



**DieTronic**  
lubrication system

# ***INSTALLATION MANUAL***

## ***LUBRICATION SYSTEM***

### ***PROMAX***

*Dietronic s.r.l. – lubricating technology*  
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## 1. GENERAL INFORMATION

### 1.1 Warnings

The parts of the manual in bold refer to warning signs, indicate those procedures whose failure or partial observance could cause injury to the operator.

This instruction booklet is strictly reserved for Customers in possession of the aforementioned machine. The information contained herein may be subject to change without notice.

The documents delivered with the machine, including the following manual, are the property of Dietronic Srl, which reserves all rights. For no reason this booklet or part of it, or the attachments provided may be reproduced in any form or medium without the authorization of Dietronic Srl.

### 1.2 Manufacturer identification

Dietronic s.r.l.

Via Madre Teresa di Calcutta, 9/13

26866 Sant'Angelo Lodigiano (LO) - Italia

### 1.3 Machine identification

SERIES	<b>PROMAX</b>
MODEL	<b>PROMAX 600</b>
SERIAL NUMBER	<b>2022</b>
YEAR OF CONSTRUCTION	<b>2022</b>

### 1.4 Request for intervention an assistance

Dietronic s.r.l.

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### 1.5 Guarantee

The machinery supplied is guaranteed for 12 months from the date of installation (30 days from shipment). This warranty, concerning defects and defects deriving from materials, construction or workmanship, is conditional on their complaint within 8 days of their discovery, remaining excluded from the warranty those defects and defects that depend on failure to comply with the service and maintenance instructions provided by the seller, from bad or inadequate use, from excessive exploitation of the machinery, from tampering, modification or repair made by the buyer and from the use of lubricants, detergents or other unsuitable products. The warranty is substantiated and exhausted in the free spare part, ex works of processing. The costs of labor (disassembly, reassembly or other), shipping and transport are borne by the buyer as well as the relative risks, with him waiving the claim for any compensation for damage to persons or things that may arise as a result of the previous defects or defects. The buyer will only enjoy the guarantees of the seller's subcontractors for damage to electrical equipment, electric motors, ball bearings, pressure gauges, gaskets, chains and any other piece not performed directly by the seller, and will always waive any compensation for damages that

may occur even during the warranty period. Components replaced under warranty will not extend for any reason the expiration of the initial warranty period, which starts, as indicated above, from the date of shipment of the complete equipment.

### 1.6 Safety requirements

- The terms used in this manual to locate the various components of the machine such as, for example, right, left, upper, lower, etc., always refer to the correct position of an operator during the normal course of work (machine front).
- Before proceeding with the commissioning of the machine, the operator must have carefully read this publication and have acquired a deep knowledge of the technical specifications and machine controls.
- It is advisable for the operator to follow a period of training regarding the use of the machine.
- Before installing the machine, check that the area used is compatible with the overall dimensions of the machine.
- Do not allow unauthorized and qualified personnel to operate, adjust, conduct or repair reference, in addition to this manual for the necessary operations. la macchina. Far
- Before cleaning and/or maintaining the machine and before removing any protection, make sure that the main switch is in the OFF position, so as to remove the power supply to the machine during the operator's intervention.
- The power supply system must be equipped with an automatic release system upstream of the main switch of the machine and a suitable grounding system that meets all the requirements of industrial standards for the prevention of accidents.
- If you need to intervene on the main switch or in its vicinity, remove voltage from the line to which the main switch is connected.
- The moving parts (roller conveyor and protective gate) of the machine do not stop immediately after it is switched off. It is recommended, before intervening on the machine, to ensure that all moving parts have stopped.
- All checks and maintenance operations that require the removal of security protections are carried out under the full responsibility of the user. It is therefore recommended to have these operations performed exclusively by specialized and authorized technical personnel.
- Check that all safety devices (barriers, protections, cranks, microswitches, etc.) have not been tampered with and that they are fully functional before operating; otherwise provide for their accommodation. Do not remove safety devices.
- Do not tamper with the electrical system, pneumatic system or any other mechanism for any reason.
- Do not attempt to climb or climb over the running machine.
- Do not wear rings, wristwatches, jewelry, shredded or dangling clothing such as ties, scarves, unbuttoned jackets or any garment that may become entangled in moving parts. Instead, wear clothing approved for accident prevention purposes such as helmets, non-slip shoes, gloves, noise-cancelling headphones, safety glasses when necessary.
- Do not wear clothing with wide sleeves during work and in particular during cleaning operations.
- In the case of repairs make sure that there are no:
  - moving organs that can come into operation;
  - unstable parts by their nature placed on the machine or in its vicinity;
  - in any case, provide for their locking with appropriate tools.
- Do not use your hands instead of appropriate tools to operate on the machine.
- Do not use your hands or other objects to stop moving parts.
- Pay the utmost attention to the plates on the machine every time you are preparing to operate on it or nearby.
- The user is obliged to keep all the plates legible, changing, if necessary, the position in order to guarantee complete visibility to the operator.
- It is also mandatory for the user to replace all the plates that for any reason have deteriorated or that are not clearly visible, requesting the new ones to the spare parts service of DIETRONIC SRL.

