



MADE IN ITALY

ENGLISH



EPIC 2 D

RANGE 0,37÷15 kW

Installation
ad use
manual

Introduction

1.1 PRESENTATION	pag. 3
1.2 DESCRIPTION	pag. 3
1.3 HANDLING	pag. 3

Warnings

2.1 SAFETY INFORMATION	pag. 4
2.2 CAUTION	pag. 4

Installation

3.1 ASSEMBLING	pag. 5
3.2 ELECTRICAL CONNECTIONS	pag. 6
3.3 GENERAL SETTINGS	pag. 8
3.4 SETTING PARAMETERS	pag. 10
3.5 TRIMMER SETTINGS	pag. 22

General use

4.1 KEYPAD AND LIGHTS INDICATIONS	pag. 23
4.2 ALARMS	pag. 24
4.3 TYPICAL INSTALLATION	pag. 25

Maintenance

5.1 PUMPS STOP	pag. 26
5.2 SERVICE	pag. 26
5.3 SPARE PARTS	pag. 26
5.4 WASTE DISPOSAL	pag. 26

Certifications

6.1 CERTIFICATE OF CONFORMITY	pag. 27
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1.1 PRESENTATION

The purpose of this manual is to provide the necessary information for the proper installation, use and maintenance of EPIC 2.

The user should read this manual before operating the unit. Improper use may cause damage to the machine and lead to the forfeiture of the warranty coverage. Always specify the model identification code and the construction number when requesting technical information or spare parts from our Sales and Service department. The instruction and warnings given below concern the standard version; refer to the sale

contract documentation for modifications and special version characteristics. For instructions, situations and events not considered in this manual or in the sale documents, please contact our customer service.

Our units must be installed in sheltered, well-ventilated, non-hazardous environments and must be used at a maximum temperature of +40°C and minimum of -5°C.

1.2 DESCRIPTION

These control panels are designed for controlling 2 motors or electric pumps used in pressurization systems or in applications for emptying wells or water tanks. In case of any failure of the main pump, the reserve pump start automatically.

Atlantic S.r.l.s shall not be liable for any damage caused or suffered by the unit as a result of its unauthorised or improper use.

TECHNICAL FEATURES

Self learning of the motor data; min-max amperage protection (A); dry running protection made by $\cos\phi$ and min Amperage; min and max

voltage protection (V); phase failure protection; start and stop delay; delay network restore, protection delay, frequency 50-60Hz.

OUTPUT ALARMS AND PROTECTIONS

Acoustic alarm; light alarm, alarm output Relais 220V CA, alarm output Relais 12 V CC, alarm output with Buzzer 12 V; min-max water level; min-max Voltage; phase failure; frequency failure alarm; min-max motor Amperage; min $\cos\phi$; motor klixon alarm; water in oil chamber alarm.

1.3 HANDLING

The panel must be handled with care, as falls and knocks can cause damage without any visible external signs.

PRELIMINARY INSPECTION

After you have removed the external packaging, visually inspect the control panel to make sure it has suffered no damage during shipping.

If any damage is visible, inform an Atlantic dealer as soon as possible, no later than five days from the delivery date.

STORED

If for any reason the unit is not installed and starter immediately after it has reached its destination it must be stored properly. The external packaging and the separately packed accessories must remain intact, and the whole must be protected from the weather, especially from freezing temperatures, and from any knocks or falls.

2.1 SAFETY INFORMATION



RISK OF ELECTRIC SHOCK

Failure to follow the instructions in this manual, carries a risk of electric shock.



RISK FOR PEOPLE AND PROPERTY

Failure to follow the prescriptions in this manual, carries a risk of damage to persons and/or property.



WARNING

Failure to observe the prescriptions in this manual, cause damage to the pump, the unit or the system.

2.2 CAUTION



ATTENTION: PUMPS

- Make sure the pumps are fully primed before you start it.
 - Make sure the pumps are running with the correct rotation.
 - The electric pumps or the motors can start up automatically.
-



ATTENTION: ELECTRICAL CONNECTION

- The control panel must be connected by a qualified electrician in compliance with the electrical regulations in force.
 - The electric pumps or the motors and the panel must be connected to an efficient grounding system in compliance with the electrical regulations locally in force.
 - Ground the unit before carrying out any other operation.
-



ATTENTION: SERVICE

As a general rule, always disconnect the power supply before proceeding to carry out any operation on the electrical or mechanical components of the unit or system.

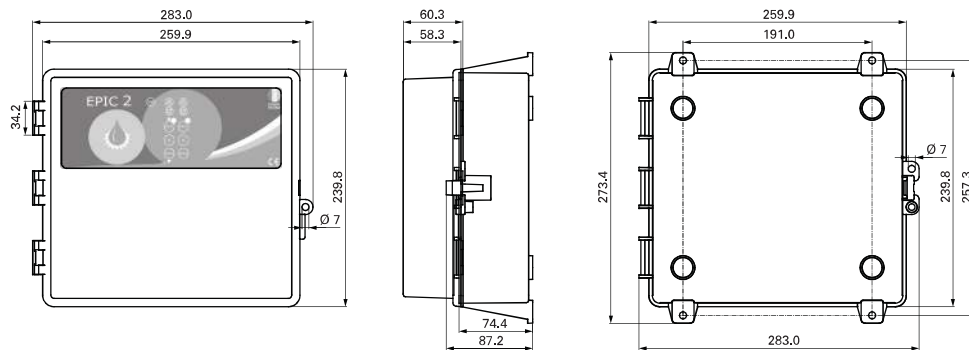
3.1 ASSEMBLING

Fix the control panel for a stable support with screws and screw anchor using the holes arranged in the box (pic. 1) or the fixing bracket if present.

To fix the cables in their terminals use a tool of the proper size to avoid the damaging of the screws or of their seat.

If use an electric screwier pay attention not to spoil the thread or the screws.

After the fixing, remove every plastic or metallic surplus (ex. Pieces of copper of the cables or plastic shavings of the box) inside the box before supplying power.



pic. 1

LINE OF SUPPLY CURRENT

Connect the unit at ground before carrying out any other operation.

The voltage input corresponds to the data written on the panel and on the pump:

- (400V \pm 10% 50/60Hz x il EPIC 1 -400/...)
- (230V \pm 10% 50/60Hz x il EPIC 1 -230)

Make sure that the power-supply-cable can bear the nominal current and connect it to the terminals of the general switch of the control panel.

If the cables are exposed, they must be appropriately protected.

The line must be protected with an Earth leakage and magnetic switch measured in accordance with the regulations locally in force.

LINE OF MOTOR POWER SUPPLY

Connect the unit at ground before carrying out any other operation.

