

WASTEK PRO - User Manual

MULTIFUNCTION ELECTRICAL PANEL FOR 1 TO 2 MOTORS



**Exclusive Italian
Production**

INDEX

1.	INTRODUCTION.....	5
2.	WARNINGS	6
3.	GENERAL DESCRIPTION	7
4.	INSTALLATION.....	9
5.	LUMINOUS INDICATORS AND COMMANDS	10
6.	MAIN SCREEN PAGE	10
7.	MOTOR SCREEN PAGE.....	12
8.	MAINBOARD INPUTS AND OUTPUTS	13
9.	EXPANSION INPUTS	15
9.1	<i>RS485 expansion.....</i>	<i>15</i>
9.2	<i>Buffer battery device expansion</i>	<i>15</i>
9.3	<i>Bluetooth-WIFI expansion</i>	<i>15</i>
10.	SETTINGS MENU	16
11.	DIP-SWITCH DISPLAY SETTINGS	21
11.1	<i>DIP-SWITCH 1 - NO/NC inputs reversal (G/P1 – G/P2 – G.A.)</i>	<i>21</i>
11.2	<i>DIP-SWITCH 2 - Phase sequence control exclusion</i>	<i>21</i>
11.3	<i>DIP-SWITCH 3 - Self-test</i>	<i>21</i>
11.4	<i>DIP-SWITCH 4 - Manual push or impulse key.....</i>	<i>22</i>
12.	BOARD SPECIFICATIONS	23
13.	MAINBOARD WIRING DIAGRAMS.....	24
13.1	<i>WASTEK PRO Single phase (230V) wiring diagram.....</i>	<i>24</i>
13.2	<i>WASTEK PRO Three phase (400V) wiring diagram</i>	<i>25</i>
14.	EXPANSION WIRING DIAGRAMS.....	26
14.1	<i>RS485 expansion.....</i>	<i>26</i>
15.	WIRING DIAGRAMS	27
15.1	<i>WASTEK PRO 1 MONO.....</i>	<i>27</i>
15.2	<i>WASTEK PRO 2 MONO.....</i>	<i>28</i>
15.3	<i>WASTER PRO 1 TRI.....</i>	<i>29</i>

15.4	WASTER PRO 2 TRI.....	30
16.	RS485 MODBUS ADDRESSES	31
17.	ALARMS	34
18.	SIZE TABLE	37
19.	TROUBLESHOOTING.....	38

1. INTRODUCTION

This manual must always accompany the relevant equipment and be kept at an accessible location for consultation by qualified technicians assigned for operation and maintenance of the system.

The installer/user is strongly recommended to carefully read all instructions and information in this manual before using the product, in order to avoid damage or improper use of the unit, which would also render the warranty null and void.

Before operating the equipment, carefully read the manual and follow all instructions provided.

The information and instructions in this manual refer to the standard use of this product; in the event of special circumstances, functions or applications not described in this document, please contact our service centre for assistance.

If technical assistance or spare parts are required, when contacting the manufacturer always specify the identification code of the model and construction number as stated on the data plate.

Our service centre is available for any requirement or clarification.

On receiving the goods, carry out an inspection immediately to ensure that the equipment has not been damaged during transport. If defects are found, the client should promptly notify, within 5 days of receiving the goods, our retailer or in the event of direct purchases, the manufacturer's service centre.



N.B. the information provided in this manual is subject to modifications without notice. The manufacturer shall not be held liable for any damage caused in relation to the use of these instructions, as they are provided for guidance only. Note that failure to observe the instructions provided in this manual may cause physical injury or damage to property.

It is understood that compliance with local provisions and/or statutory regulations in force is compulsory.

2. WARNINGS



The electrical panel must be used exclusively for the purpose and function as specified in design. Any other application or use is to be considered improper and therefore hazardous.

In the event of a fire in the place of installation or the surrounding area, avoid using water jets and use appropriate extinguishing equipment and means (powder, foam, carbon dioxide).

Install the equipment far from heat sources and in a dry and sheltered location according to the specified protection rating (IP).

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

Before performing any work on the electrical panel or system, disconnect the electrical power supply.

No parts of the panel should be removed without an official authorisation from the manufacturer: any tampering with or changes to the unit will render all terms of the warranty null and void.

All installation and/or maintenance operations must be performed by a specialised technician who is fully aware of the currently applicable safety standards.

Ensure that the installation is connected to an efficient earthing system.