- Unless expressly specified in this manual, avoid repairing or adjusting the machine or part of it when it, or part thereof, is in operation, in order to avoid being hooked by moving parts.
- In the event of machine malfunctions or damage to components, contact the maintenance manager, without proceeding with further repairs.
- It is absolutely forbidden for anyone to use the machine for uses other than those provided for and documented. The use of the machine must always take place in the ways, times and places provided for by the rules of good technique, of laws in force in each country even if in the specific country there were no specific rules to regulate the sector.

DIETRONIC declines all responsibility for any accidents or damage to persons or property arising from failure to comply with both the safety requirements and the regulations set out herein.

These requirements, together with the rules relating to the installation of the machine and electrical connections constitute, moreover, an integral part of the Industrial Accident Prevention Regulations of each individual country. These safety rules complement and do not replace local safety regulations.

NEVER perform hasty or makeshift repairs that could compromise the proper functioning of the machine.

IN CASE OF DOUBT, ALWAYS REQUEST THE INTERVENTION OF SPECIALIZED PERSONNEL. ANY TAMPERING BY THE USER RELIEVES ALL RESPONSIBILITY AND MAKES THE USER SOLELY RESPONSIBLE TO THE COMPETENT BODIES FOR LA DITTA COSTRUTTRICE DALA PREVENZIONE DEGLI INFORTUNI.

### 1.7 General notes on delivery

Upon receipt of the machine check that:

- the supply corresponds to the specifications of the order;
- there is no damage.

In case of damage or missing parts, immediately inform Dietronic s.r.l., providing all possible details.

The catalogues and drawings contained in this manual are to be considered as a general reference and do not necessarily contain all the technical details.

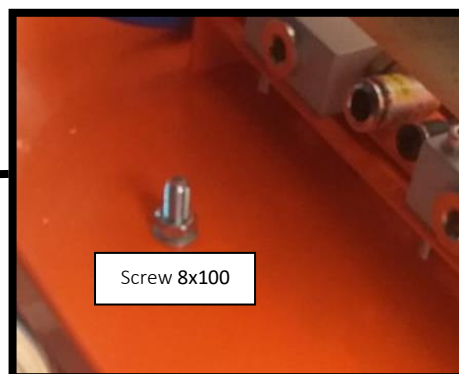
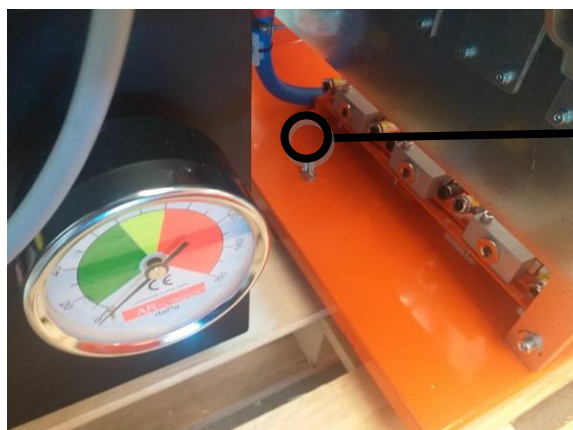
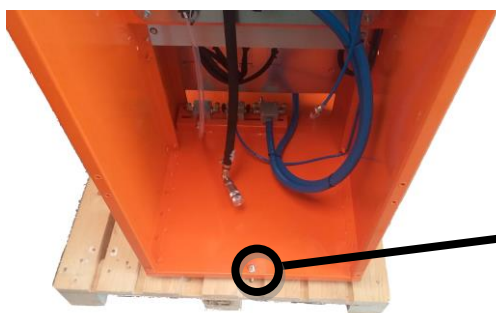
### 1.8 Packaging removal