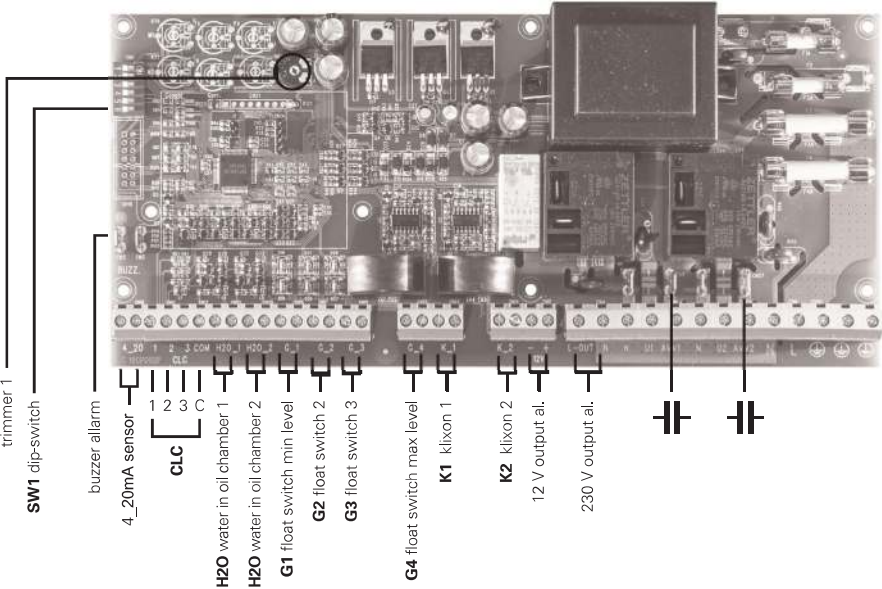
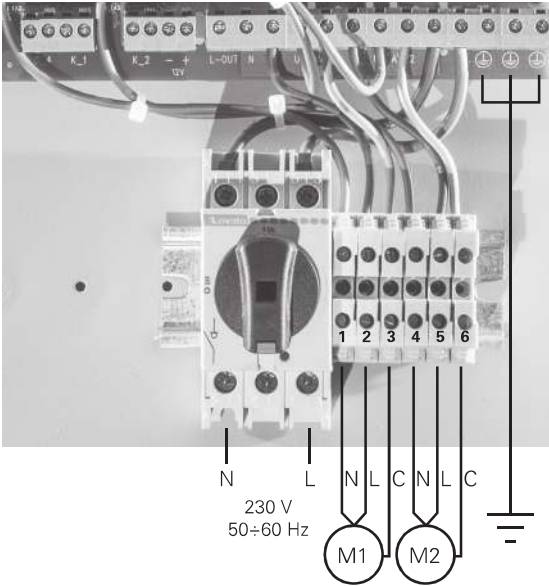
The voltage input corresponds to the data written on the motor:

- (400V \pm 10% 50/60Hz three-phase)
- (230V \pm 10% 50/60Hz single-phase)

Doing some starting make sure that the motor respects the right direction of rotation usually indicated by an arrow printed on the motor.

3.2 ELECTRICAL CONNECTIONS

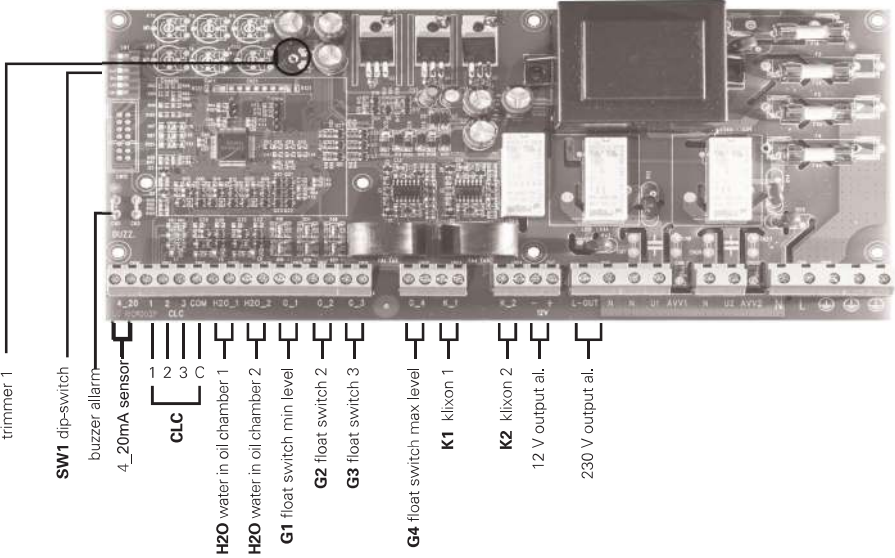
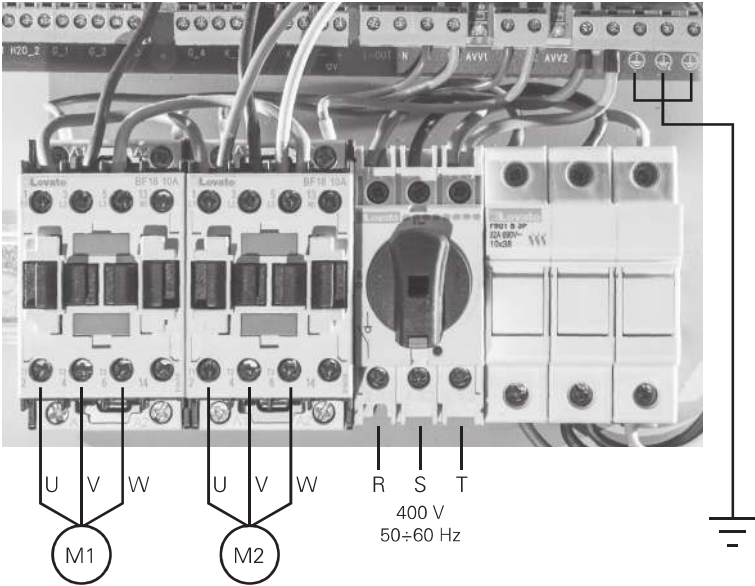
EPIC 2 230D



Installation

EPIC 2D

EPIC 2 400D



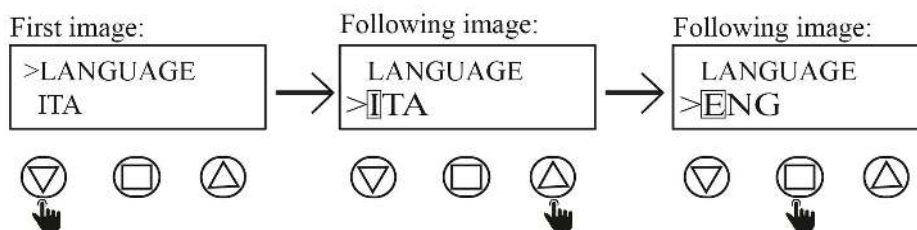
3.3-GENERAL SETTINGS

-TURN ON THE CONTROL PANEL

After making the electrical connections, turn on the panel.

-Language settings (mandatory)

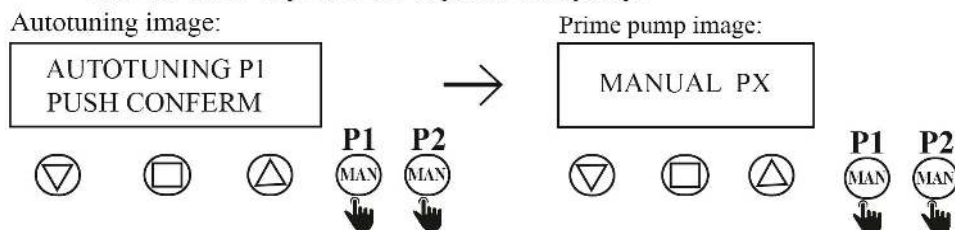
The display will show:



-PRIMING OF THE PUMPS

Important: It is necessary to prime the pumps before the next self-learning phase.

Push the MAN key for 3 sec to prime each pump.

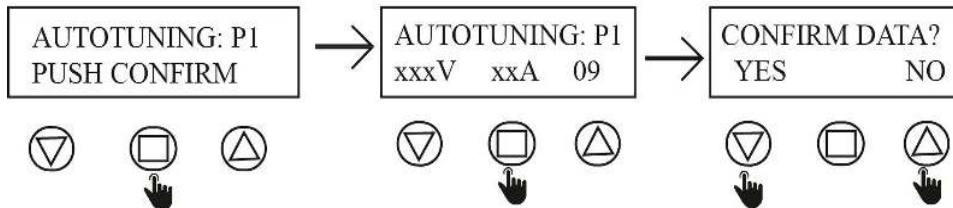


IMPORTANT NOTE:

ONCE PRESSED THE FINAL CONFIRMATION BUTTON IS NOT LONGER POSSIBLE TO MAKE THE AUTOTUNING SETTINGS. TO DO IT SELF-LEARNING PLEASE ENTER INTO THE ADVANCED MENU POINT 9.0

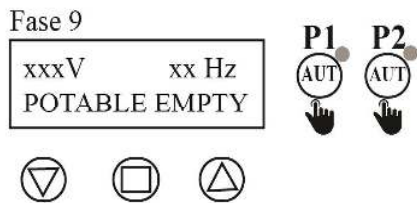
- AUTOTUNING (mandatory)

It is necessary to check the grid voltage with a tester before starting the procedure. The tension must be the nominal one or at least the normal network voltage.



