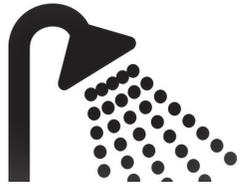


# CONTROL PUMP PLUS

## 1 & 2 PUMPS SINGLE PHASE & THREEPHASE

Settable Electronic Panel for the direct control of 1 & 2 Pumps SINGLE & THREE PHASE

**DRAINAGE - BOOSTER or FILLING TANK**



BOOSTER

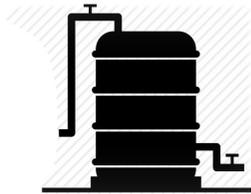


SUBMERSIBLE

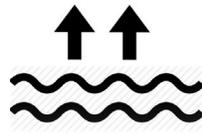


SINGLE PHASE

&



FILLING PUMP CONTROL



DRAINAGE



THREE PHASE

&



ONE PUMP

&



TWO PUMPS



To Install According CEE el . n° 24.  $I \Delta n = 30 \text{ mA}$  Automatic Cut Out Is Required

In any event all local and/or current legislation must be observed at all times.

Install the equipment far from heat sources and in a dry and sheltered location

The installation of a safety device is recommended to protect the panel power line in compliance with current electrical standards.

The electrical panel must be connected by a qualified electrician in observance of the relevant electrical standards.

All installation and/or maintenance operations must be performed by a specialized technician who is fully aware of the relevant current safety standards.

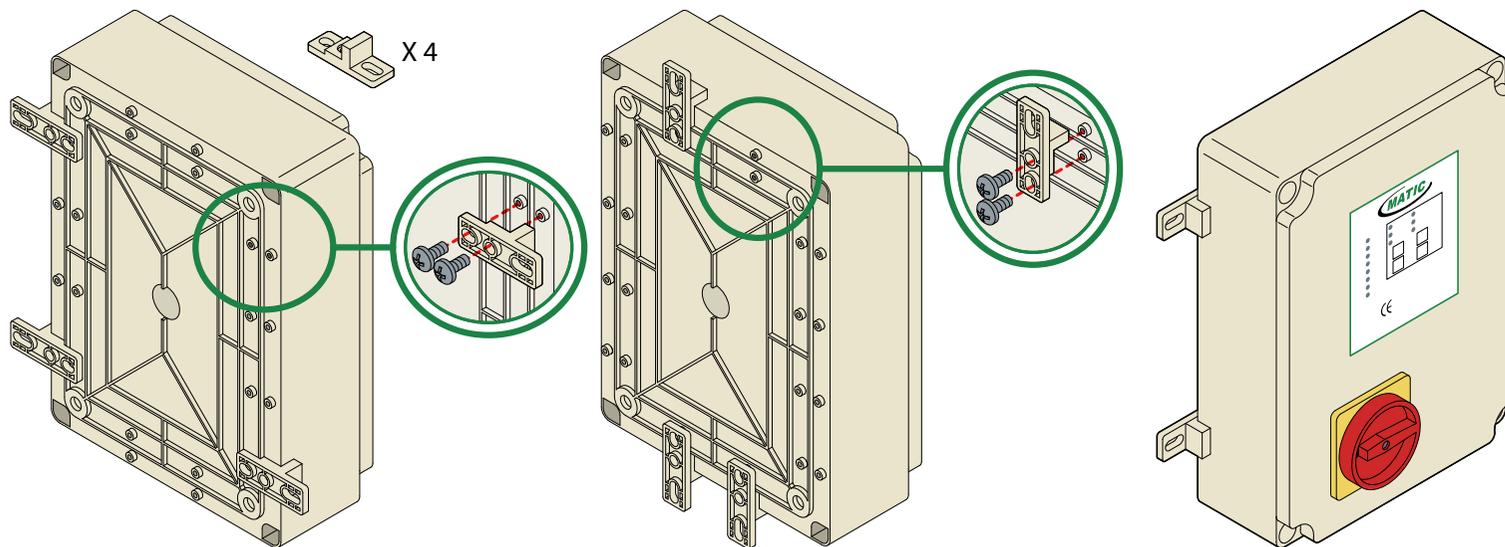
Ensure the installation is connected to an efficient earthing system.

The power line must be protected by a residual current circuit breaker.

Keep connection cables as short as possible, preventing any twisting of cables which may be harmful due to inductive effects on the electronic equipment.

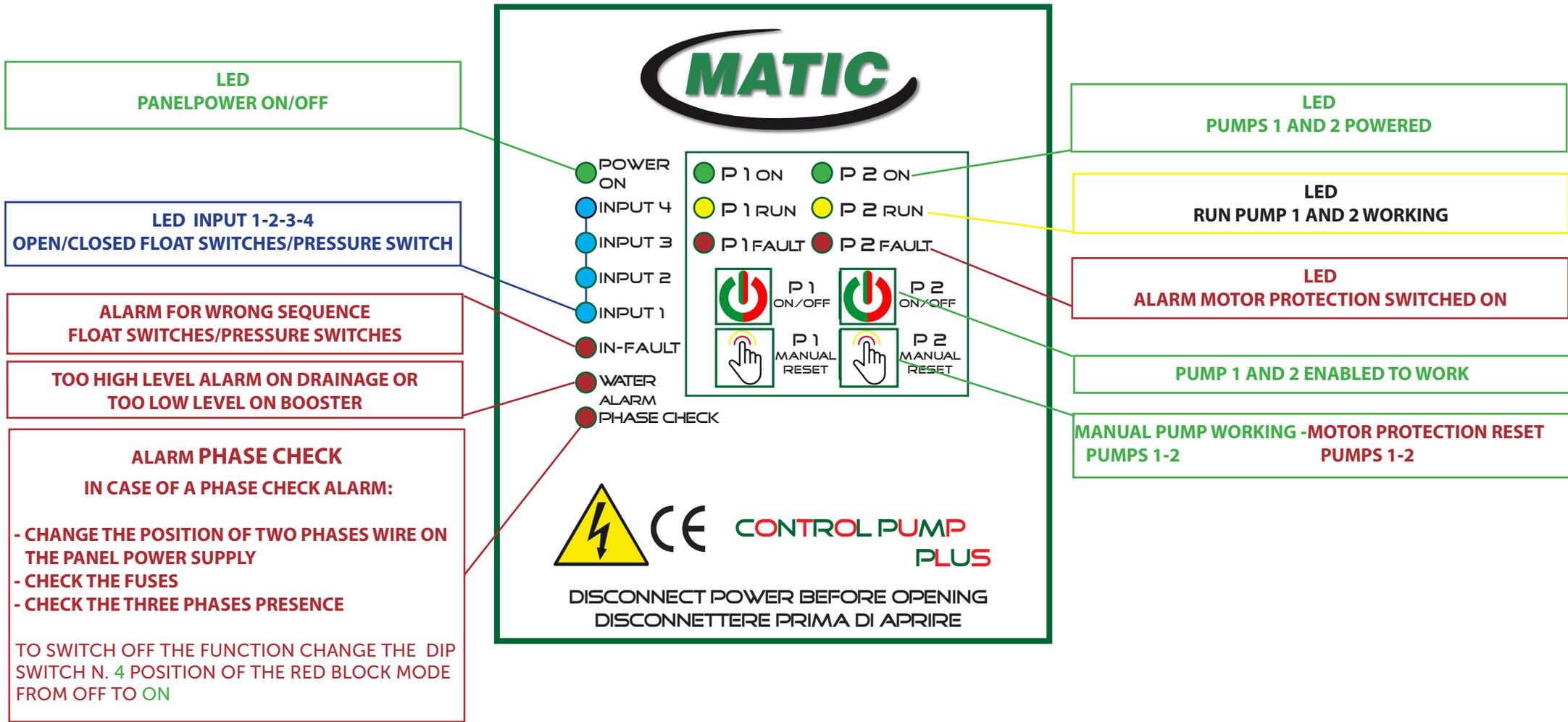
All wires used in the cabling must be suitably sized to withstand the load to be powered.

The electrical panel is designed for wall-mounting by means of the brackets supplied.



H	W	L
mm		
305	224	127
BRACKETS 20 mm		

# CONTROL PANEL GENERAL VIEW



LC 400

FUSE 5X20

WARNING  
DON'T USE  
BOTH FUSES  
TOGETHER

230

F6 R41 R39 R40 R42

GRIGIO BIA



5X20

10 70V

D12 D11 D19 D20 D7 D8 D10 D9 D14 D13 D16 D15

ON WE ON ON WE ON  
1 2 3 4 1 2 3 4 1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8

MODE ALARM CURRENT 1 CURRENT 2

MEL 39/18  
MATIC 002-024

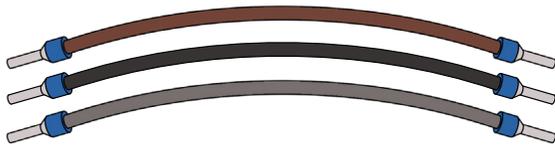


WATER  
SENS.