The PROMAX system is shipped in a NON-OVERLAPPING packaging of dimensions 90x60x155

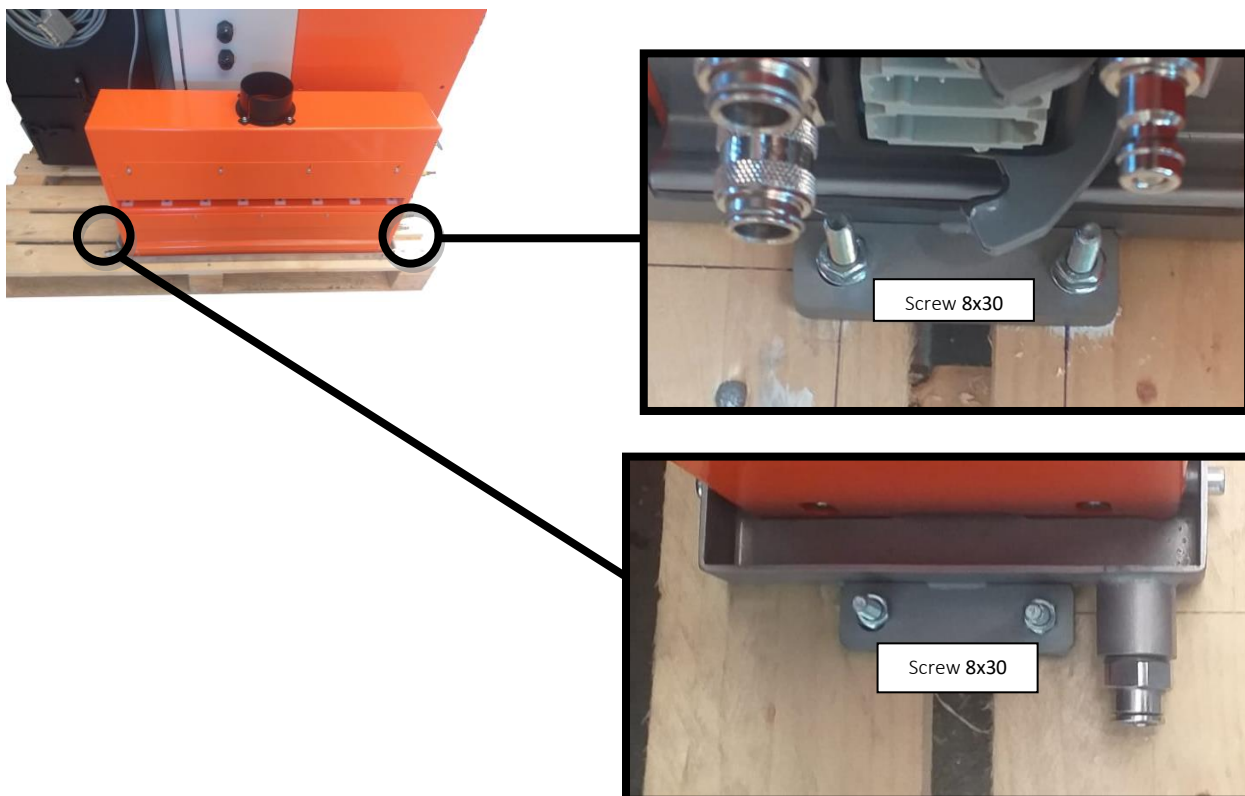
Once the cellophane cover has been removed, remove the fixing screws of the different groups attached to the euro-pallet.



Control unit



Spray box





Aspirator



Vacuum cleaner bracket



## 1.9 System Components

### Control unit

The control unit supplied is equipped with an electrical cabinet containing all the equipment for the operation of the system. All electrical connections between the different units (spray box, LuboDie unit, suction system) are via connectors.

Voltages present in the framework

Power supply 380 Vac

Frequency 50/60 Hz

Auxiliary voltage 24 Vdc

Power consumption 2KW

Power consumption with vacuum cleaner

In addition, the control unit is equipped with pneumatic equipment for the management of the operation of the system.

Pneumatic feeding min. 5 bar

Air consumption 1000 NI/min at 6 bar

Air pipe required min. 10 mm inner diameter



### Oil tank

Stainless steel tank on wheels with quick connections of release pneumatic air inlet and lubricant outlet.

The connections provided are with sealing valve to ensure disconnection without leakage in case of pressure equipment.