If YES, switch to pump 2 autotuning.
 If NO, you return to AUTOTUNING P1.

At this point the panel displays the autotuning data.
 Push AUT P1 / P2 to put the pumps in automatic setting



- Preset parameters

LANGUAGE	AS SELECTED
TURN ON DELAY	2 sec
MANUAL KEY	STABLE
START DELAY	4 sec
STOP DELAY	1 sec
ALTERNATION P1/P2	ON
OPERATION	EMPTYING
TYPE	POTABLE
SELF HOLDING	ON

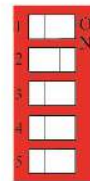
Installation

EPIC 2D

3.4 SETTING PARAMETERS

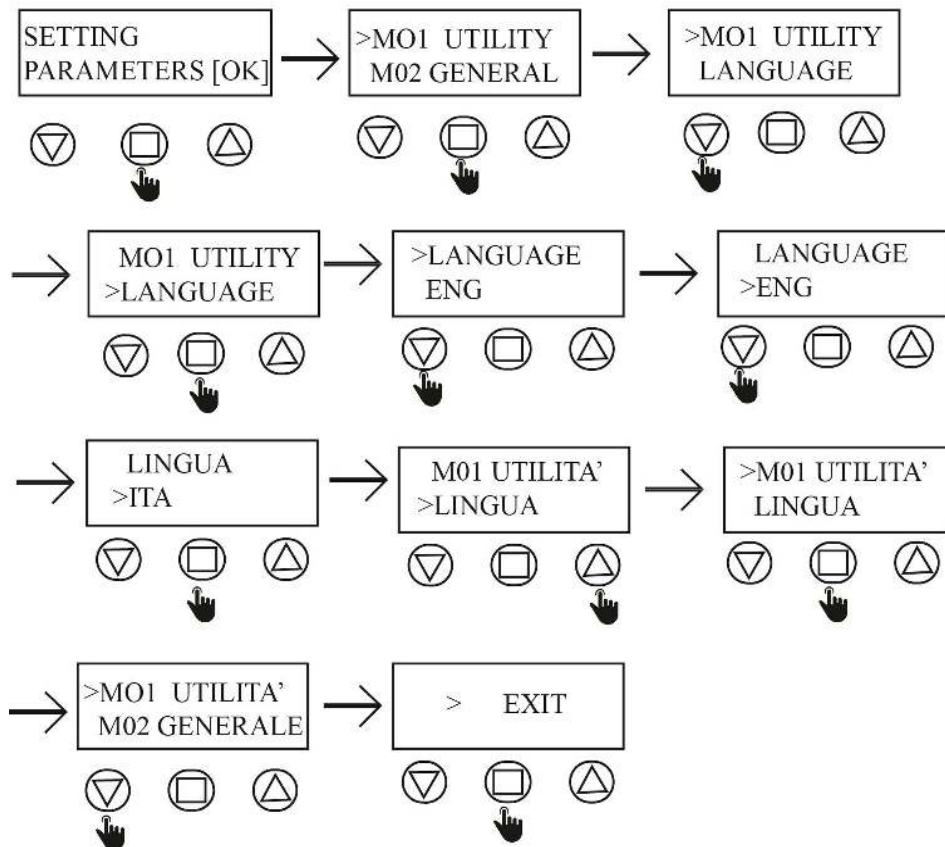
To change one or more parameters enter into the advanced menu.
Proceed as follows:

bring the DEEP SWITCH 2 into the ON position

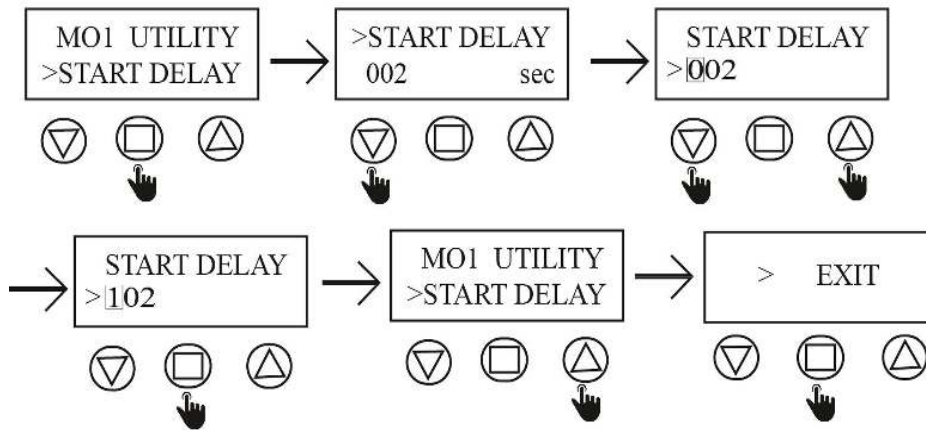


M01 UTILITY

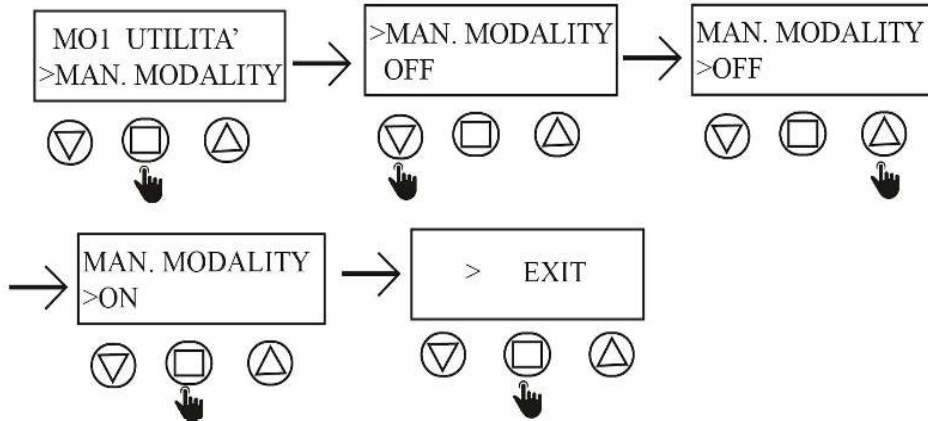
TO CHANGE LANGUAGE:



TO CHANGE THE START DELAY:



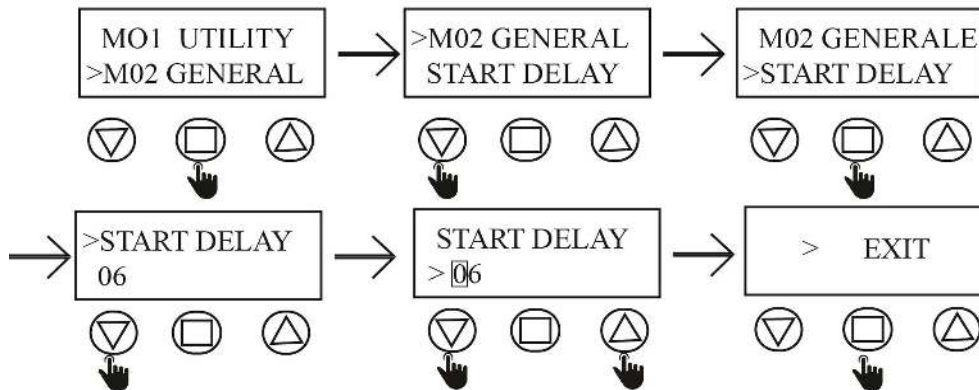
TO CHANGE THE KEY (MAN) STABLE/UNSTABLE:



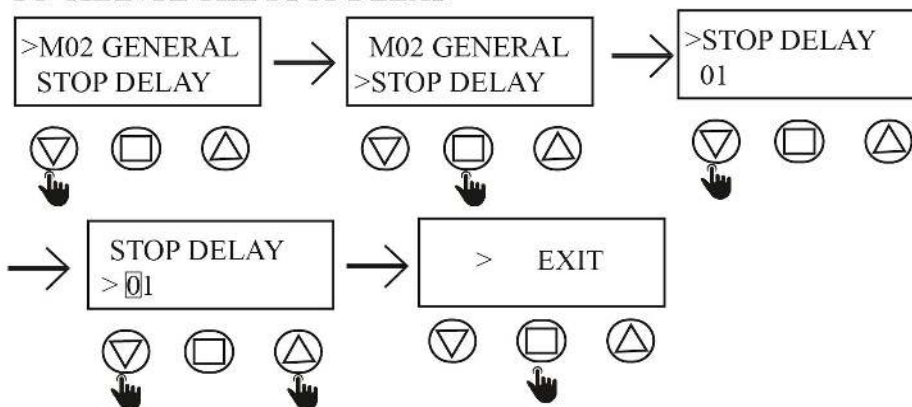
Installation

EPIC 2D

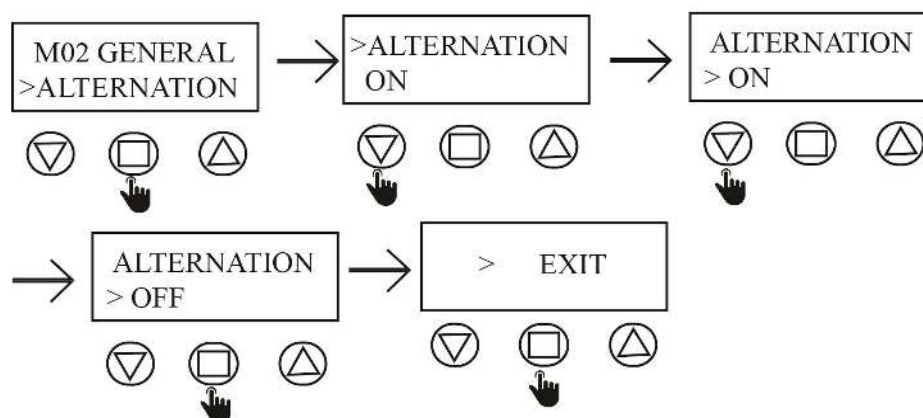
M02 GENERAL TO CHANGE THE START DELAY



TO CHANGE THE STOP DELAY



PUMP ALTERNATION

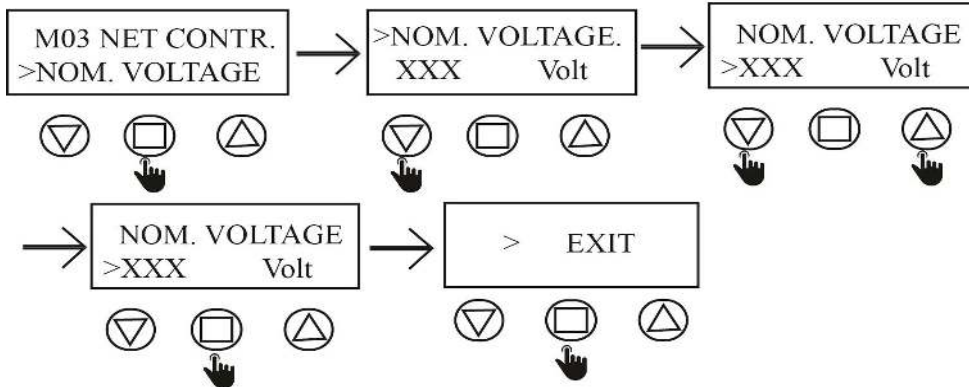


Installation

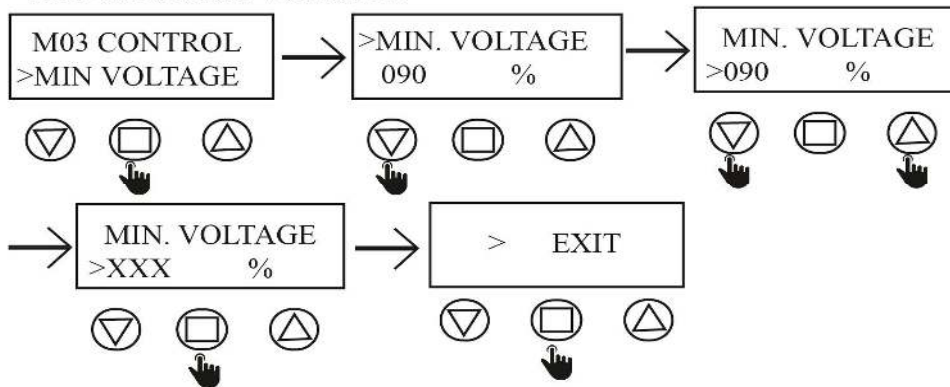
EPIC 2D

M03 NET CONTROL

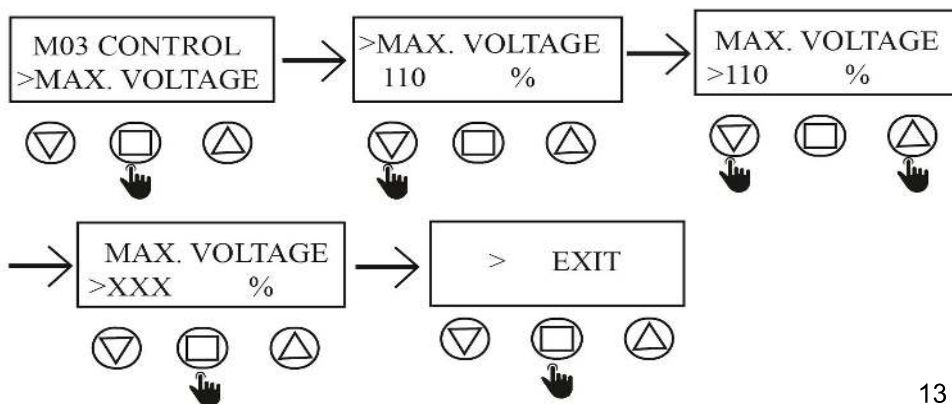
SET THE NOMINAL VOLTAGE



SET MINIMUM VOLTAGE



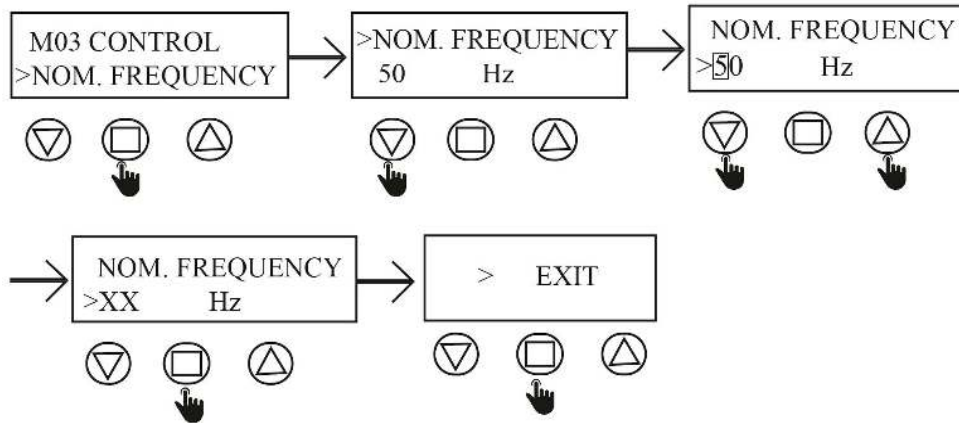
SET MAXIMUM VOLTAGE



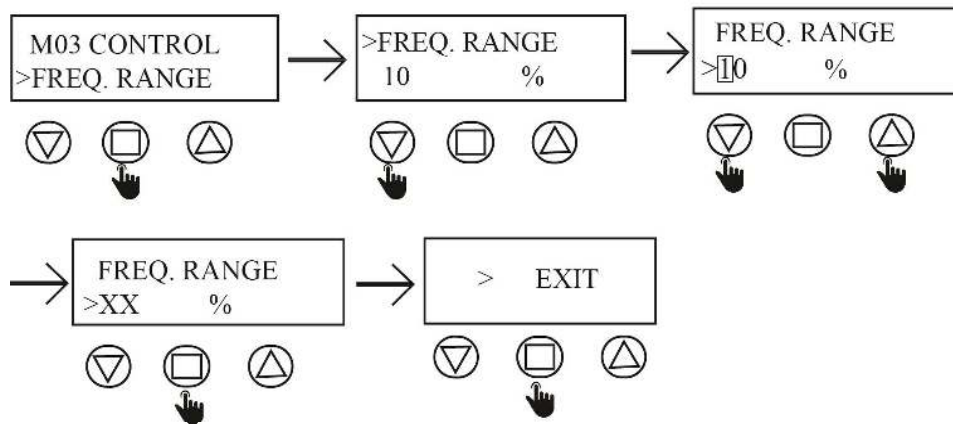
Installation

EPIC 2D

SET NOMINAL FREQUENCY

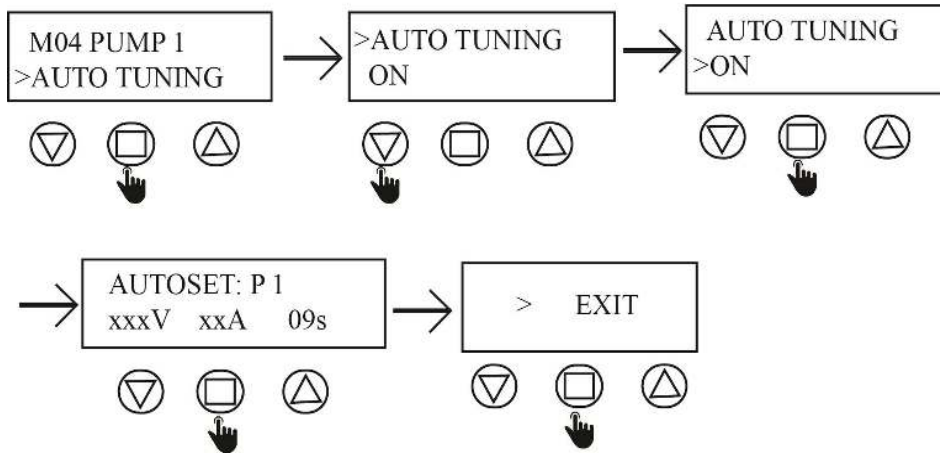


SET FREQUENCY RANGE

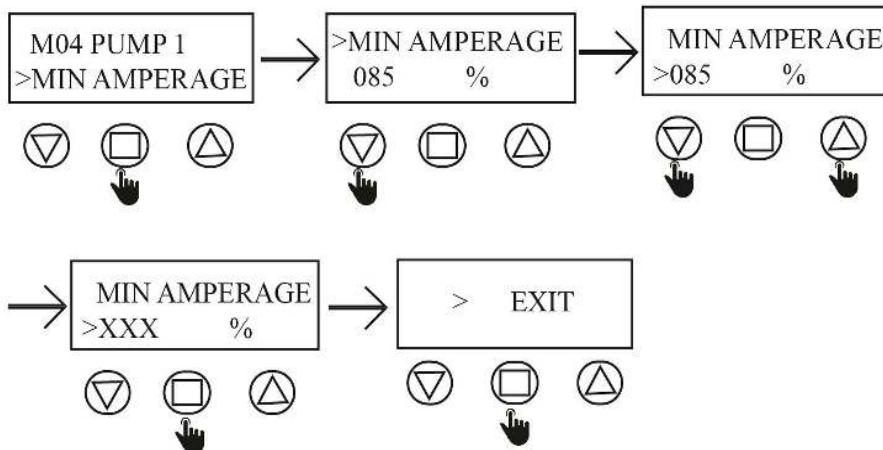


M04 PUMP 1

AUTO TUNING



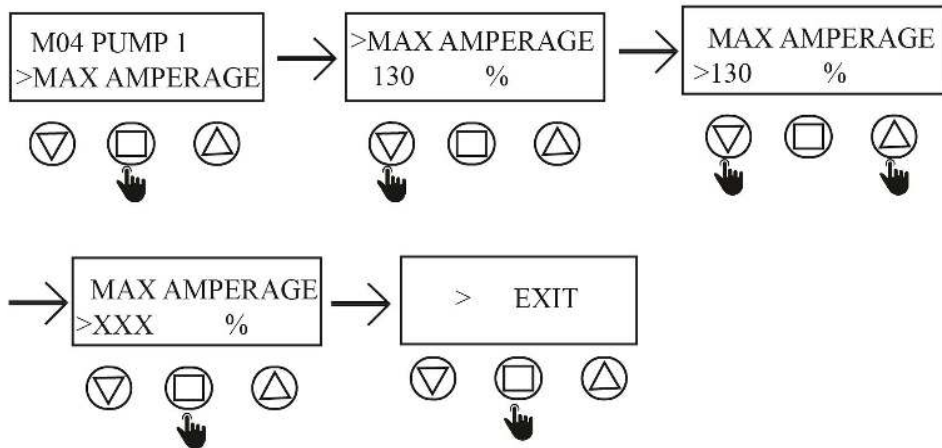
SET MINIMUM AMPERAGE



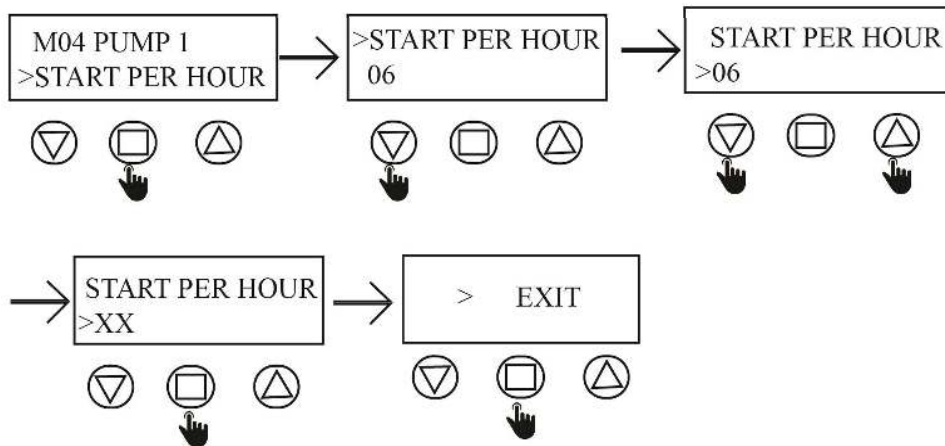
Installation