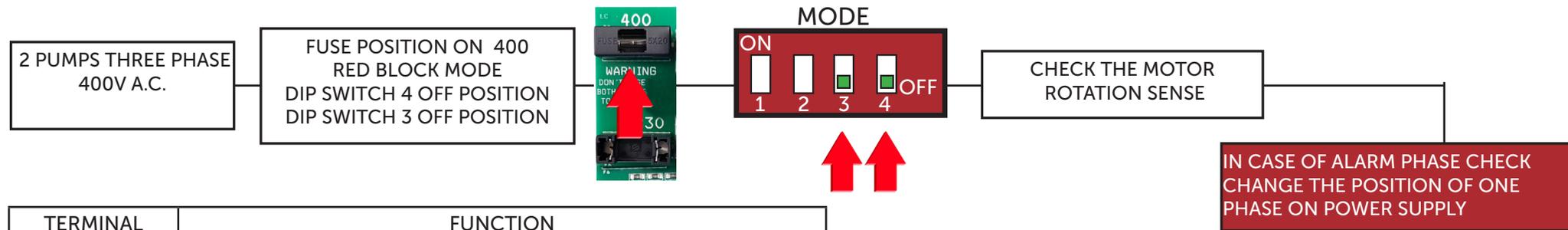
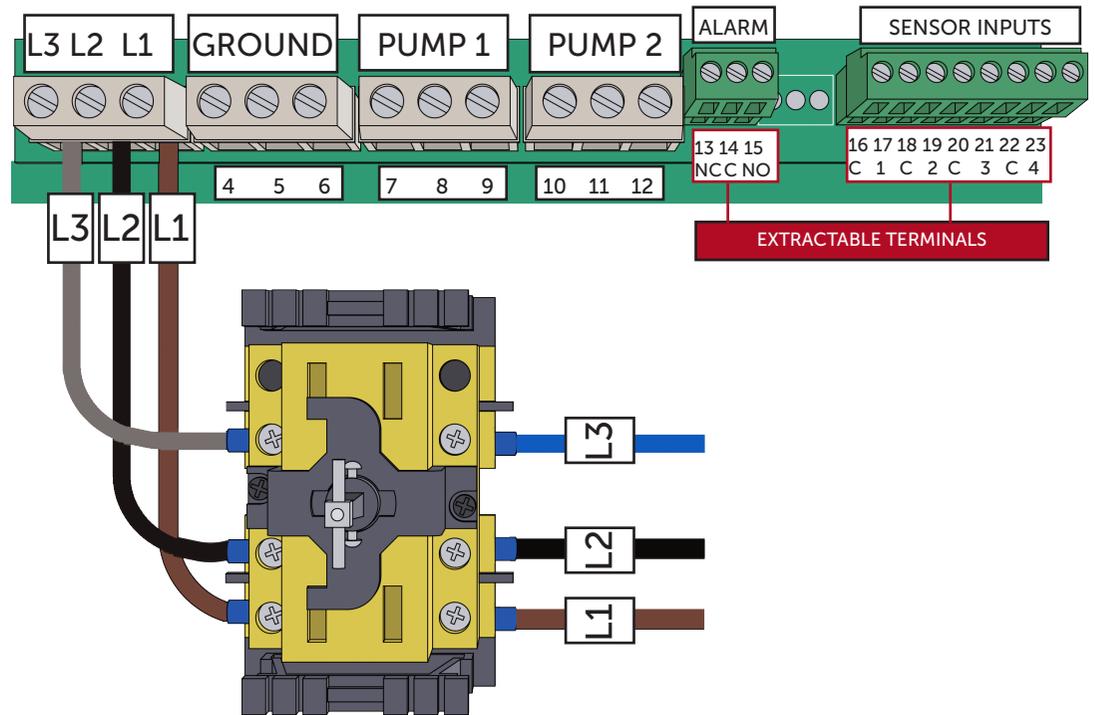


# 400V a.c. 3 PHASE SUPPLY - TWIN PUMPS - MAX 5,5 kW circa MAX 15 AMPERE

Supplied With The Control Panel Plus  
Are Cable Links To Go From The Isolator  
Switch To The Control Board



After The Connection Please Follow The  
Next Steps On The Following Pages For  
400V A.c. Supply, Twin Pump Set Up



TERMINAL	FUNCTION
L3	L3 PANEL POWER SUPPLY THREE PHASE GREY WIRE
L2	L2 PANEL POWER SUPPLY THREE PHASE BLACK WIRE
L1	L1 PANEL POWER SUPPLY THREE PHASE BROWN WIRE
4	GROUND
5	GROUND
6	GROUND
7	PHASE 1 PUMP 1
8	PHASE 2 PUMP 1
9	PHASE 3 PUMP 1

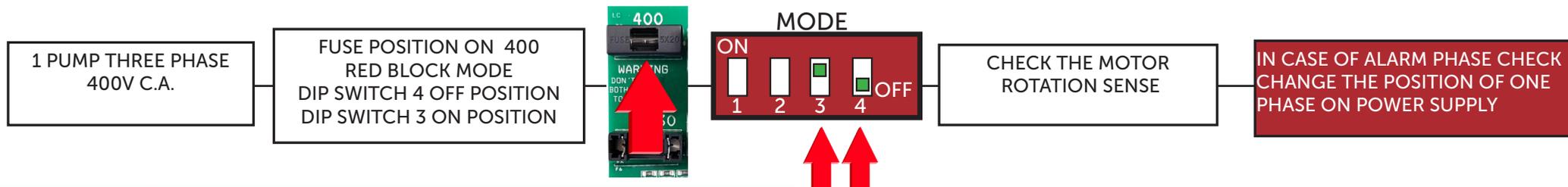
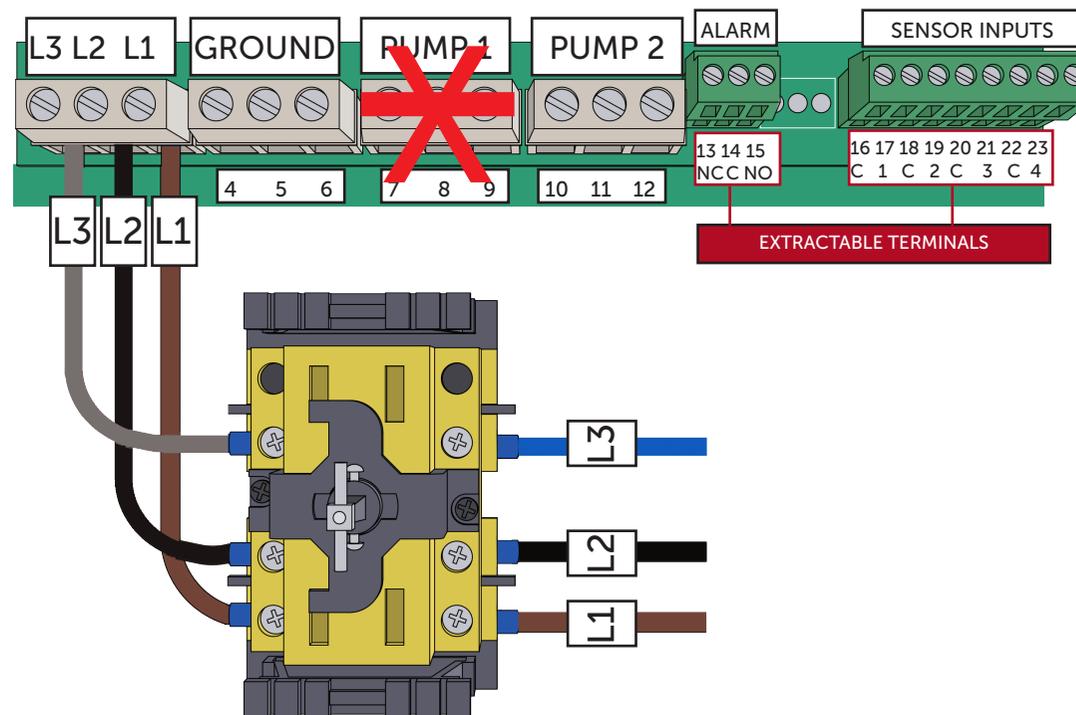
TERMINAL	FUNCTION
10	PHASE 1 PUMP 2
11	PHASE 2 PUMP 2
12	PHASE 3 PUMP 2
13	ALARM RELAY OUTPUT NC
14	ALARM RELAY OUTPUT COM.
15	ALARM RELAY OUTPUT NO
16-17-18-19-20-21 SENSOR CONNECTION	

# 400V a.c. 3 PHASE SUPPLY - SINGLE PUMP - MAX 5,5 kW circa MAX 15 AMPERE

Supplied With The Control Panel Plus Are Cable Links To Go From The Isolator Switch To The Control Board



After The Connection Please Follow The Next Steps On The Following Pages For 400V A.c. Supply, Single Pump Set Up

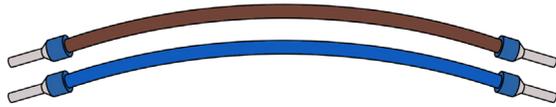


TERMINAL	FUNCTION
L3	L3 PANEL POWER SUPPLY THREE PHASE GREY WIRE
L2	L2 PANEL POWER SUPPLY THREE PHASE BLACK WIRE
L1	L1 PANEL POWER SUPPLY THREE PHASE BROWN WIRE
4	GROUND
5	GROUND
6	GROUND
7	NOT CONNECTED
8	NOT CONNECTED
9	NOT CONNECTED