Maximum pressure 3 bar

Tank capacity 24 liters

The equipment with wheels and the quick release allow you to fill the tank from the main source (barrel or IBC container) avoiding the transfer of impurities due to the use of dirty containers.

In addition, this system allows the replacement of the tank in case you want a larger capacity by duplicating the volume, or in the use of different lubricants.

The tank is equipped with a safety valve in which the maximum allowable pressure is exceeded with a quick discharge lever in case you want to depressurize it.

### Spray box complete with upper and lower spray heads

Structure in carpentered carpentry with stainless steel collection tank.

The box contains 2 spray heads with a number of LVLP spraying valves called KA2 nozzle 0.5 mm spraying angle 90°.

The spray heads are removable laterally for easy calibration of the spray valves and easy maintenance.

The heads are connected to the control unit through automatic release pipes and an electrical connector.

The number of spraying valves is variable depending on the model, under the various models available according to the width of the sheet:



Sheet metal width	Number of spraying valves	Valve spacing
200 mm	3+3 KA2	85 mm
300 mm	3+3 KA2	100 mm
400 mm	5+5 KA2	85 mm
500 mm	5+5 KA2	100 mm
600 mm	7+7 KA2	85 mm
700 mm	7+7 KA2	100 mm
800 mm	9+9 KA2	85 mm



**20 litre plastic tank**

collection of lubricant from the spray box tank  
with connecting pipe



**2 Piping kit** for connecting the control unit  
with spray heads



**2 Electrical cable kit** for connecting the control unit  
with spray heads



**Oily mist extractor (optional)**

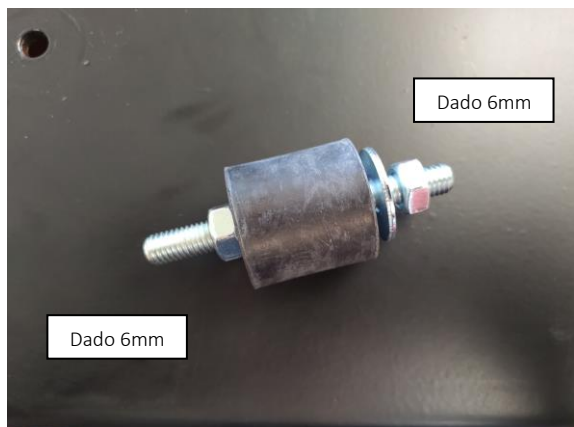
The suction system model ECO TWO with 3 degrees of filtration for fume extraction.

The system is equipped with a bracket for fixing, 2 m of connection pipe to the spray box with 2 hose clamps and drainage pipe in addition to the connection pipe for the spray box and vibration dampers.



Anti-vibration mounting on vacuum bracket

Unscrew the nut and remove the washer.



Place the vibration damper with the other nut facing upwards and tighten the removed nut and washer at the bottom of the bracket



Remove the nut and place the vacuum cleaner. Once positioned, screw the nut back on to fix the vacuum cleaner to the vibration dampers.





## 2.2 Connecting system units

A kit of pipes (total 2) and cables (total 2) are supplied with the system for connecting the upper and lower spray heads from the spray box to the control unit.

Connecting Piping Kits:



### TOP HEAD PIPING KIT

Sheath containing 3 pipes with quick couplings and marking:

AIR U pipe 6x4 network compressed air line

SPRAY U pipe 10x8 compressed air pulverization line

OIL U pipe 8x6 lubricant line

### BOTTOM HEAD PIPING KIT

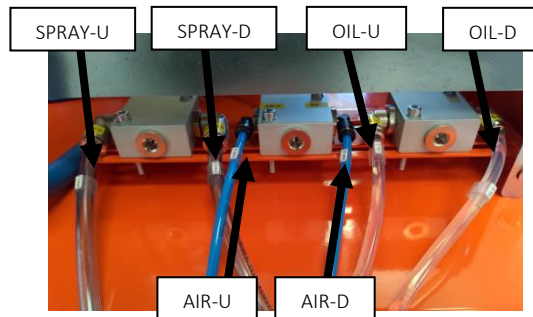
Sheath containing 3 pipes with quick couplings and marking:

AIR D pipe 6x4 network compressed air line

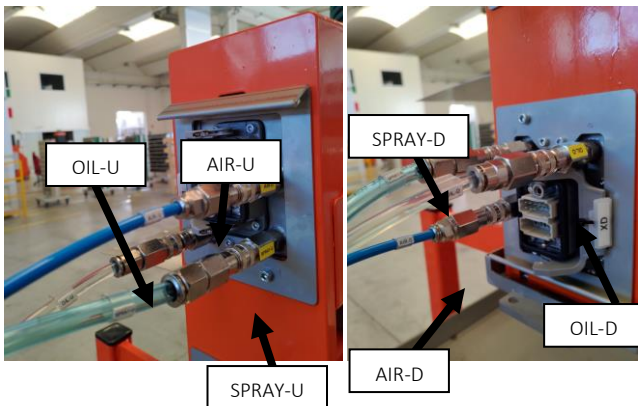
SPRAY D pipe 10x8 compressed air pulverization line

OIL D pipe 8x6 lubricant line

From the back of the control unit, connect the pipes following the marking shown on the pipes and their junction blocks



On the side of the spray heads, connect the pipes following the marking on the pipes and their spray heads





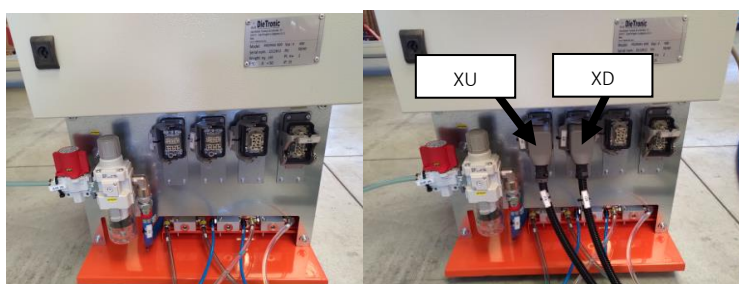
Connecting cable kits:



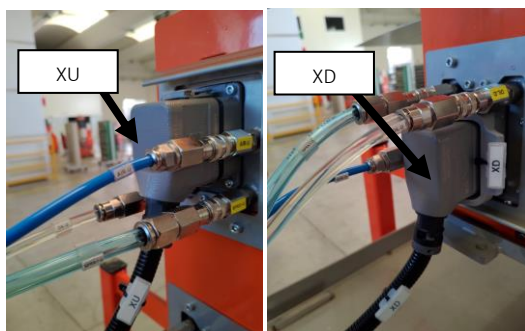
Connectorized multi-row cables:

XU	top head cable
XD	bottom head cable

From the back of the control unit connect the electrical connectors following the marking shown on the pipes and on the relative spray heads



On the side of the spray heads connect the electrical connectors following the marking on the cable and on the relative spray head



### 2.3 Connection of the lubricant recovery tank

Connect the lubricant recovery tank below the spray box to the 20-liter tank through the supplied 10x8 pipe



## 2.4 Connection to the suction system (optional)

Reposition the 4 vibration dampers on the bracket as shown in the photo below, lock them through the nut provided.

Position Fix the supporting bracket of the suction system so as to avoid curves of the suction tube connecting with the spray box.

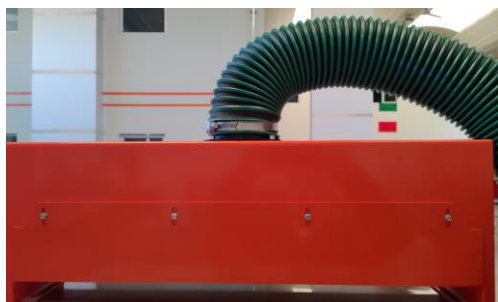
Use the following fixing holes:



connect the hose from the aspirator side with its supplied cable tie



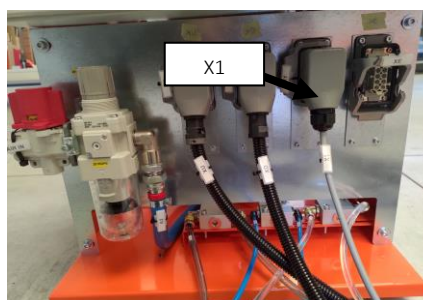
connect the hose from the side of the spray box with its supplied cable tie



connect the drainage pipe from the aspirator to the recovery tank through the supplied 10x8 pipe



