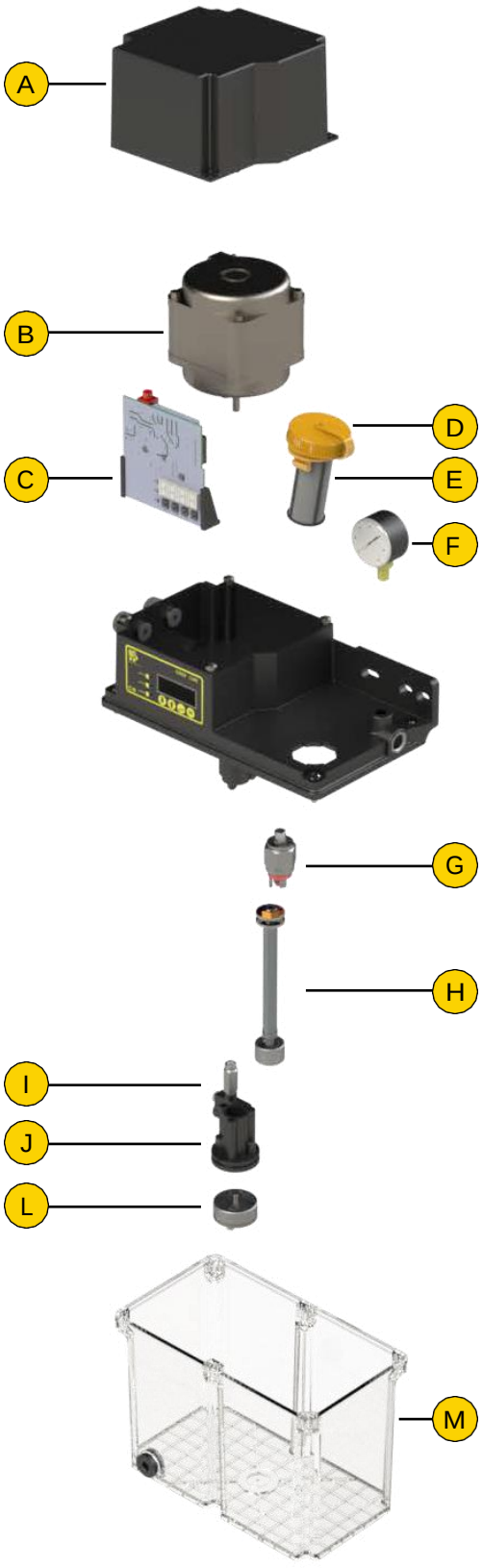
24. Spare parts



A	Motor cover	
		A70.093732
B	Motor	
	24 V DC	A94.150311
	115 V AC	A94.150303
	230 V AC	A94.150304
C	Control circuit and timer	
	Without timer (24V DC)	A91.111500
	Without timer (115/230 V AC)	A91.111501
	With timer (24V DC)	A91.111502
	With timer (115 V AC)	A91.111503
	With timer (230 V AC)	A91.111504
D	Loading cap	
		A70.093731
E	Load filter	
		A93.086045
F	Pressure gauge	
		46.300.0
G	T. Pressure switch 22 Bar NO	
		49.062.7
H	Minimum electric level	
	Oil	A70.094170
	Soft grease	A70.094171
I	Adjustable by-pass valve 5/50 Bar	
		A68.075043
J	Valve unit	
		A68.075041
L	Gear pump	
		00.540.9
M	Reservoir	
	2LT	A70.093741
	3LT	A70.093742

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25. Warranty

All ILC products come with a warranty of 12 months from the date of delivery for construction and material defects. 24-month extended warranty if the system was installed by ILC. 12 months from the date of installation of the commercial components-electrical parts. If installation is done after 6 months from the delivery date, the warranty will cover a maximum of 18 months from the delivery date.

Should the equipment malfunction, you must notify us of the defect, providing us the code, the serial number (expressed as in fig.1), the delivery and installation dates and the conditions in which the product in question is used.
Once we receive this information, at our sole discretion we will decide whether to: provide technical support; direct you to the nearest support centre; give you a number authorising the return for repair.

When we receive the equipment and based on accurate analyses, ILC reserves the right to choose whether to repair or replace the product. Should the warranty still be valid, we will see to repairing or replacing the product at our expense.
If the product is not found to be defective, ILC will decide at its discretion whether or not to charge the expenses (logistics).

This warranty lapses if the product shows

- damage or cracks due to improper use
- negligence
- normal wear
- chemical corrosion
- signs of installation that is non-compliant with the explicitly stated instructions and use that is contrary to the manufacturer's recommendations.
- tampering

Modifications, tampering with or alterations to the equipment or parts of it without authorisation by ILC S.r.l. relieve ILC from all liability and from warranty obligations. Parts subject to normal wear and non-durable parts are not covered by the warranty. Anything that is not expressly stated, as well as damage, injury or costs resulting from product defects are considered excluded from the warranty.

The warranty validity conditions are considered implicitly accepted at the time of purchase. Any varying modifications to this warranty shall only be considered valid upon written authorisation from ILC.

ILC declines all liability for damages to persons and property due to the failure to observe the requirements in this manual. Any modifications to parts making up the system or using the system or its parts for different purposes without written authorisation from ILC relieves ILC from all liability for damages to persons and/or property and from any warranty obligations.

26. Machine identification

On the front of the pump reservoir there is a yellow label (fig.1) which shows the product code and its basic characteristics.