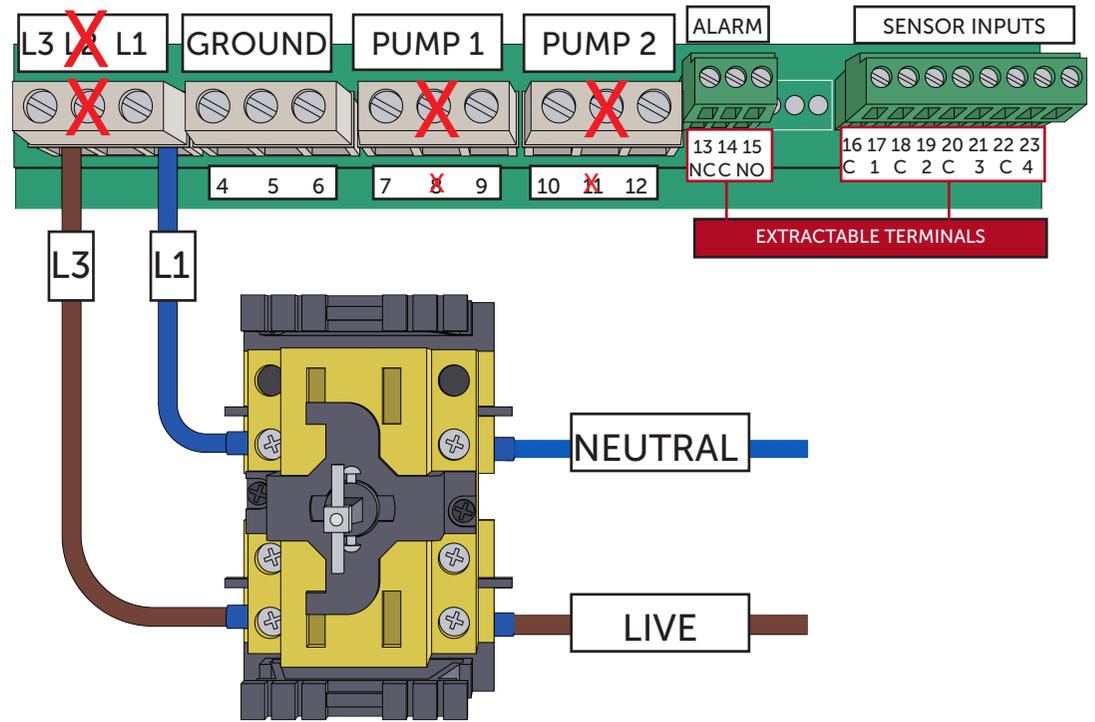
TERMINALE	FUNCTION
10	PHASE 1 PUMP 2
11	PHASE 2 PUMP 2
12	PHASE 3 PUMP 2
13	ALARM RELAY OUTPUT NC
14	ALARM RELAY OUTPUT COM.
15	ALARM RELAY OUTPUT NO
16-17-18-19-20-21 SENSOR CONNECTION	

# 230V a.c. SINGLE PHASE SUPPLY - TWIN PUMPS - MAX 1,5 kW circa. MAX 15 AMPERES EACH ONE

Supplied With The Control Panel Plus Are Cable Links To Go From The Isolator Switch To The Control Board

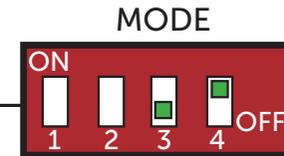


After The Connection Please Follow The Next Steps On The Following Pages For 230V A.c. Supply, Twin Pump Set Up



2 PUMP SINGLE PHASE  
230V A.C.

FUSE POSITION ON 230  
RED BLOCK MODE  
DIP SWITCH 4 ON POSITION  
DIP SWITCH 3 OFF POSITION

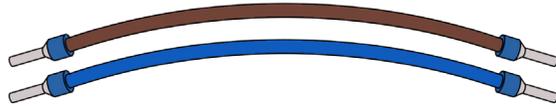


TERMINAL	FUNCTION
L3	L3 PANEL POWER SINGLE PHASE LIVE BROWN WIRE
2	L2 NOT CONNECTED
L3	L1 PANEL POWER SINGLE NEUTRAL BLUE WIRE
4	GROUND
5	GROUND
6	GROUND
7	PHASE PUMP 1
8	NOT CONNECTED
9	NEUTRAL PUMP 1

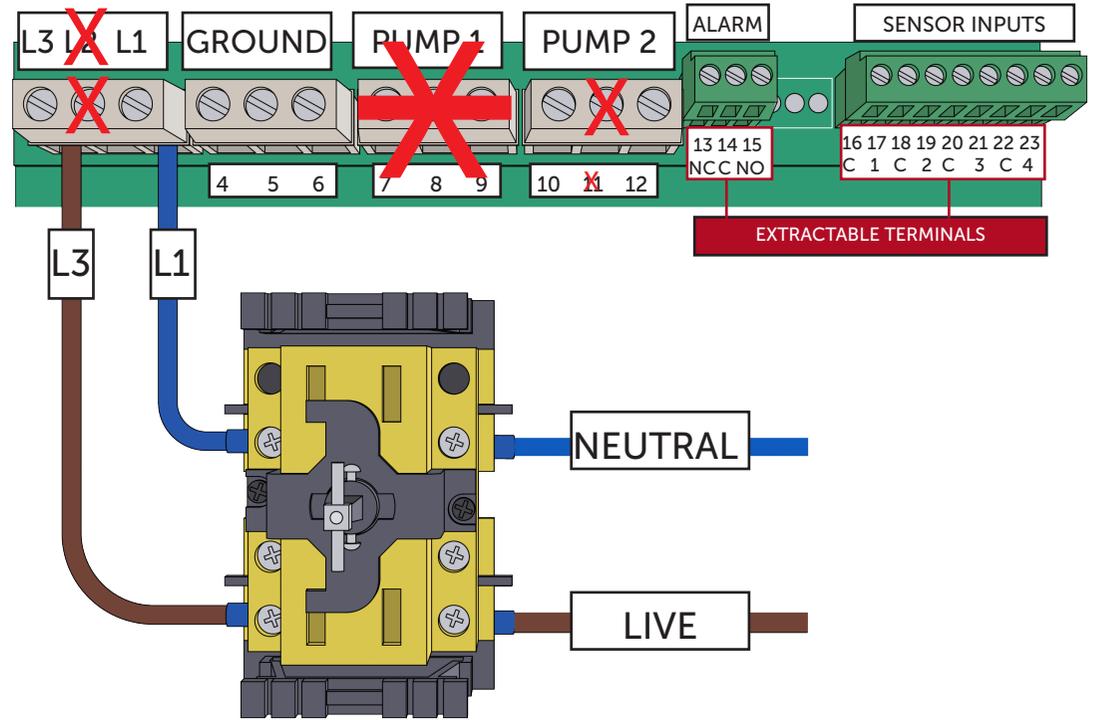
TERMINAL	FUNCTION
10	PHASE PUMP 2
11	NOT CONNECTED
12	NEUTRAL PUMP 2
13	ALARM RELAY OUTPUT NC
14	ALARM RELAY OUTPUT COM.
15	ALARM RELAY OUTPUT NO
16-17-18-19-20-21 SENSOR CONNECTION	

# 230V a.c. SINGLE PHASE SUPPLY - SINGLE PUMP - MAX 1,5 kW circa. MAX 15 AMPERES

Supplied With The Control Panel Plus Are Cable Links To Go From The Isolator Switch To The Control Board

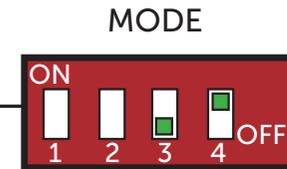


After The Connection Please Follow The Next Steps On The Following Pages For 230V A.c. Supply, Single Pump Set Up



1 PUMP  
SINGLE PHASE  
230V A.C.

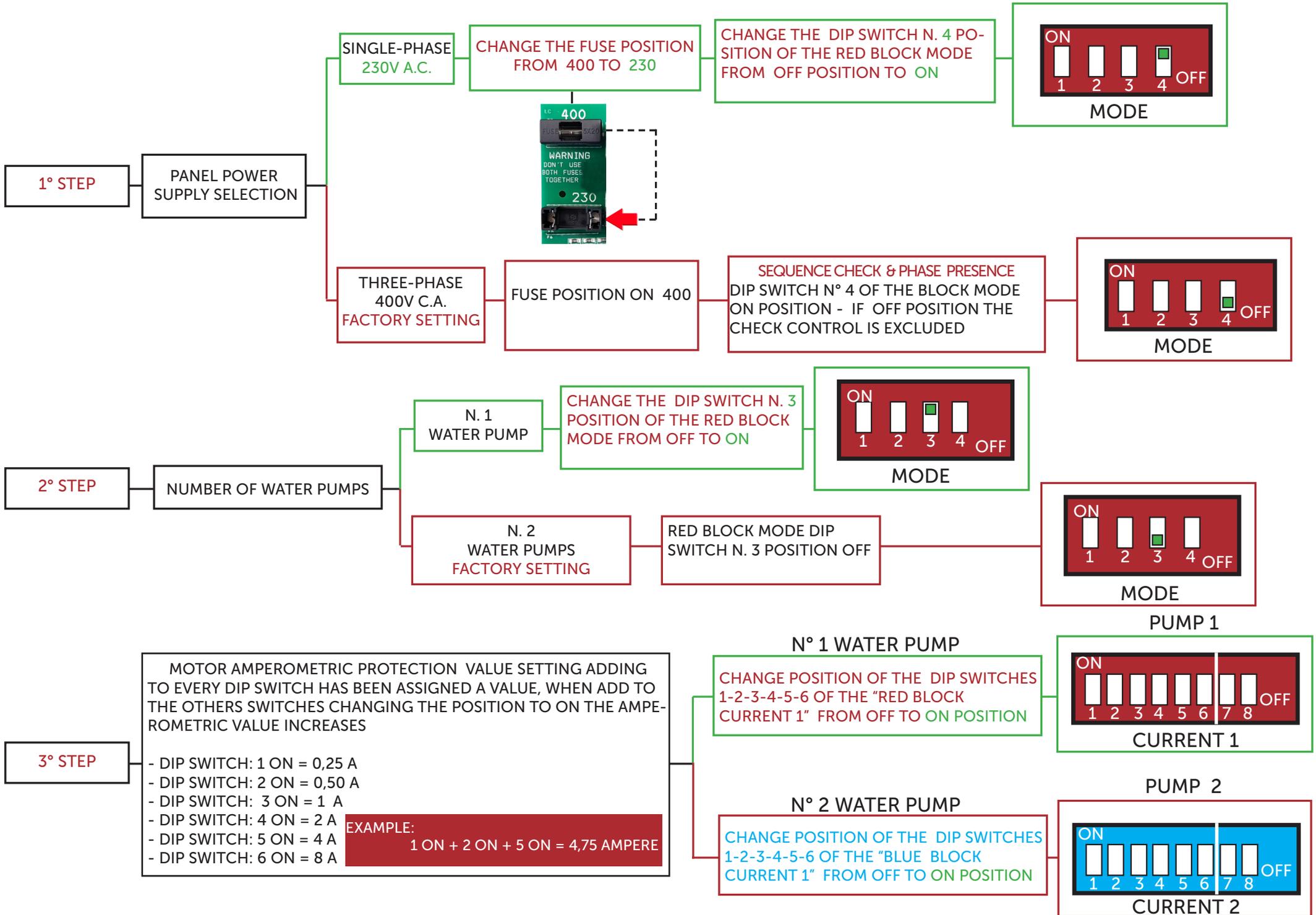
FUSE POSITION ON 230  
RED BLOCK MODE  
DIP SWITCH 4 ON POSITION  
DIP SWITCH 3 OFF POSITION