After completing the electrical connection, check that all electrical panel settings are correct to avoid automatic start-up of the electric pump.

The manufacturer declines all liability in the event of the following:

- Incorrect installation;
- Use by personnel not adequately trained in the correct use of the panel;
- Serious failure to perform scheduled maintenance;
- Use of non-original spare parts or parts not model-specific;
- Unauthorised modifications or interventions;
- Partial or total failure to observe instructions.

3. GENERAL DESCRIPTION

- Single-phase board power supply 100-240Vac 50/60Hz;
- Three-phase board power supply 310-450Vac 50/60Hz;
- Electronic board own consumption 3W;
- G/P1 and G/P2 normally open inputs for motor start-up;
- C-MIN-MAX inputs for single-pole level sensors;
- T1 and T2 normally closed inputs for motor thermal switch (Klixon);
- G.A. normally open input for alarm activation;
- 4-20mA and 0-10V analog inputs;
- Cumulative alarm output with voltage-free contacts (NC-C-NO resistive load - 5A / 250V);
- Cumulative alarm output, live (12Vcc / 100mA);
- DIP-SWITCH 1 display - NO/NC inputs reversal (G/P1 – G/P2 – G.A.);
- DIP-SWITCH 2 display - Phase sequence control exclusion;
- DIP-SWITCH 3 display - Void;
- DIP-SWITCH 4 display - Manual push/impulse mode;
- Settable parameters:
 - Language;
 - Pump rotation enable;
 - Float start/stop function enable (self-holding)
 - Probe sensitivity;
 - Filling or emptying level probes;
 - Min level alarm trigger;
 - Minimum voltage;
 - Maximum voltage;
 - Maximum motor current;
 - Minimum motor current;
 - Minimum current dry run control trigger;
 - Minimum current and timing automatic restart trigger;
 - Minimum current cyclic restart trigger;
 - Analog signal trigger;
 - Type of analog signal;
 - Analog signal unit of measure;
 - Analog signal full scale;
 - Set point;
 - Motor start/stop threshold;
- SWITCH key (change screen/settings);
- AUTOMATIC button (or arrow UP).
- 0 “standby” button (or arrow DOWN).
- MANUAL button;
- Display: Volts, amps, analog signal, running hours, motor status and alarms;
- Missing or incorrect phase sequence check on power supply input;
- Emergency operation on analogue sensor failure;
- Protections of auxiliary circuits and motor with fuses;
- Door lock general disconnect switch (if any);
- Provision for start-up capacitors, single phase version (not included);

- ABS enclosure, IP55;
- Room temperature: -5/+40 °C;
- Altitude a.s.l. 2000 m;
- Relative humidity 50% at 40 °C (non-condensing).



CAUTION!

**For further technical data, please refer to the nameplate on the panel.
General characteristics may vary if accessories are added to the standard product.
The addition of accessories may result in changes to the above description.**

4. INSTALLATION

Ensure that the mains power supply specifications match the voltage specified on the data plate of the electrical panel and connected motor, then provide an earthing connection before all other connections.

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

Tighten the electrical cables on the corresponding terminals using a suitable tool correctly sized to avoid the risk of damaging the fixing screws. Be extra careful if using an electric screwdriver.

The electrical panel is designed for wall-mounting using screws and plugs in the pre-drilled holes at the corners of the enclosure, or brackets where available.

Install the equipment in areas compliant with the protection rating and ensure that the box is kept intact when drilling the holes for fitting the cable clamps.

Avoid the use of multicore cables where there are wires connected to inductive loads and power cables and signal cables such as sensors and digital inputs.

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 wiring must be suitably sized to withstand the power load.

5. LUMINOUS INDICATORS AND COMMANDS



Viewing and programming display unit.



Red LED: general alarm.



SETUP button (screen switch).

Pressing and holding it in the main screen for 3 seconds gives access to the settings menu.



Automatic button and arrow UP.



0 button and arrow DOWN.

Press for 5 seconds in the motor screen to reset the hour meter.



Manual button.



Press arrow and then MAN to reset the current alarm after resetting the cause.

6. MAIN SCREEN PAGE

When the panel is switched on, the display unit shows the following sequence:



At the end of the boot up sequence, the main menu is displayed, as described below.