EPIC 2D

SET MAXIMUM AMPERAGE



START PER HOUR



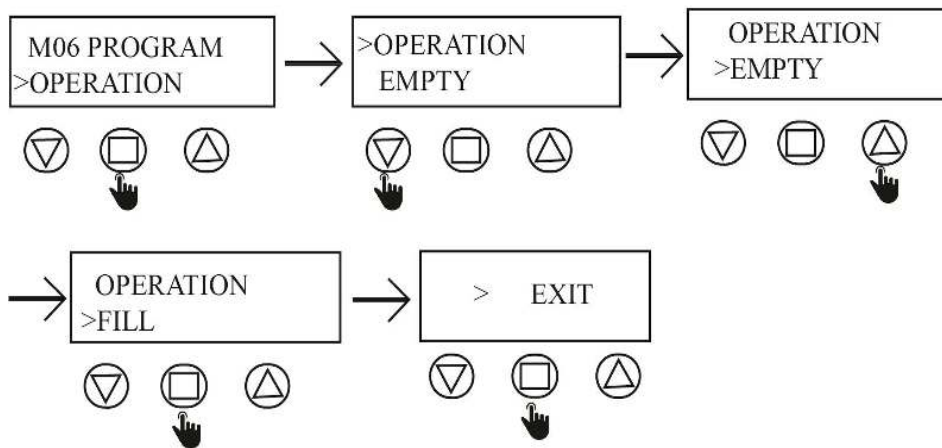
M05 PUMP 2
THE SAME ACTIONS AS PUMP 1

Installation

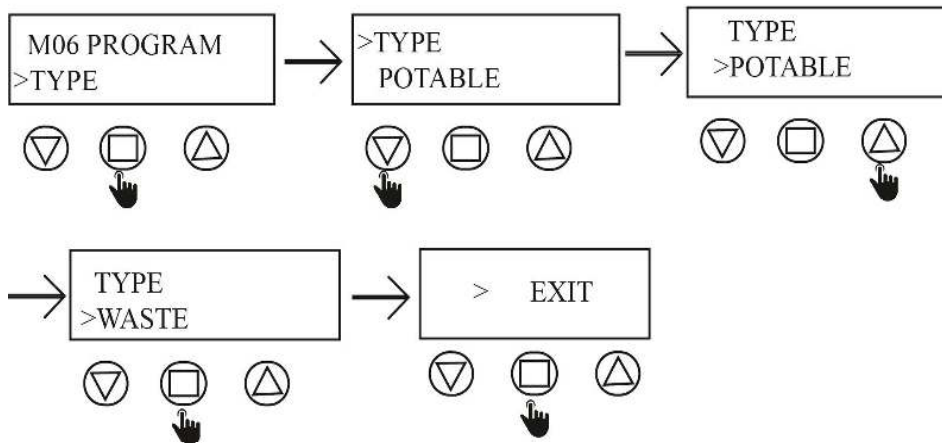
EPIC 2D

M06 PROGRAM

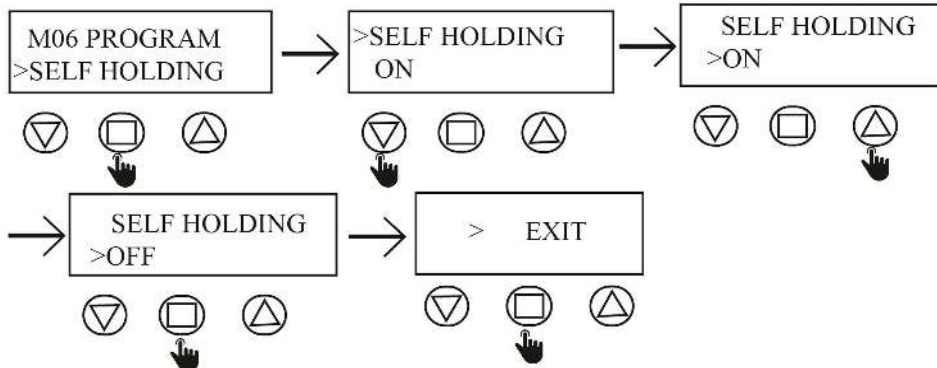
SET EMPTY/FILLING PROGRAM



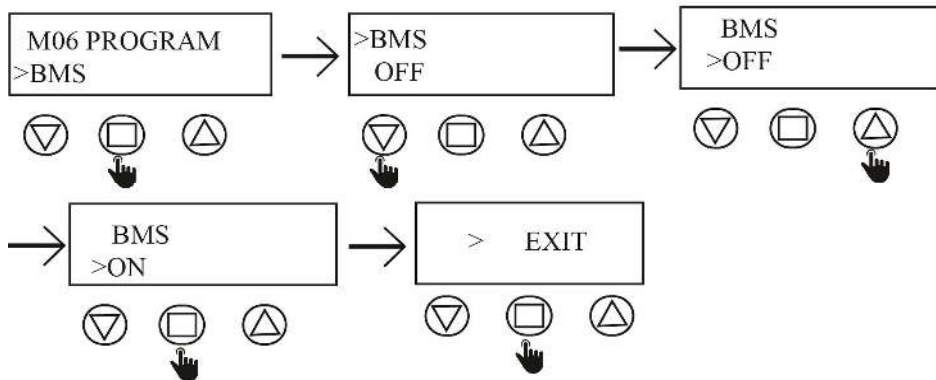
SET POTABLE/WASTE PROGRAM



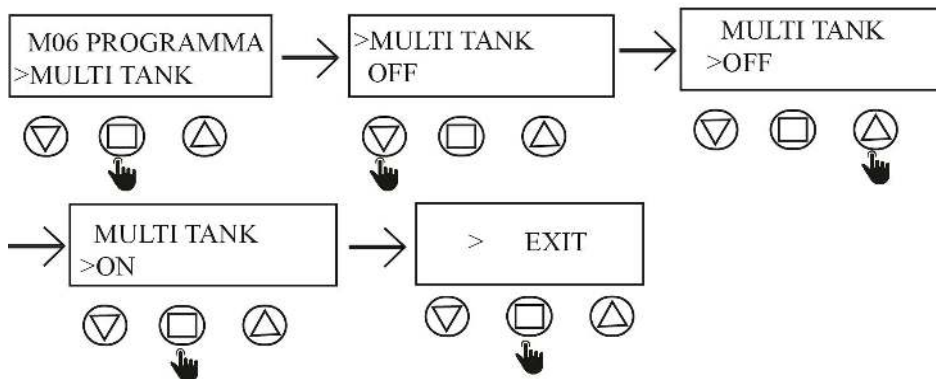
SELF HOLDING PROGRAMS



BMS SETTING

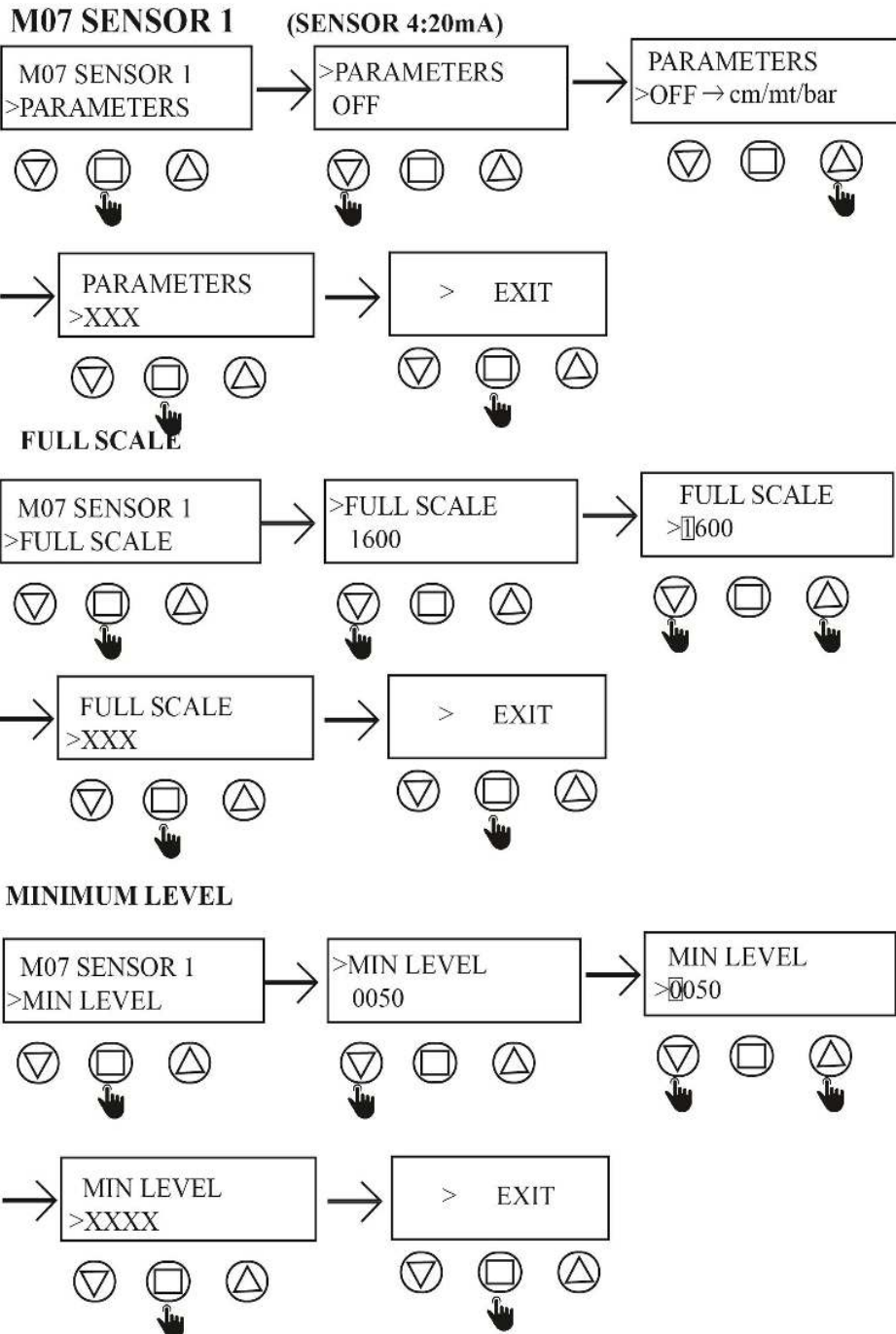


MULTI TANK SETTING



Installation

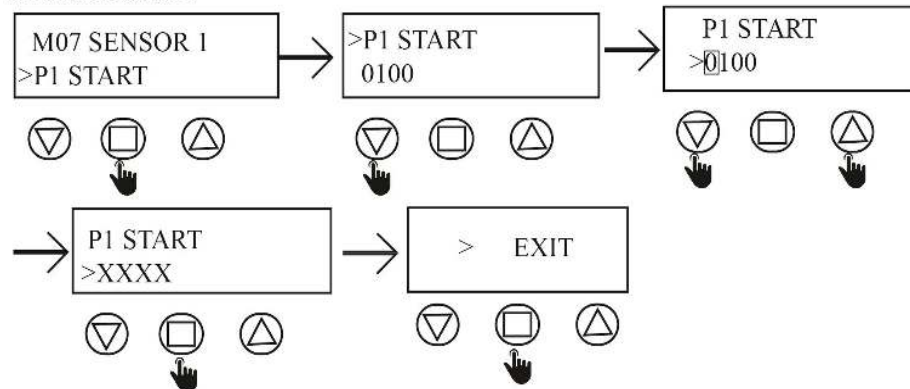
EPIC 2D



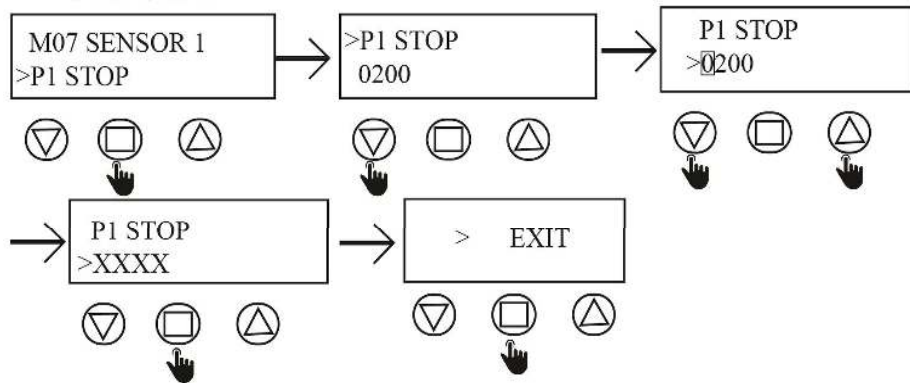
Installation

EPIC 2D

START PUMP 1



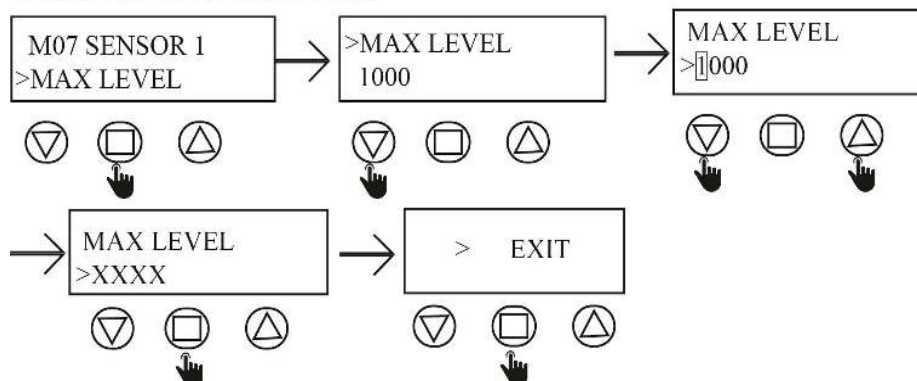
STOP PUMP 1



**START PUMP 2
FOLLOW THE SAME
PROCEDURE OF PUMP 1**

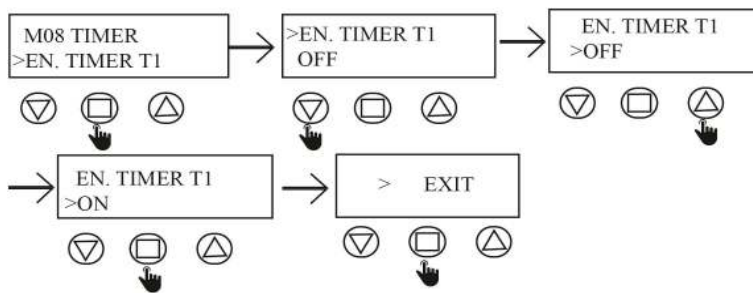
**STOP PUMP 2
FOLLOW THE SAME