TERMINAL	FUNCTION
L3	L3 PANEL POWER SINGLE PHASE LIVE BROWN WIRE
2	L2 NOT CONNECTED
L1	L1 PANEL POWER SINGLE NEUTRAL BLUE WIRE
4	GROUND
5	GROUND
6	GROUND
7	NOT CONNECTED
8	NOT CONNECTED
9	NOT CONNECTED

TERMINAL	FUNCTION
10	PHASE PUMP 2
11	NOT CONNECTED
12	PHASE PUMP 2
13	ALARM RELAY OUTPUT NC
14	ALARM RELAY OUTPUT COM.
15	RALARM RELAY OUTPUT NO
16-17-18-19-20-21	SENSOR CONNECTION

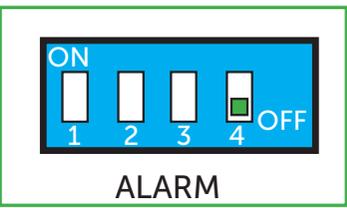
# POWER OFF THE PANEL BEFORE TO SET THE FUNCTIONS



**4° STEP** BUILT IN ALARM BUZZER FUNCTION SETTING SELECTION

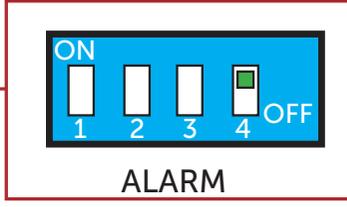
OFF

CHANGE THE DIP SWITCH N. 4 POSITION OF THE BLUE ALARM MODE FROM ON TO OFF



ON  
FACTORY SETTING

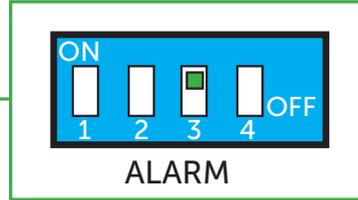
DIP SWITCH POSITION N° 4 ON POSITION



**5° STEP** ANTI ROTOR BLOCKING SETTING FUNCTION SELECTION - ONLY FOR THE DRAINAGE FUNCTION, SWITCHES ON THE PUMP FOR 3 SECONDS EVERY 72 HOURS FROM THE LAST START

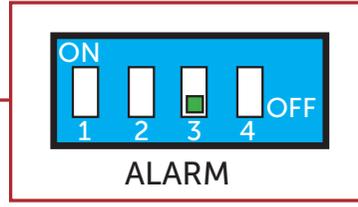
FUNCTION ON

CHANGE THE DIP SWITCH N. 3 POSITION OF THE BLUE ALARM MODE FROM OFF TO ON



FUNCTION OFF  
FACTORY SETTING

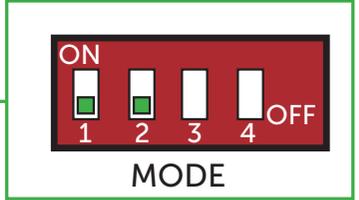
DIP SWITCH POSITION N° 3 OFF



**6° STEP** FUNCTION SETTING:  
- DRAINAGE PUMP  
- BOOSTER PUMP  
- TANK FILLING

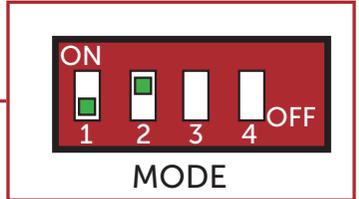
DRAINAGE  
FACTORY SETTING

RED BLOCK MODE, DIP SWITCH POSITION N. 1 TO OFF POSITION N. 2 TO OFF POSITION



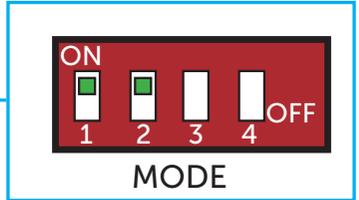
BOOSTER

RED BLOCK MODE, DIP SWITCH POSITION N. 1 TO OFF POSITION N. 2 TO ON POSITION



FILLING TANK  
(FILLING)

RED BLOCK MODE, DIP SWITCH POSITION N. 1 TO ON POSITION N. 2 TO ON POSITION



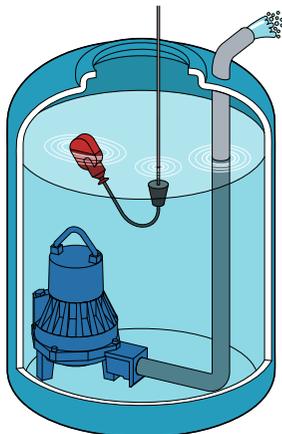
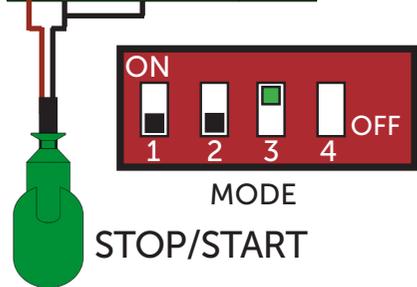
# DRAINAGE (MODE 1 OFF, 2 OFF)

USE THE FLOAT SWITCH CONTACT CLOSED ON UP POSITION AND OPENED ON DOWN POSITION

ON/OFF PUMP WORKING DIFFERENTIAL BY THE FLOAT SWITCH

1 FLOAT SWITCH - 1 PUMP

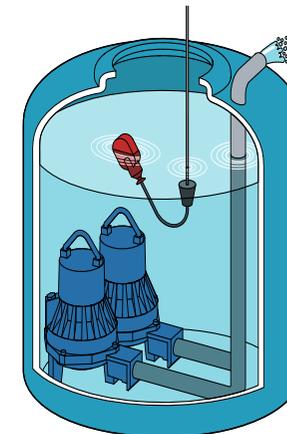
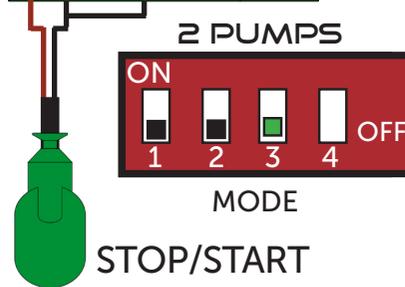
C 1 C 2 C 3 C 4



ON/OFF PUMP WORKING DIFFERENTIAL BY THE FLOAT SWITCH. **EXCHANGE FUNCTION** at each pump starting

1 FLOAT SWITCH - 2 PUMPS

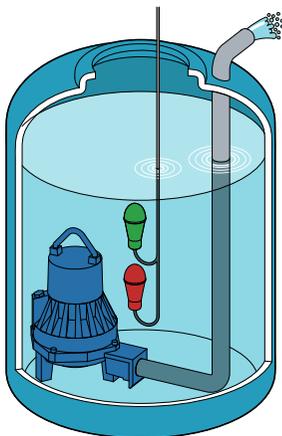
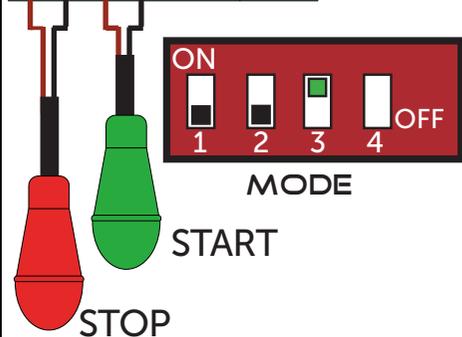
C 1 C 2 C 3 C 4



ON/OFF PUMP WORKING DIFFERENTIAL BY THE 2 FLOAT SWITCHES

2 FLOAT SWITCHES - 1 PUMP

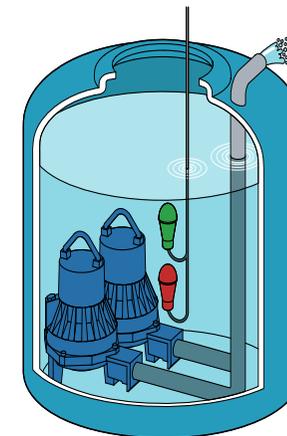
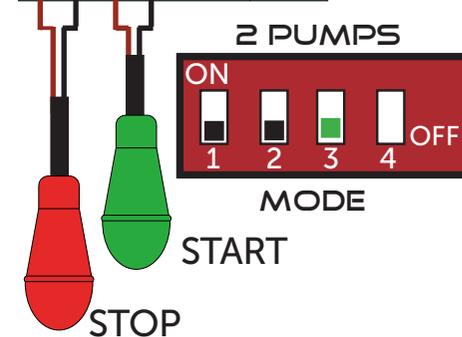
C 1 C 2 C 3 C 4