This screen page displays a general view of the motor and system status:

- 230 V Power supply voltage reading;
- 7.0 A Total absorbed current;
- 10.0B Analog input value (here, 10.0 bar);
- M1 = 1 Motor 1 enabled;
- M1 = 0 Motor 1 disabled;
- M2 = 1 Motor 1 enabled;
- M2 = 0 Motor 1 disabled;

Unless analog sensors are used, the main screen will not show any value that refers to analog input.

Only from this screen, it is possible to access the settings menu by pressing and holding the **SETUP** key for 3 seconds.

7. MOTOR SCREEN PAGE

From the main screen, by pressing the **SETUP** key, access is obtained to the motor screen page where one can change the status of the selector (automatic - off - manual), view the absorption of each motor and view running hours.

Running hours can be reset upon motor replacement by pressing the **OFF** key for 5 seconds.



Press the **SETUP** key again to return to the main screen

8. MAINBOARD INPUTS AND OUTPUTS

T1	Normally open input for motor 1 Klixon (overtemperature thermal switch). Jumper if not using this input.
T2	Normally open input for motor 2 Klixon (overtemperature thermal switch). Jumper if not using this input.
C - MIN - MAX	Input for single-pole level sensors Input for minimum level float (connection between C and MAX). Input for general enabling (connection between C and MAX). Jumper C and MAX if not using this input.
G/P1	Input for motor 1 activation. When rotation operation is enabled, each time the input is opened and closed it will start the first motor in alternation.
G/P2	Input for motor 2 activation. When rotation operation is enabled, each time the input is opened and closed it will start both motors regardless of the status of G/P1 input.
G.A.	Input for alarm activation.
OUT ALARM (NC - C - NO)	Cumulative alarm output with voltage-free contacts (resistive load - 5A / 250V) for: <ul style="list-style-type: none">- Probe level alarm.- G.A. Input alarm.- Dry run motor alarm.- Motor overcurrent alarm.- Motor overtemperature alarm.- Voltage too low alarm.- Voltage too high alarm.- Sequence or missing phase alarm.- Max level alarm.
BUZZ +/-	Alarm output, live (12Vcc / 100mA);

SINGLE PHASE:

- L/S - Motor phase
- N/R - Motor idle
- AVV - Start with on board capacitor

OUT MOTOR

THREE PHASE:

- T1 (contactor) - Motor phase U
 - T2 (contactor) - Motor phase V
 - T3 (contactor) - Motor phase W
-



Earthing.

9. EXPANSION INPUTS

9.1 RS485 expansion

A(-) – B(+) Module for **RS485** communication standard with **MODBUS** protocol

9.2 Buffer battery device expansion

PRODBT module for connection of 6V 1,2Ah buffer battery for maintaining control of alarm float and for signalling mains power supply failure

9.3 Bluetooth-WIFI expansion

To connect the panel to any device via wi-fi or Bluetooth to Elentek APP

10. SETTINGS MENU

To access the settings menu press and hold the **SETUP** key for 3 seconds.

DESCRIPTION OF PARAMETER	VALUE
<p>LANGUAGE</p> <p>0=ITA / 1=ENG / 2=FRA / 3=ESP / 4=DEU</p>	0 - 4
<p>DISPLAY BRIGHTNESS ON STANDBY</p> <p>This parameter allows to enter the brightness setting applied when the display is set to standby (wait 9 seconds for a preview).</p>	0 - 9
<p>KLIXON SELF-RESET</p> <p>This parameter defines whether automatic or manual reset of motor overtemperature alarm by Klixon</p>	AUTOMATIC MANUAL
<p>MINIMUM VOLTAGE</p> <p>Set by default to -10%. Altering operating limits beyond the default parameters will immediately render the warranty null and void.</p>	207 (230) 360 (400)
<p>MAXIMUM VOLTAGE</p> <p>Set by default to +10%. Altering operating limits beyond the default parameters will immediately render the warranty null and void.</p>	253 (230) 440 (400)
<p>MAXIMUM CURRENT M1/M2</p> <p>This parameter allows the maximum current limit of the motor to be set. Enter the maximum current value, increasing it by 10-15% with respect to the rated motor value.</p> <p><i>Altering operating limits beyond the parameters stated on the model data plate will immediately render the warranty null and void.</i></p>	1 - ... A
<p>MOTOR M1 - M2 MINIMUM CURRENT</p> <p>This parameter allows the MINIMUM motor current to be set below which the motor must stop due to dry running. By setting the current to 0, the minimum current dry run control is deactivated.</p> <p>Enable this parameter only if no floats or probes are in use for minimum level control.</p>	0 - ... A