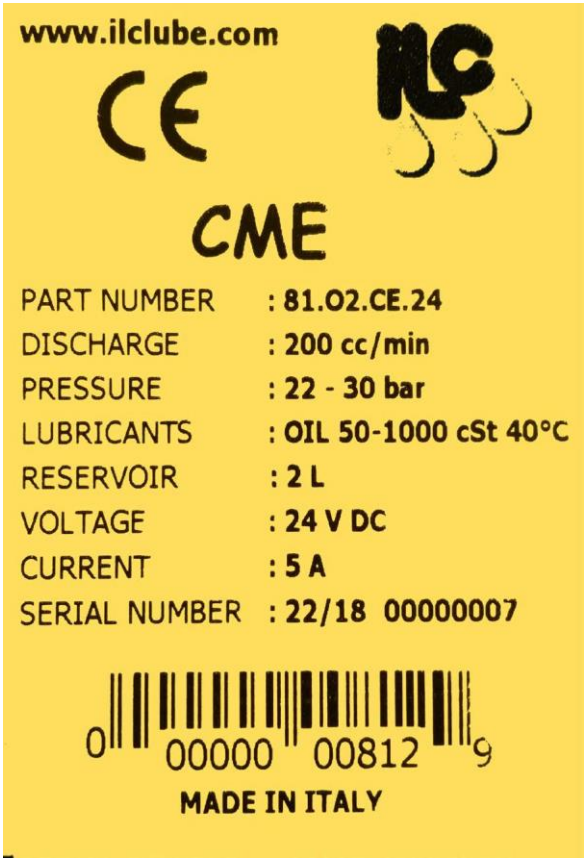

fig.1

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DICHIARAZIONE DI CONFORMITÁ / DECLARATION OF COMPLIANCE WITH STANDARDS / DECLARATION DE CONFORMITE / KONFORMITÄTSERKLÄRUNG DES STANDARDS / DECLARACIÓN DE CONFORMIDAD/ DECLARAÇÃO DE CONFORMIDADE

La società ILC srl, con sede legale in Gorla Minore (VA), Via Garibaldi 149 - ILC srl, registered office in Gorla Minore (VA), Via Garibaldi 149 - ILC srl. au Siège Social à Gorla Minore (VA), Via Garibaldi 149 / ILC srl Gorla Minore (VA), Sitz in Via Garibaldi 149 - La sociedad ILC srl., con sede legal en Gorla Minore (VA), Via Garibaldi 149 - A ILC srl, com sede em Gorla Minore (VA), Via Garibaldi 149

DICHIARA / CERTIFIES / CERTIFIE / ZERTIFIZIERT / DASS / DECLARA / CERTIFICA

che il prodotto denominato/that the product called/ le produit appelè/ das Produkt mit dem Namen/ el producto que se llama/ o produto chamado:

Descrizione/ Description/ Description Beschreibung/ Descripción/ Descrição	**GEAR ELECTRIC PUMP**
Nome Commerciale/ Product Name/ Dénomination Handelsname/ Denominación/ Denominação	**CME ELECTRIC PUMP**
Versioni/ Versions/ Versions/ Versionen/ Versiones/ Versões	**ALL VERSION**
Codici/Part Number/Codes/Teile Nummer/Codigos/Codigos	**81.---- :83.999**

IT	è conforme alle condizioni previste dalle Direttive CEE
EN	has been constructed in conformity with the Directives of the Council of the European Community on the standardization of the legislations of member states
FR	a été construit en conformìté des Directives du Conseil des Communautés Européennes
DE	Entsprechend den Richtlinien des Rates Der Europäischen Union, für die Standarisierung der Legislative der Mitglieder - staaten, konstruiert wurde
ES	cumple con las condiciones establecidas por las directivas comunitarias/ foi construído em conformidade com as diretivas do Conselho das Comunidades Europeias
PT	foi construido em conformidade com as diretivas do Conselho das Comunidades Europeias

- 2006/42/CE Direttiva macchine /Machinery Directive/ Directive machines/ Maschinenrichtlinien/Maquinaria / Directiva Máquinas;
- 2014/30/UE Compatibilità elettromagnetica/ Electromagnetic compatibility/ Compatibilité électromagnétique/ Elektromagnetlschevertr glichkeit/ Compatibilldad electromagnética/ Compatibilidad eletromagnética
- 2014/35/UE Bassa tensione / Low Voltage Directive / Directive Basse Tension/ Niedrigspannungsrichtlinien/ Directiva de baja tensión/ Directiva de Baixa Tensão;
- RoHS 2011 / 65 / EU.

La persona autorizzata a costituire il Fascicolo Tecnico presso ILC srl
The person authorized to compile the Technical File care ILC srl
La personne autorisée à constituer le dossier technique à CIT srl
Die Person, die berechtigt, die technischen Unterlagen bei ILC srl zu kompilieren
La persona autorizada para configurar el Archivo Técnico en ILC srl
A pessoa autorizada a configurar o Arquivo Técnico na ILC srl

CE

Gorla Minore 10/02/2018
Ing. Vittorio Baroni

Firmatario autorizzato/Authorized signatory/
Signataire autorisé/Zeichnungsberechligter/
Slgnatario autorizado/ Slgnatàrio autorizado

Il Legale Rappresentante
Maurizio Morelli

I.L.C. srl - Via Garibaldi, 149 - 20155 Gorla Minore - Italy
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