ON/OFF PUMP WORKING DIFFERENTIAL BY THE 2 FLOAT SWITCHES. **EXCHANGE FUNCTION** at each pump starting

2 FLOAT SWITCHES - 2 PUMPS

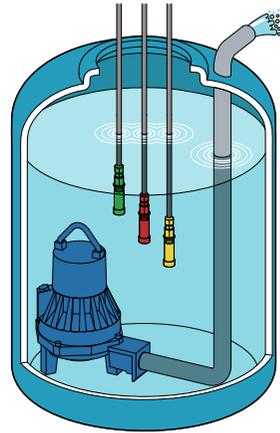
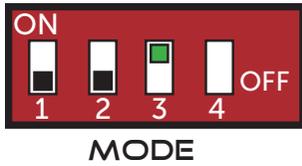
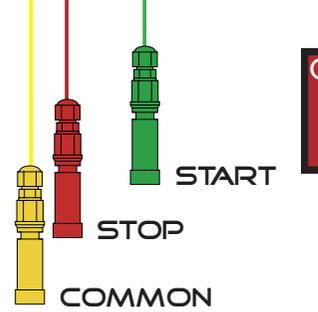
C 1 C 2 C 3 C 4



ON/OFF DIFFERENTIAL PUMP WORKING BY THE DISTANCE BETWEEN THE START PROBE AND THE STOP PROBE.  
COMMON PROBE CONNECTION IS OBLIGATORY

3 PROBES - 1 PUMP

C 1 C 2 C 3 C 4

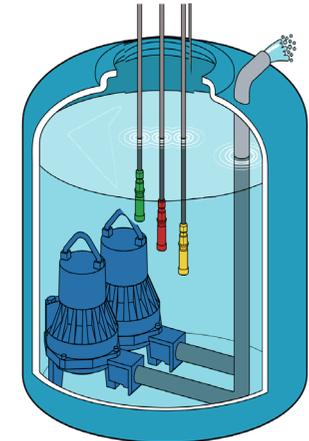
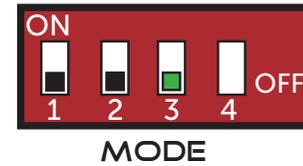
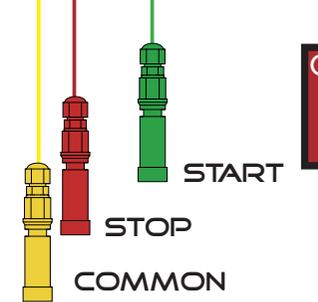


ON/OFF DIFFERENTIAL PUMP WORKING BY THE DISTANCE BETWEEN THE START PROBE AND THE STOP PROBE.  
COMMON PROBE CONNECTION IS OBLIGATORY

EXCHANGE FUNCTION at each pump starting

3 PROBES - 2 PUMPS

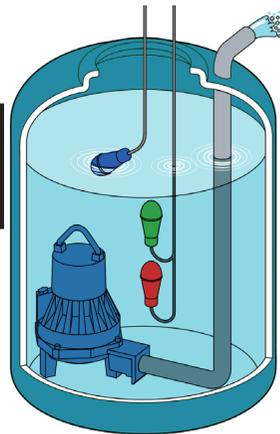
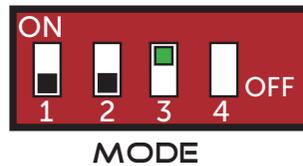
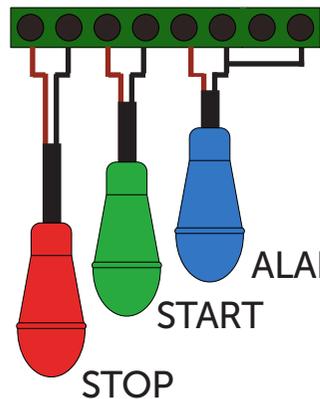
C 1 C 2 C 3 C 4



START/STOP + HIGH LEVEL ALARM  
switches ON the inner BUZZER (Excludible) + relay for the remote Alarm + Red light on the panel

3 FLOAT SWITCHES - 1 PUMP

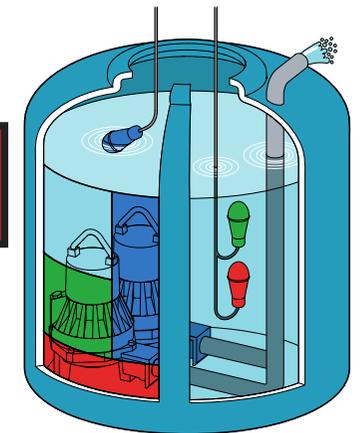
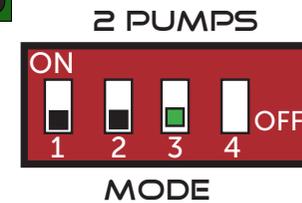
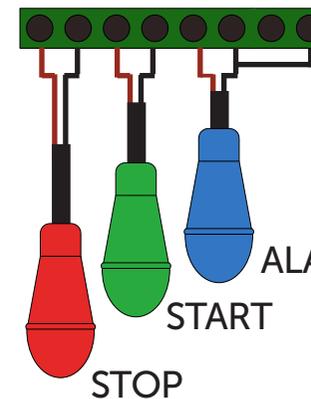
C 1 C 2 C 3 C 4



START/STOP + EXCHANGER FUNCTION AT EACH START  
+ HIGH LEVEL ALARM + switches ON the inner BUZZER (Excludible) + relay for the remote Alarm + Red light on the panel

3 FLOAT SWITCHES - 2 PUMPS

C 1 C 2 C 3 C 4

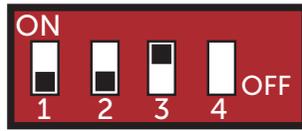
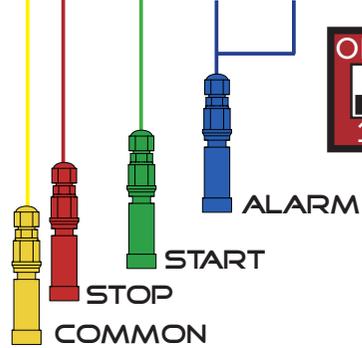


### START/STOP + HIGH LEVEL ALARM

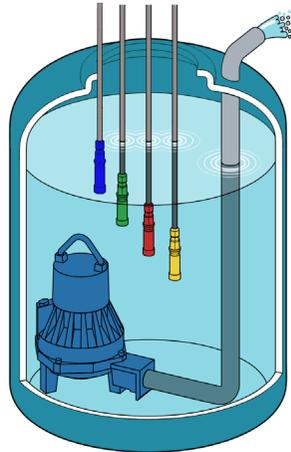
switches ON the inner BUZZER (Excludible) + relay for the remote Alarm + Red light on the panel

#### 4 PROBES - 1 PUMP

C 1 C 2 C 3 C 4



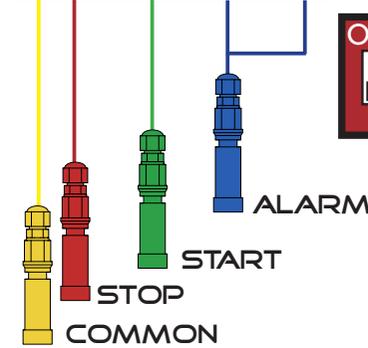
MODE



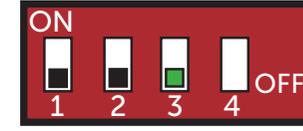
START/STOP + EXCHANGER FUNCTION + HIGH LEVEL ALARM STARTS THE SECOND PUMP HELPING THE FIRST + switches ON the inner BUZZER (Excludible) + relay for the remote Alarm + Red light on the panel

#### 4 PROBES - 2 PUMPS

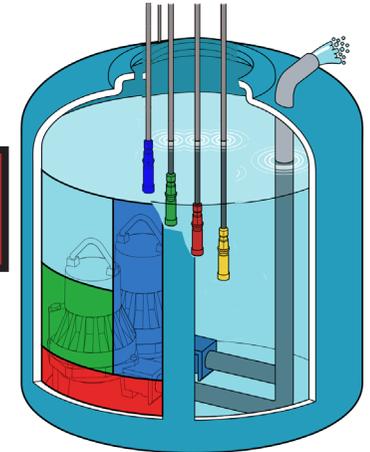
C 1 C 2 C 3 C 4



2 PUMPS

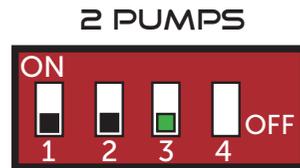
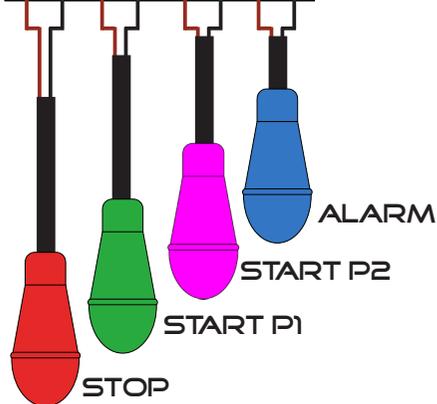