<p>PUMP ROTATION ENABLE</p> <p>This parameter allows the pump changeover to be activated every time the floats or pressure switches are triggered. In addition, if the main pump is switched to thermal protection (overcurrent), the second pump is enabled (the START/STOP function is disabled with N).</p>	<p>Y / N</p>
<p>AUTOMATIC RESTART FOR DRY RUN</p> <p>In the case of a dry run alarm (minimum current) the panel can attempt an automatic restart, programmable in minutes.</p> <p>Four restart times can be set, whereby the system automatically restarts after stopping.</p>	<p>Y / N</p>
<p>AUTOMATIC RESET FOR DRY RUN TIME 1</p> <p>First attempt to reset the dry run alarm (default: 5 minutes).</p>	<p>1 - 240 Min</p>
<p>AUTOMATIC RESET FOR DRY RUN TIME 2</p> <p>Second resetting attempt counting from the previous resetting attempt (default: 10 minutes).</p>	<p>1 - 240 Min</p>
<p>AUTOMATIC RESET FOR DRY RUN TIME 3</p> <p>Third resetting attempt counting from the previous resetting attempt (default: 20 minutes).</p>	<p>1 - 240 Min</p>
<p>AUTOMATIC RESET FOR DRY RUN TIME 4</p> <p>Fourth resetting attempt counting from the previous resetting attempt (default: 30 minutes).</p>	<p>1 - 240 Min</p>
<p>DRY RUN CYCLIC RESET TRIGGER</p> <p>Setting the <i>N</i> value stops automatic restarts after the fourth attempt, while setting the <i>Y</i> value after the fourth attempt resumes the restart cycle starting from the fourth time set to infinity.</p> <p>The panel's dry run protection system activates restarts based on the programming time settings and resets the restart cycle whenever the system detects the presence of water for more than 10 seconds.</p>	<p>Y / N</p>
<p>M1-M2 START-UP DELAY TIME</p> <p>This parameter allows to set a delay in the pump start-up time.</p>	<p>0-600 sec</p>

<p>M1-M2 SWITCH-OFF DELAY TIME</p> <p>This parameter allows to set a delay in the pump switch-off time.</p>	<p>0-600 sec</p>
<p>12VDC ALARM OUTPUT?</p> <p>This parameter allows to activate and deactivate the 12 Vdc output.</p>	<p>Y / N</p>
<p>TYPE OF CONTROL</p> <p>This parameter enables the selection of the type of fluid level acquisition.</p> <p>0. = Sens: air pressure sensor: 1. = On/Off: Floats or on/off (voltage-free) contacts 2. = 4-20mA: Level transducers with 4-20 mA signal</p> <p>Terminal “+” = positive (12Vdc); Terminal “-“ = negative; Terminal “A/B”= signal</p> <p>By enabling the use of the air pressure sensor from this screen, reading can be calibrated to zero by holding down the MAN button until the next screen changes</p>	<p>0 - 1 - 2</p>
<p>ANALOG SIGNAL UNIT OF MEASURE</p> <p>By this parameter, the unit of measure of the 4-20mA analog signal can be selected.</p>	<p>“cm” / “m” NONE</p>
<p>ANALOG SIGNAL FULL SCALE</p> <p>By this parameter, the full-scale value of the 4-20mA analog sensor can be selected.</p>	<p>0.0 - 999.9</p>
<p>SET POINT</p> <p>This parameter allows the set point to be maintained on the system to be set.</p> <p>The maximum settable value depends on the "ANALOG SIGNAL FULL SCALE VALUE" set in the previous parameter.</p>	<p>0.0 - 999.9</p>
<p>M1 – M2 START THRESHOLD</p> <p>This parameter allows the motor restart value to be set as the analog signal decreases.</p>	<p>0.0 - 999.9</p>
<p>DRAIN TRIGGER (Self-holding)</p> <p>This parameter allows active pumps to be deactivated only on opening of the min./stop float contact.</p> <p>This function is only available on on/off control activation.</p>	<p>Y / N</p>