connect the electrical cable of the X1 vacuum cleaner to the control unit



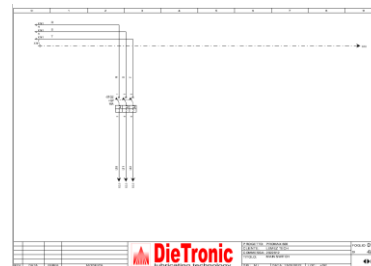
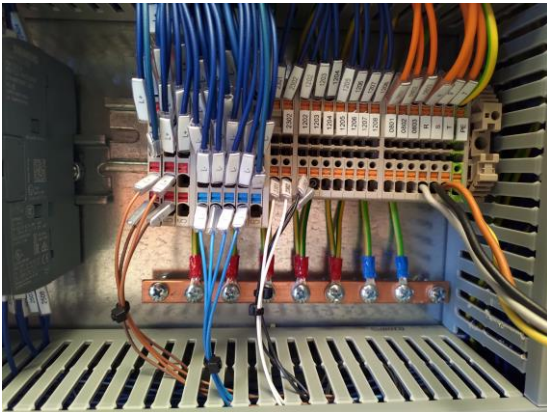
## 2.5 System power supply

The electrical connection must be carried out by specialized personnel.

Through the entrance to the electrical cabinet bring a power cable suitable according to the electrical characteristics listed above in this manual.



Connect the cable to the terminal block below by connecting the grounding block included:



## 2.6 Pneumatic system feeding

The pneumatic connection must be carried out by specialized personnel.

Through the main connection of the compressed air inlet bring a pipe suitable to depend on the pneumatic characteristics listed above in this manual. (min. inner diameter 12 mm)

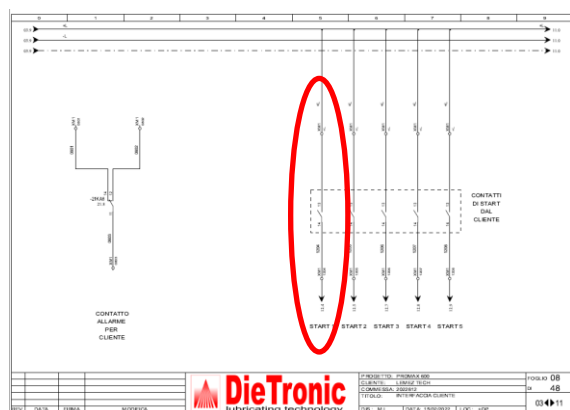


## 2.7 Operation interface with line signals

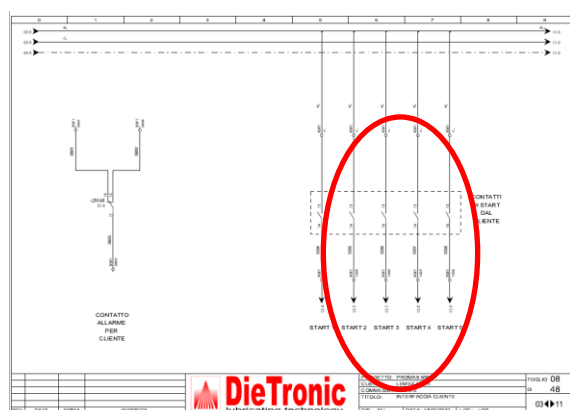
Referring to the wiring diagram of the system supplied with the documentation, connect the lubrication on/off signal to the terminal block as shown below.

The recommended interface is to activate the lubrication during the advancement of the sheet metal and its shutdown when the sheet metal stops.

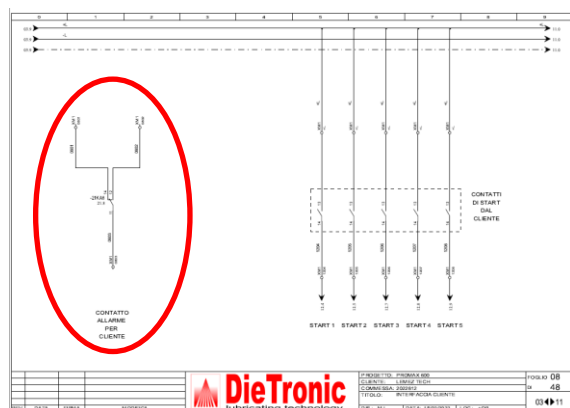
This signal must be connected as follows:



Nevertheless, the system allows the interfacing of each individual spraying valve using up to 5 external activation/deactivation signals, configuring, from the operator panel, the relationship between the spraying valve and the associated external signal.



A remote alarm signal is also available:



ONCE THE SYSTEM INSTALLATION IS COMPLETE, PLEASE REFER TO THE  
COMMISSIONING MANUAL PROVIDED.