PROCEDURE OF PUMP 1**

MAXIMUM LEVEL SETTING

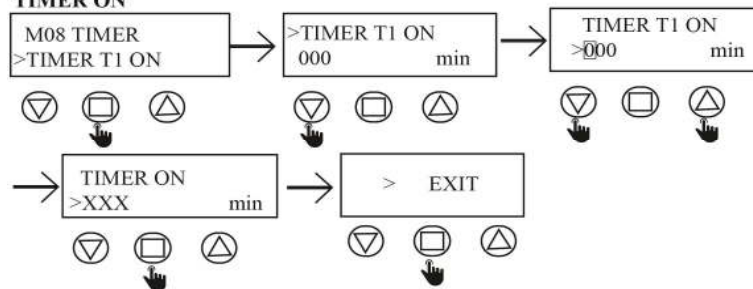


M08 TIMER

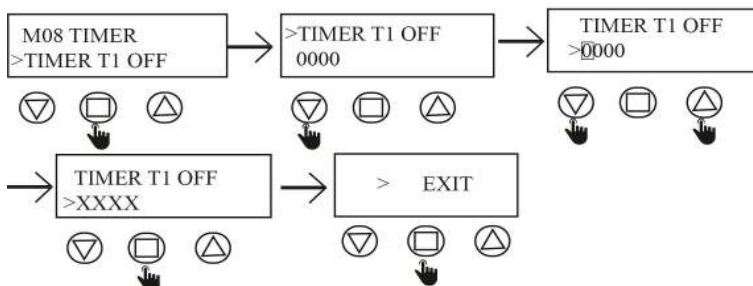
SETTING DUTY/STAND BY PROGRAM



TIMER ON



TIMER OFF



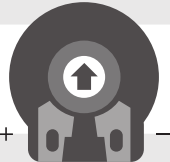
SAME PROCEDURE OF T1

3.5 TRIMMER SETTINGS

To change manually the threshold protections, **interrupting the power supply to the panel** and work on the trimmers following the below instructions:









PROTECTION DELAY
The motor protection switching delay has been setted at **5 sec.**

TRIMMER SETTING	
	<p>TRIMMER 1: PROBE SENSITIVITY CHANGE</p> <p>Probe sensitivity (CLC) and water in oil chamber sensor trimmer regulation.</p> <p>It is possible to change the sensitivity of the CLC probes and the water sensor in the oil chamber, interrupting the power supply to the panel and acting on trimmer 1 (clockwise to increase and counterclockwise to decrease sensitivity).</p>

4.1 KEYPAD AND LIGHTS INDICATIONS



CONTROL PANEL

	PW blue light indicating power network presence and powered panel.
	ALARM red light to indicate a general alarm and pump stop. (min e max Amp, min e max V, min e max level, motor klixon, water in oil chamber, phase failure).
	START green light to indicate pump start; fixed on to indicate pump running, flashing to indicate auto-setting mode.
	AUT the button activates the auto-setting mode and automatic pump (if the green light is on, the automatic mode is active).
	0 pump stop button and reset alarms, sound alarm turn-off.
	MAN activation of manual pump; holding it down, the engine is operated in by-pass mode, bypassing all the protections.