<p>SENSOR SENSITIVITY</p> <p>This parameter allows the sensor sensitivity level to be adjusted.</p>	1 - 9
<p>MIN LEVEL ALARM TRIGGER</p> <p>This parameter allows the cumulative alarm output to be cancelled for minimum level.</p>	C
<p>MODBUS ADDRESSES</p>	10
<p>MAX. NUMBER OF M1 - M2 SWITCH-ONS PER HOUR</p> <p>This parameter allows setting the maximum number of switch-ons per hour which, if exceeded, will trigger an alarm.</p>	0 - 30
<p>NUMBER OF M1 - M2 SWITCH-ONS PER HOUR</p> <p>Display of the total number of switch-ons.</p>	-
<p>POWER RETURN DELAY</p> <p>This parameter allows a fixed delay of 30" to be activated on power return, before the motors are activated if the control inputs are closed.</p>	Y / N
<p>SERVICE MODE?</p> <p>During maintenance, this parameter allows to block or release changes to maintenance parameters.</p> <p>If set to Y, all parameters are released and can be changed.</p> <p>If set to N, all parameters are blocked and cannot be changed.</p>	Y / N
<p>MAN. DAY</p> <p>This parameter allows to set the days to the next scheduled maintenance.</p> <p>The second line of the display shows the days elapsed since the last maintenance. If power is off, the WASTEK panel records the days counted up to the preceding day.</p> <p>Can be changed if SERVICE MODE is set to S.</p>	0 - 9999
<p>CNT. DAY</p> <p>This screen displays the working days of the panel.</p> <p>By pressing UP and DOWN at the same time, the count is reset.</p> <p>Can be displayed if SERVICE MODE is set to S.</p>	-
<p>MAINTENANCE ALARM POSTPONEMENT</p> <p>This parameter allows to set a scheduled maintenance alarm postponement.</p>	0 - 250

If the maintenance alarm is silenced by the customer, it reappears after the days set in this parameter.

Can be changed if SERVICE MODE is set to S.

11. DIP-SWITCH DISPLAY SETTINGS

Set DIP-SWITCHES with the panel switched off.



11.1 DIP-SWITCH 1 - NO/NC inputs reversal (G/P1 – G/P2 – G.A.)

OFF ↓	Normally open inputs.
ON ↑	Normally closed inputs.

DIP-SWITCH 1 allows to invert the enabling of digital inputs G/P1 - G/P2 - G.A.

In the OFF position, normally open inputs enable the system to close the contact.

In the ON position, normally closed inputs enable the system to open the contact.

11.2 DIP-SWITCH 2 - Phase sequence control exclusion

OFF ↓	Missing or incorrect phase sequence check enabled.
ON ↑	Missing or incorrect phase sequence check disabled.

DIP-SWITCH 2 disables the missing or wrong phase sequence check at the panel input.

In the OFF position, missing or incorrect phase sequence check enabled.

In the ON position, Missing or incorrect phase sequence check disabled.

11.3 DIP-SWITCH 3 - Self-test

OFF ↓	Motor self-test disabled.
ON ↑	Motor self-test enabled.

DIP-SWITCH 3 enables motor self-test.

In the OFF position, self-test is disabled.

In the ON position, self-test is enabled.

Self-test has a fixed, non-adjustable time and will enable the pump, or pumps depending on the panel model, for 2 seconds every 48 hours.

A pump self-test can only be activated if the Automatic function of the panel is enabled.