MODE

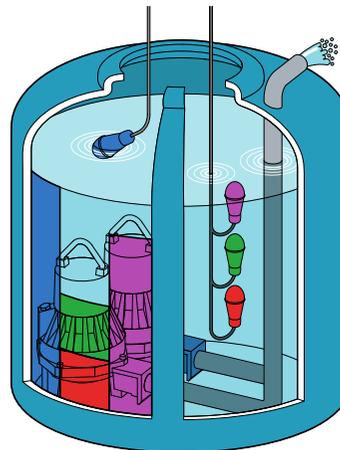


#### 4 FLOAT SWITCHES - 2 PUMPS

C 1 C 2 C 3 C 4

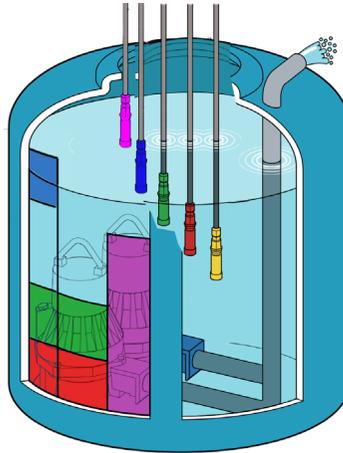
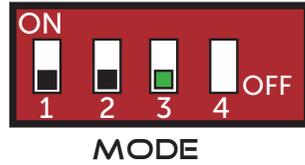
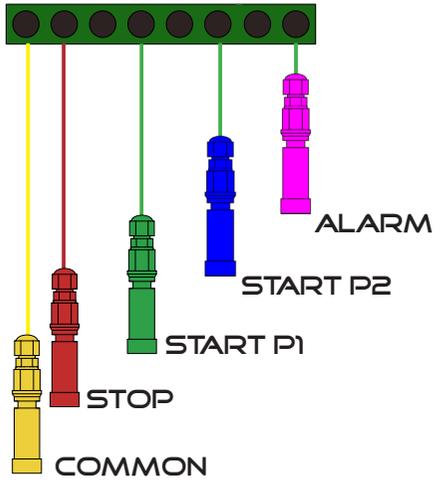


MODE



START/STOP PUMP N° 1 + EXCHANGER FUNCTION + STARTS THE SECOND PUMP HELPING THE FIRST WHEN THE LEVEL IS HIGH + HIGH LEVEL ALARM switches ON the inner BUZZER (Excludible) + relay for the remote Alarm + Red light on the panel

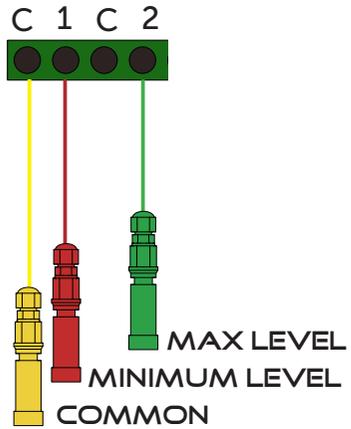
### 5 PROBES - 2 PUMPS



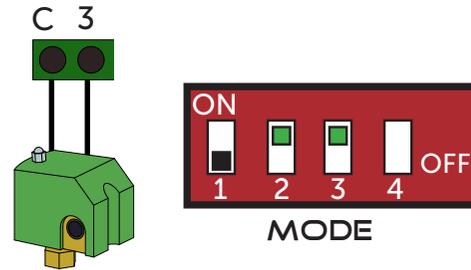
START/STOP PUMP N° 1 + EXCHANGER FUNCTION  
+ STARTS THE SECOND PUMP HELPING THE FIRST  
WHEN THE LEVEL IS HIGH+ **HIGH LEVEL ALARM**  
switches ON the inner BUZZER (Excludible) + relay  
for the remote Alarm + Red light on the panel

# BOOSTER 1 PUMP (MODE 1 OFF, 2 ON, 3 ON)

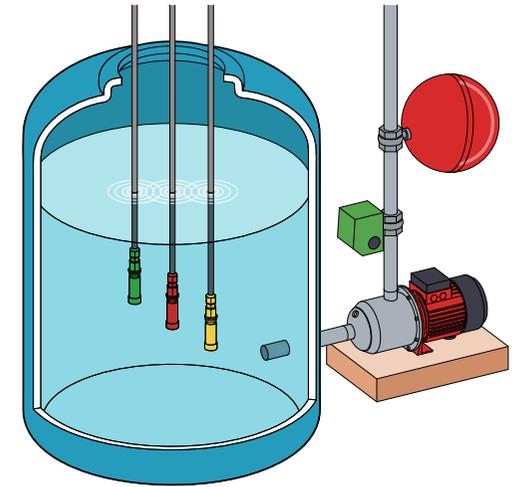
3 PROBES FOR THE DRY RUNNING CONTROL



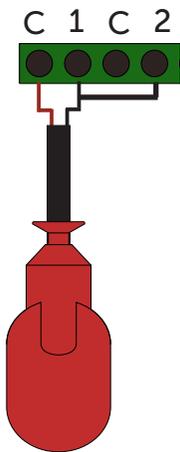
START/STOP  
1 PUMP



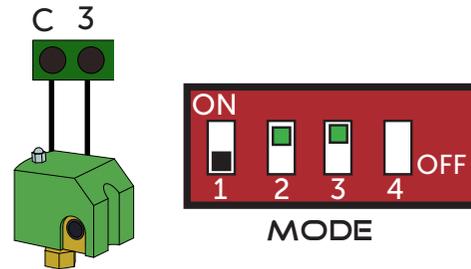
PRESSURE SWITCH



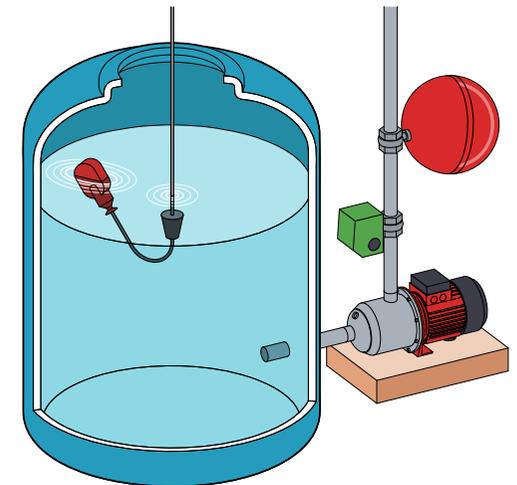
1 FLOAT FOR THE DRY RUNNING CONTROL  
USE THE CLOSED CONTACT WHEN UP



START/STOP  
1 PUMP

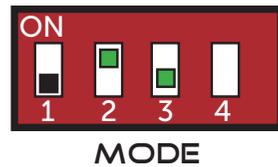
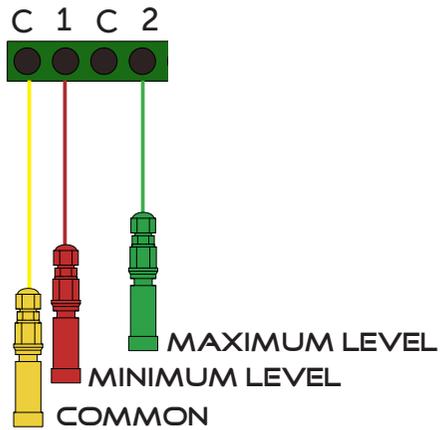


PRESSURE SWITCH

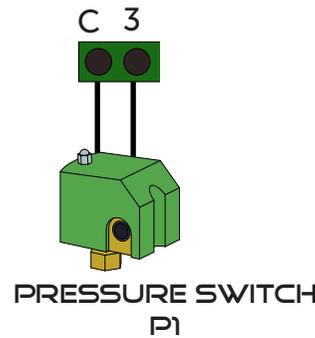


BOOSTER WITH 2 PUMPS AND EXCHANGER FUNCTION (MODE 1 OFF, 2 ON, 3 OFF)  
 THE PRESSURE SWITCH N° 2 MUST TO BE SET LOWER THAN THE FIRST ONE .  
 IF NOT THE PANEL SWITCHES ON AN ALARM

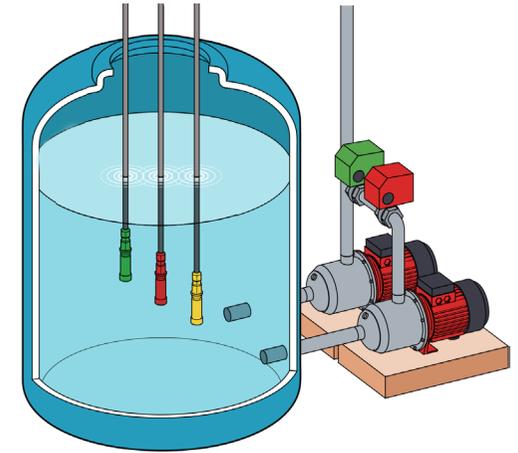
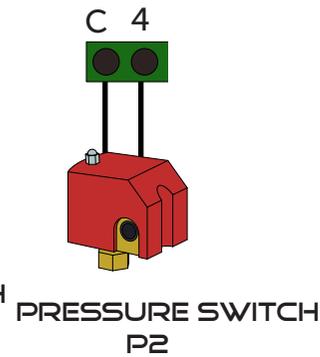
3 PROBES FOR THE DRY RUNNING CONTROL



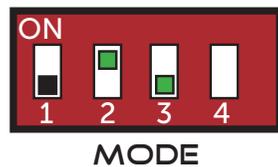
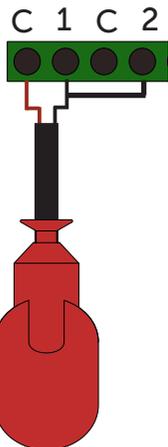
START/STOP  
PUMP 1