10.0 ALARMS

The panel displays a series of alarms that may occur during operation.

Some of them stop the pumps, others do not stop the pump but display the alarms.

In any case, the alarm has been showed on the display until has been deleted by the operator.

Below is a list of alarms:

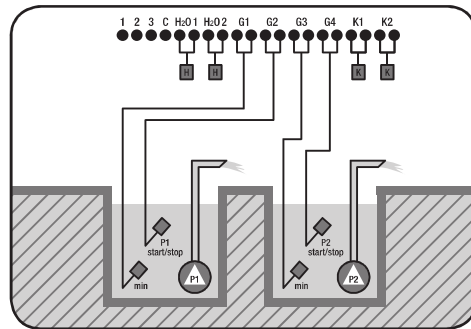
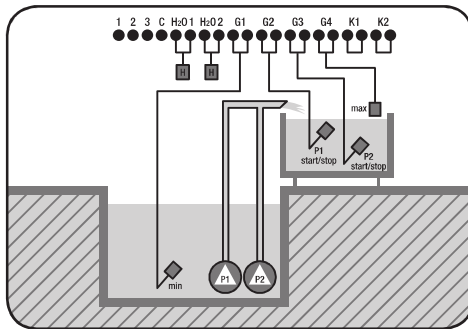
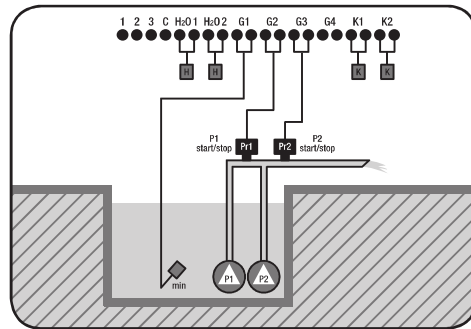
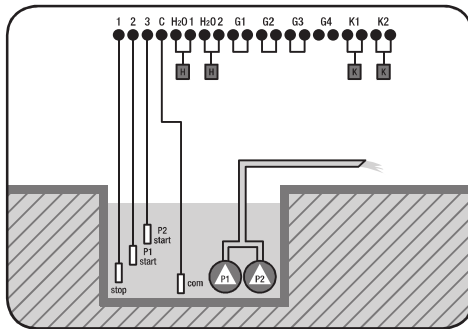
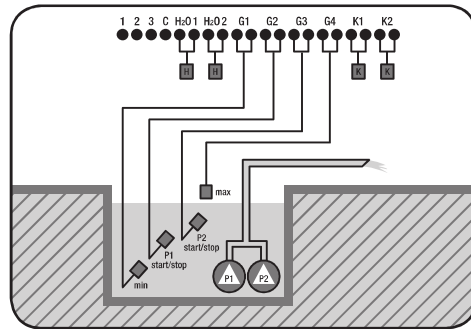
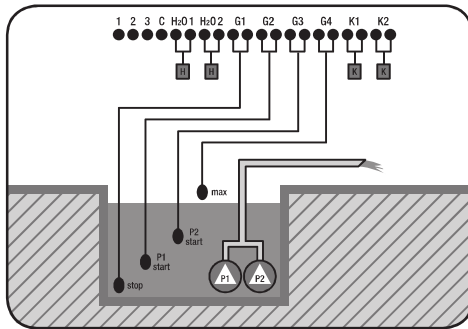
Alarm code	DESCRIPTION	PUMP STOP	RELAY ON	Led 
AL 1	MIN VOLTAGE	YES	YES	YES
AL 2	MAX VOLTAGE	YES	YES	YES
AL 3	LOW FREQUENCY	NO	YES	YES
AL 4	HIGH FREQUENCY	NO	YES	YES
AL 5	DRY RUNNING P1/P2	YES	YES	YES
AL 6	MAX AMPERAGE P1/P2	YES	YES	YES
AL 7	MAX START PER HOUR	NO	YES	YES
AL 8	ALARM WATER IN OIL CHAMBER P1/P2	NO	YES	YES
AL 9	ALARM KLIXON P1/P2	YES	YES	YES
AL 10	ALARM MIN LEVEL	YES	YES	YES
AL 11	ALARM MAX LEVEL	NO	YES	YES

TO DELETE ALARMS USE KEY:



IF AFTER HAVING DELETED THE ALARM, THE SAME IS RECOVERED IT IS NECESSARY TO INTERVENE ON THE CASE.




4.3 TYPICAL INSTALLATION



1/2/3/C	input for level probes
H	input for water in oil chamber sensor/water leakage
K	input for motor klixon
P	pump
Pr	pressure switch

T	pressure transducer
□	float switch for clear water
●	float switch for waste water
⏏	level probes

5.1 PUMPS STOP

MODE	BUTTON	STOP
MANUAL		The motor stops when the "MANUAL" button is released or once you digit the 0 button.
AUTOMATIC		When the input commands are disable/non active once you digit the 0 button.
OFF		Turning the main switch interlocking door in "OFF" position.

5.2 SERVICE

EPIC 2 does not require any routine maintenance provided that their working limits are observed. Any maintenance operations must be performed by qualified and experienced personnel, in compliance with the safety regulations in force.



DANGER!

Make sure that EPIC 2 is disconnected from the power supply before performing any maintenance operations.

5.3 SPARE PARTS

Always state the exact model identification number and construction number when requesting technical information or spare parts from our sales and service centre.

Use only original spare parts when replacing any faulty components. The use of unsuitable spare parts can cause malfunctions, personal injury and damage to property.

5.4 WASTE DISPOSAL

After the control panel has been installed and started, the customer must provide for the appropriate elimination/disposal of the waste materials according to the legislation locally in force. If the control panel or parts of it must be taken out of service and dismantled, follow local regulations regarding sorted waste disposal. Refer to the appropriate recycling centres.



CAUTION!

Contamination of the environment with hazardous substances such as battery acid, fuel, oil, plastic, copper, etc., may cause serious damage to the environment and endanger people's health.

6.1 CERTIFICATE OF CONFORMITY

The Manufacturer:

Atlantic Power Control S.r.l.s

Via E. Fermi, 10 - 35020 Polverara (PD) - ITALIA

**DECLARES UNDER IS OWN RESPONSIBILITY
THAT THE FOLLOWINGS CONTROL PANELS:**

EPIC 2 -230D e EPIC 2 -400D

**ARE IN CONFORMITY
WITH COMMUNITY DIRECTIVES REGARDING:**

- European directive 2006/95/CE
- Electromagnetic compatibility directive 2004/108/CE



AND AS APPLICABLE TO HARMONIZED STANDARDS:

- EN 61439-1
- EN 61439-2
- EN 60204-1
- EN 55014-1
- EN 55014-2
- EN 61000-3-2
- EN 61000-3-3

Moreover Mr. Giuseppe Franchin, as the legal representative of the company, is the person authorized to compile the technical documentation file.

Polverara - Italy, 10/01/2018

Technical Manager
(Giuseppe Franchin)



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