11.4 DIP-SWITCH 4 - Manual push or impulse key

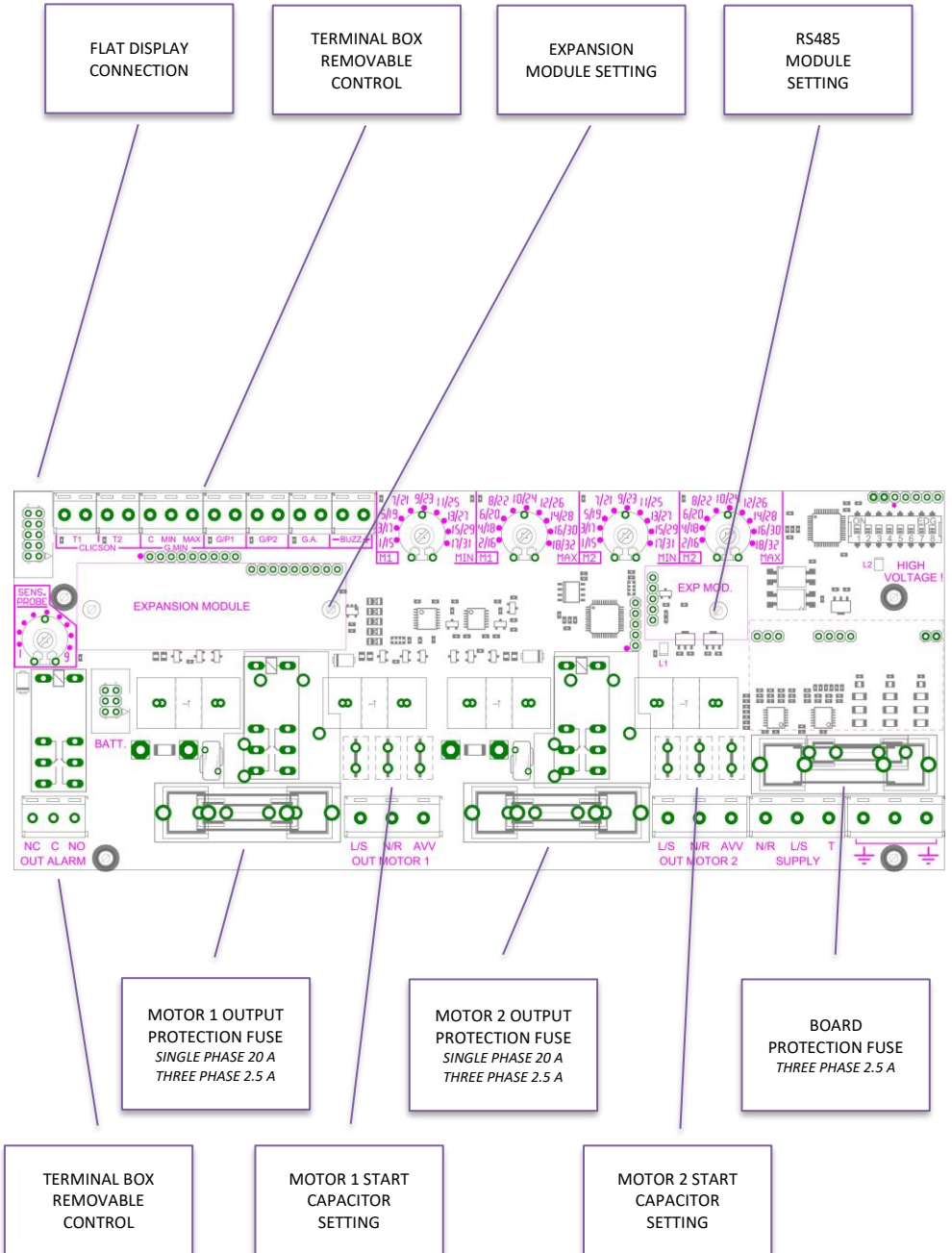
OFF ↓	Manual push key.
ON ↑	Manual impulse key.

DIP-SWITCH 4 enables operation of the manual key.

In the OFF position, the manual key enables the motor by holding the key down; when it is released, the motor stops.