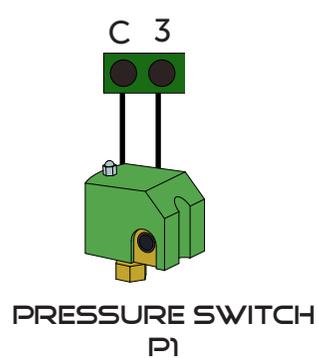
START/STOP  
PUMP 2



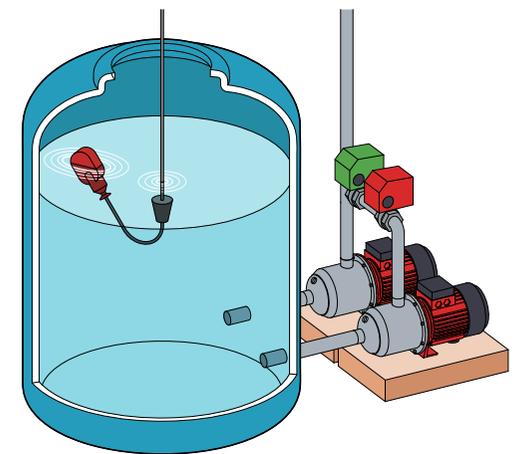
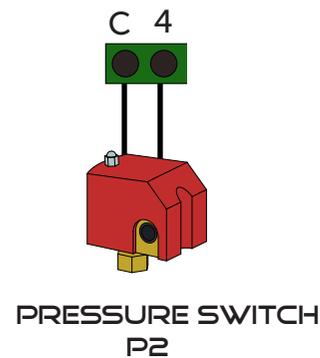
1 FLOAT FOR THE DRY RUNNING CONTROL  
 USE THE CLOSED CONTACT WHEN UP



START/STOP  
PUMP 1



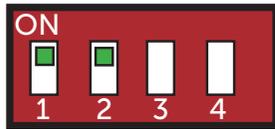
START/STOP  
PUMP 2



## FILLING PUMP FUNCTION (MODE 1 ON, 2 ON, 3 ON)

1 FLOAT FOR THE DRY RUNNING CONTROL  
USE THE CLOSED CONTACT WHEN UP

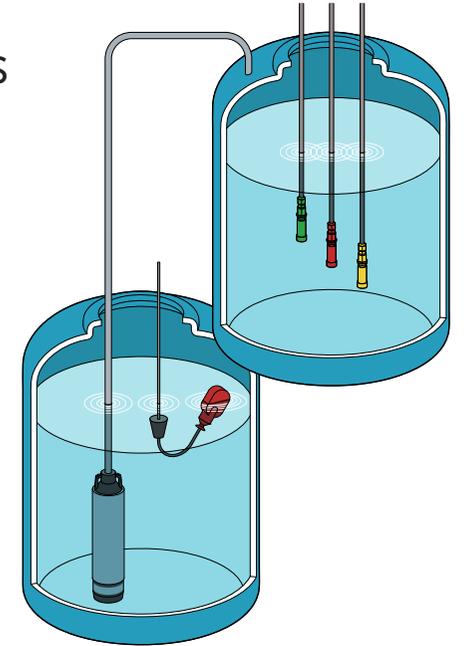
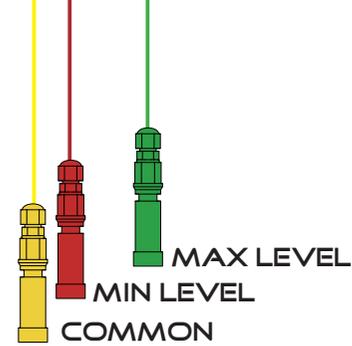
C 1 C 2



MODE

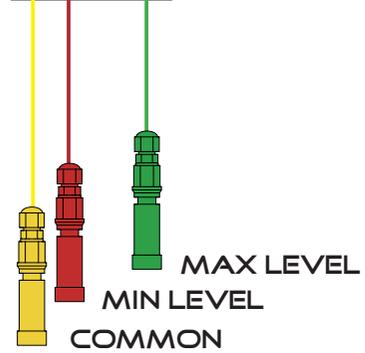
FILLING CONTROL BY 3 SINGLE POLE PROBES

C 3 C 4



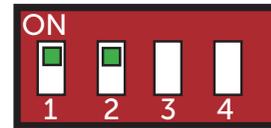
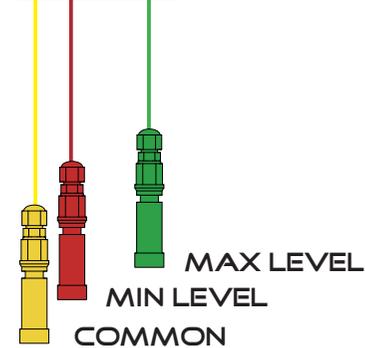
SINGLE POLE PROBES FOR THE DRY RUNNING CONTROL

C 1 C 2

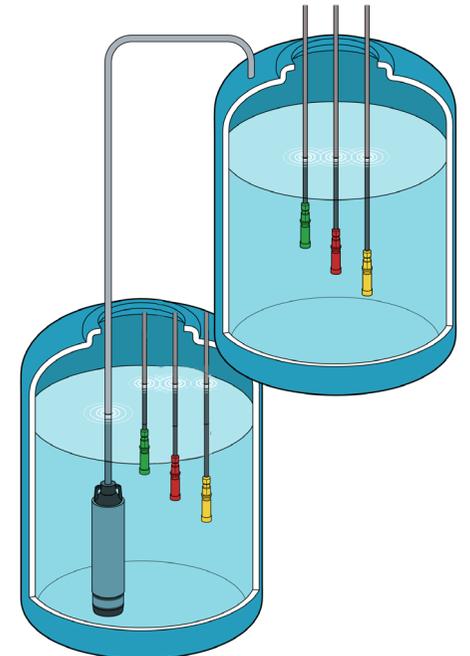


FILLING CONTROL BY 3 SINGLE POLE PROBES

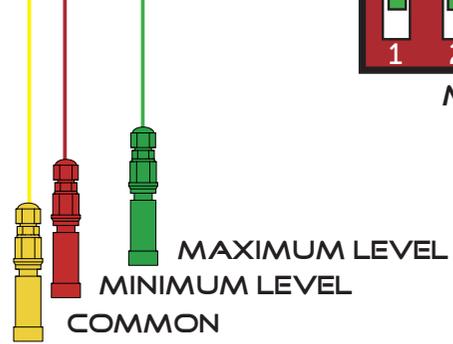
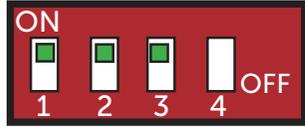
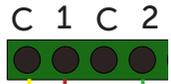
C 3 C 4



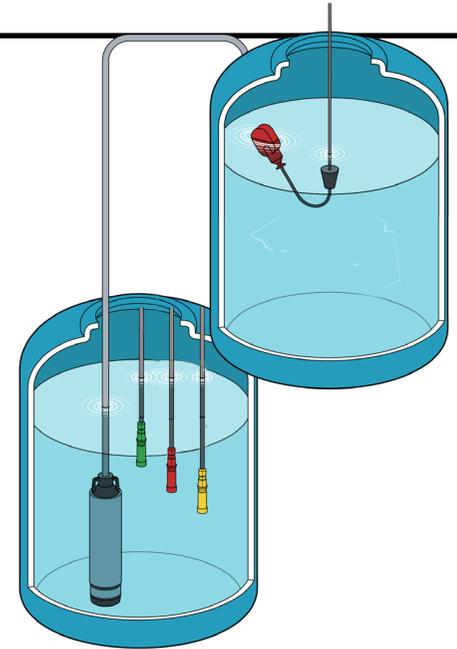
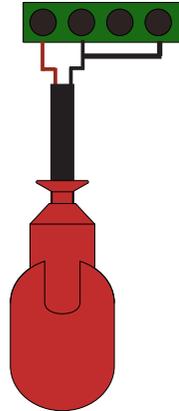
MODE



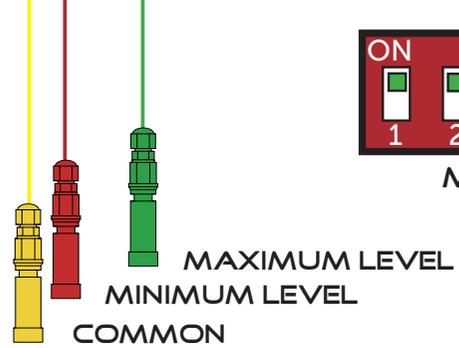
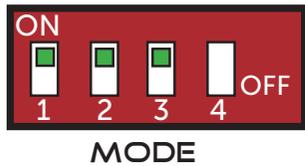
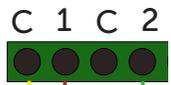
### SINGLE POLE PROBES FOR THE DRY RUNNING CONTROL



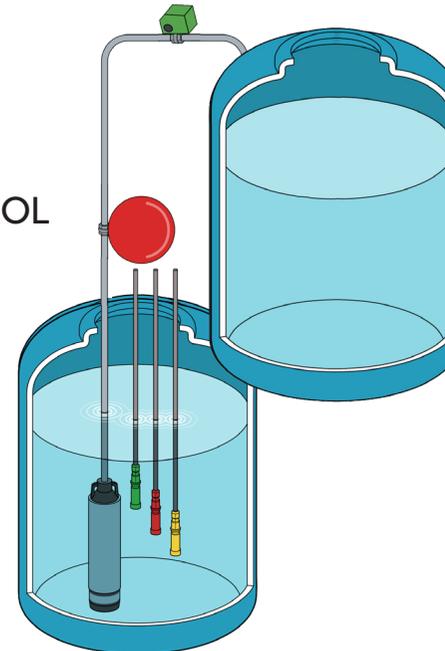
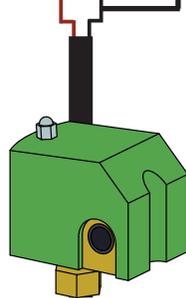
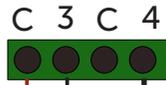
### 1 FLOAT FOR THE FILLING CONTROL USE THE CLOSED CONTACT WHEN UP