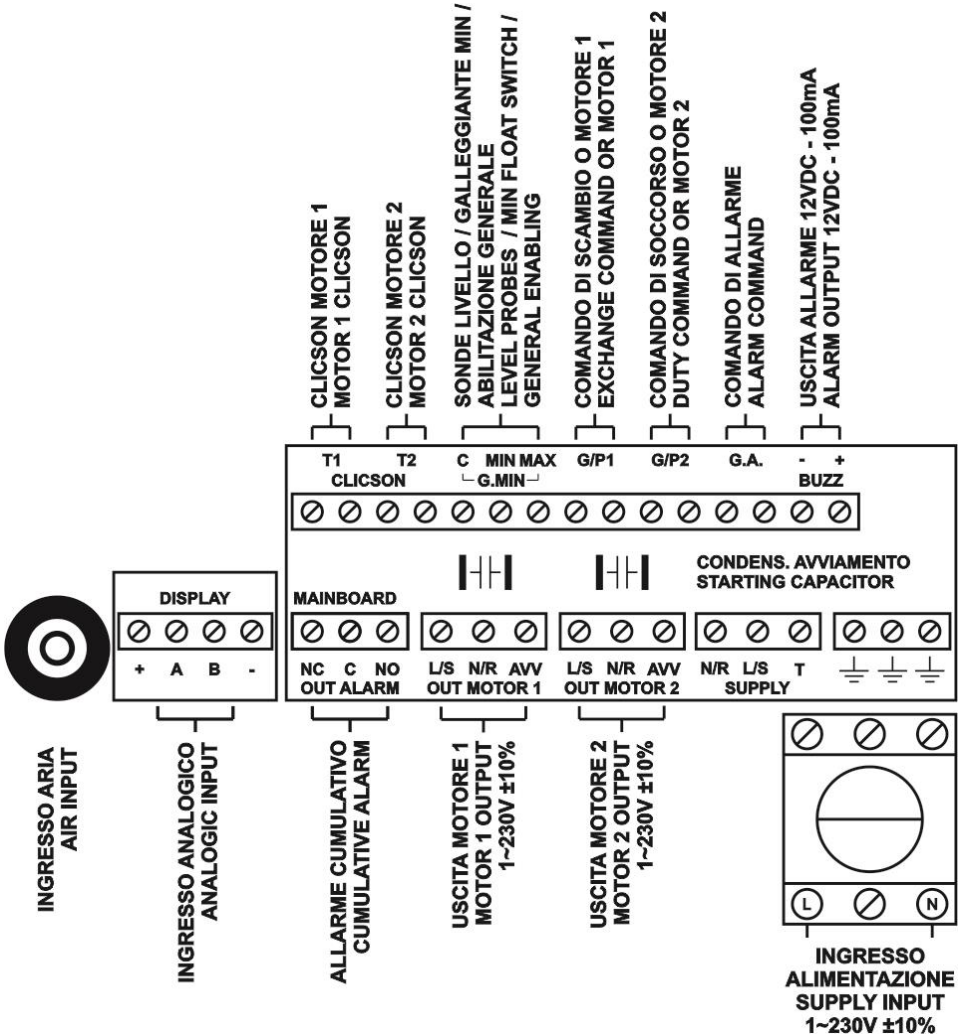
In the ON position, the manual key enables the motor at the first impulse and stops the motor at the next impulse.