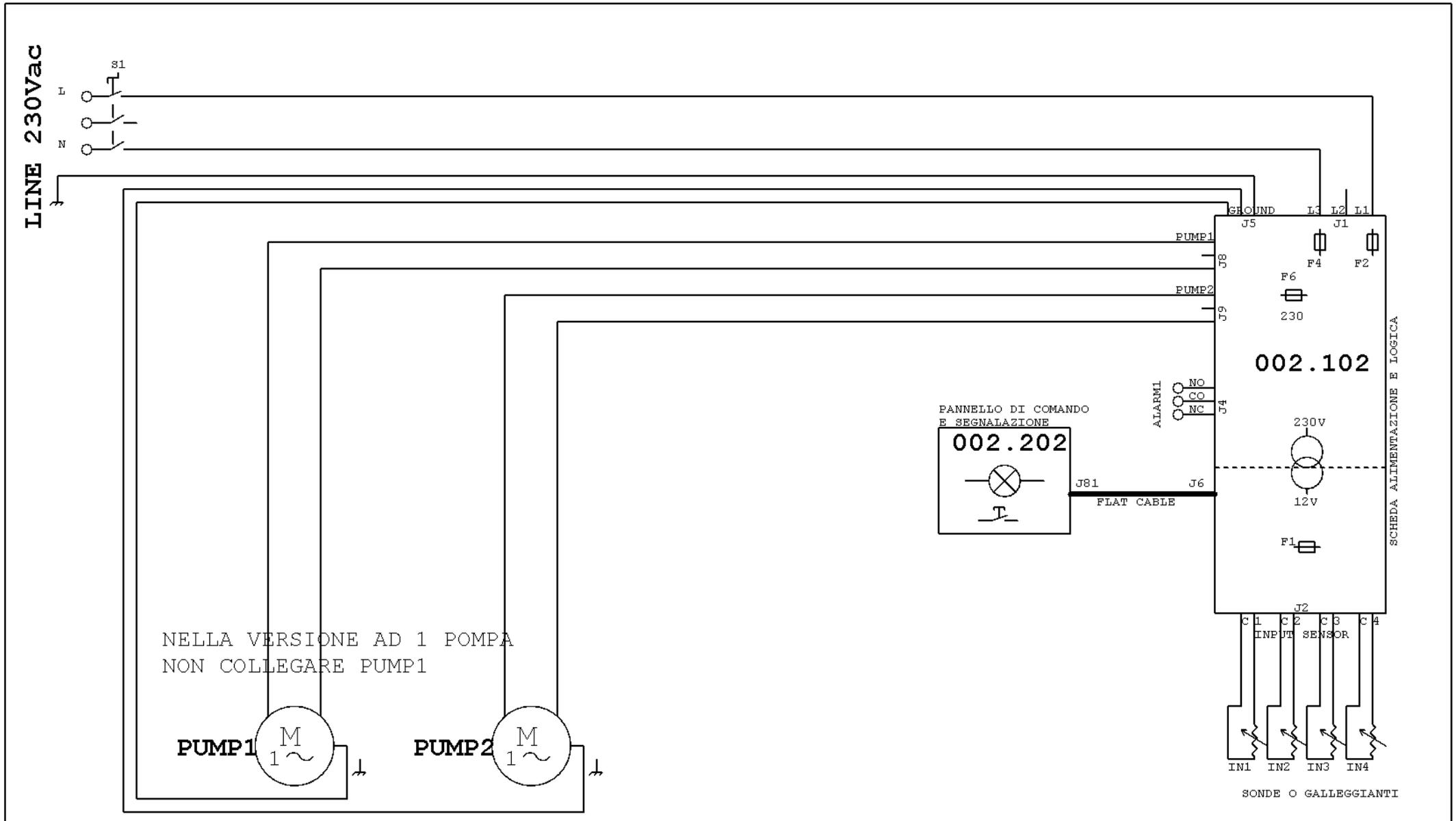
### SINGLE POLES PROBES FOR THE DRY RUNNING CONTROL



### PRESSURE SWITCH FILLING CONTROL



# WIRING DIAGRAM



## LEGENDA DEI COMPONENTI

S1 : SEZIONATORE GENERALE CON BLOCCOPORTA  
 F2, F4 : FUSIBILI POMPE 32aM  
 F1 : FUSIBILE AUSILIARIO F500mA  
 F6 : FUSIBILE AUSILIARIO F500mA

002.102 : SCHEDA DI ALIMENTAZIONE E LOGICA DI FUNZIONAMENTO  
 002.202 : SCHEDA PANNELLO FRONTALE DI COMANDO E SEGNALAZIONE

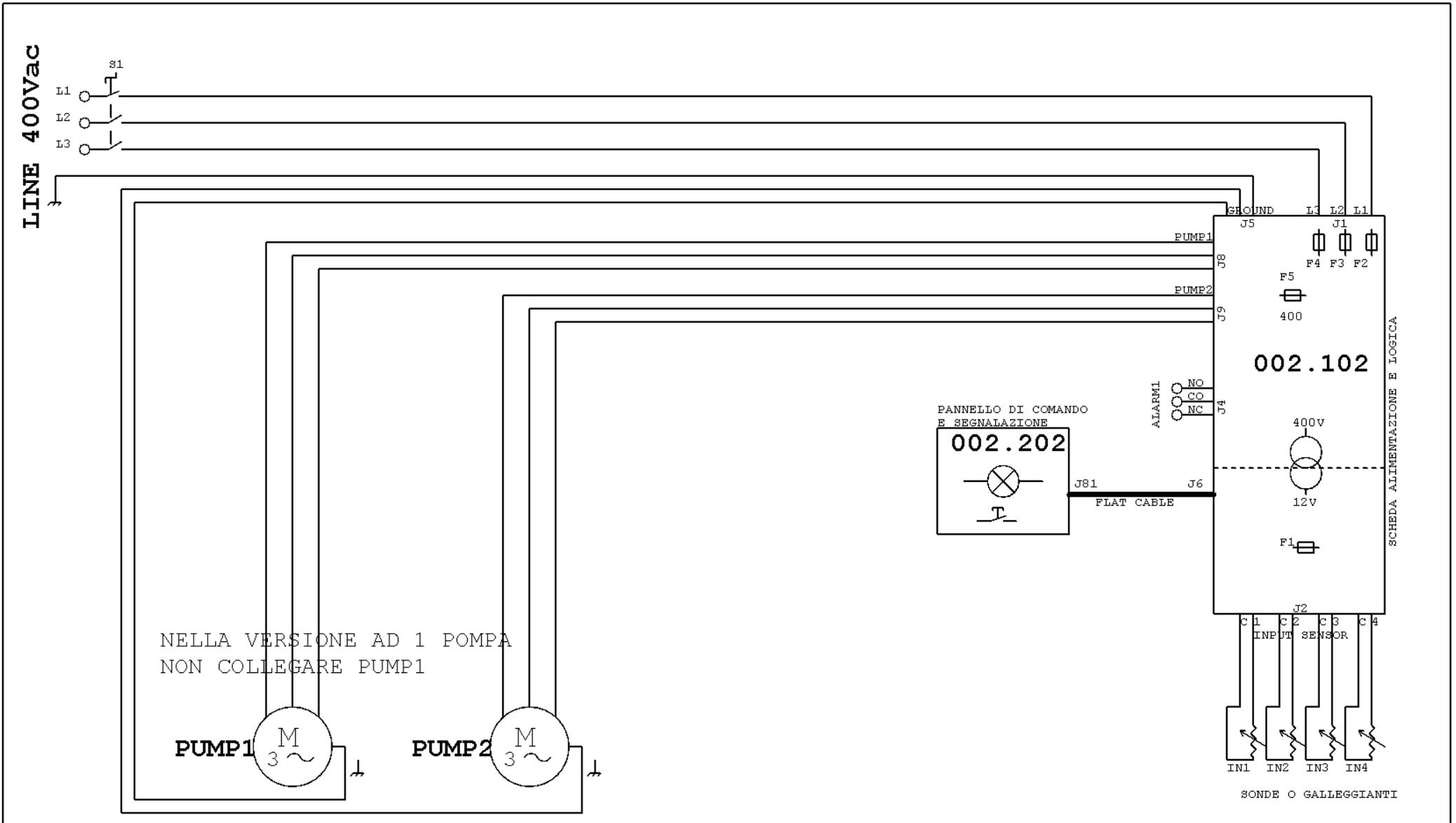
## MATIC

Des. Quadro Monofase per 1 o 2 elettropompe con protezioni per uso drenaggio o autoclave

Mod. 002 CONTROL PUMPE PRO 15A

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# WIRING DIAGRAM



**LEGENDA DEI COMPONENTI**

S1 : SEZIONATORE TRIFASE GENERALE CON BLOCCOPORTA  
 F2÷F4 : TERNA FUSIBILI POMPE 32mA  
 F1 : FUSIBILE AUSILIARIO F500mA  
 F5 : FUSIBILE AUSILIARIO F500mA

002.102 : SCHEDA DI ALIMENTAZIONE E LOGICA DI FUNZIONAMENTO  
 002.202 : SCHEDA PANNELLO FRONTALE DI COMANDO E SEGNALAZIONE

**MATIC**

Des. Quadro Trifase per 1 o 2 elettropompe con protezioni per uso drenaggio o autoclave

Mod. 002 CONTROL PUMP PRO 15A

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