12. BOARD SPECIFICATIONS

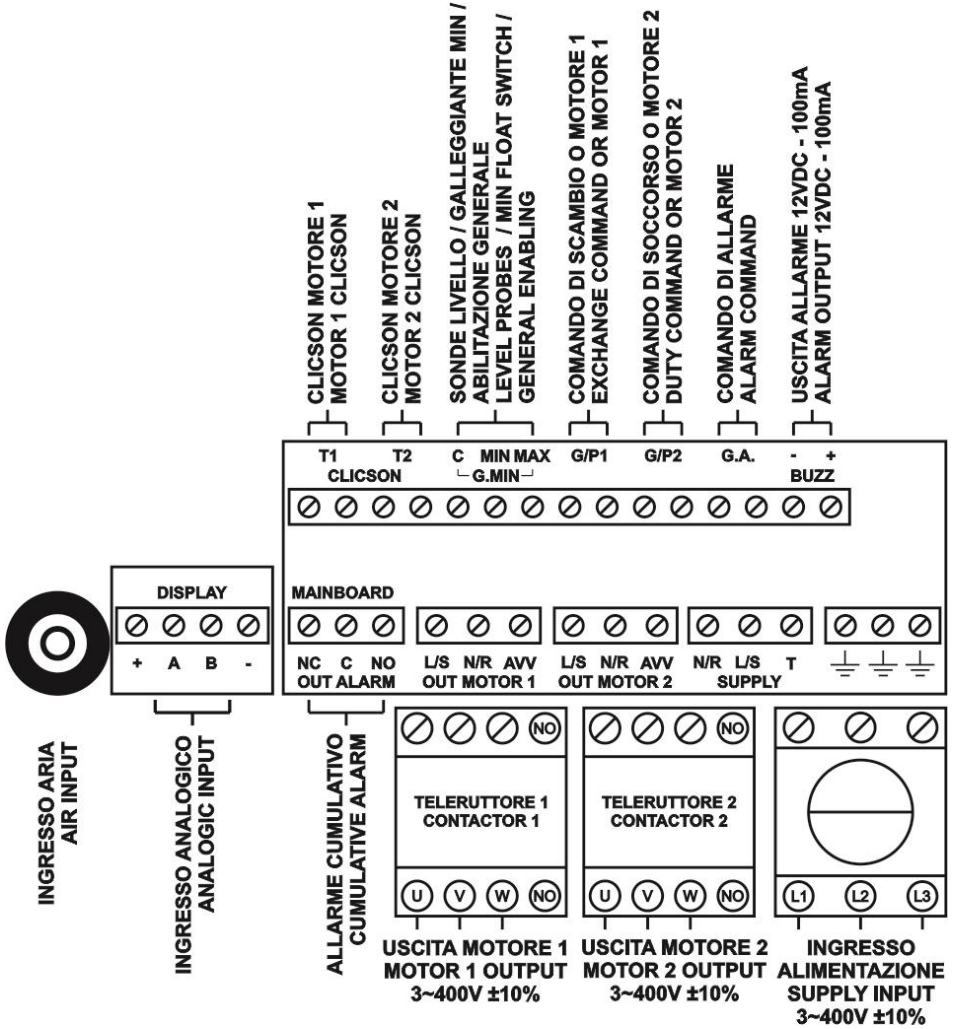


13. MAINBOARD WIRING DIAGRAMS

13.1 WASTEK PRO Single phase (230V) wiring diagram



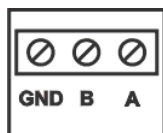
13.2 WASTEK PRO Three phase (400V) wiring diagram



NB: In the three-phase 230V version, the power supply and motors must be 3~230V.

14. EXPANSION WIRING DIAGRAMS

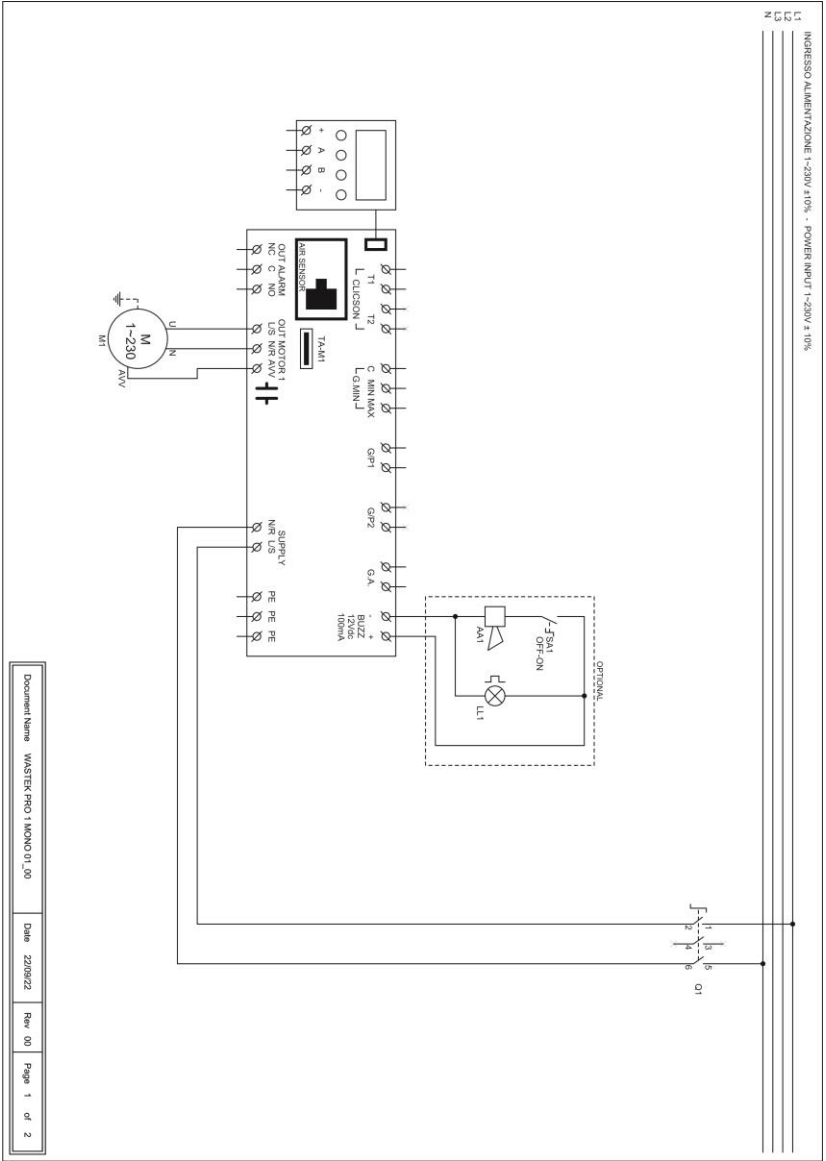
14.1 RS485 expansion



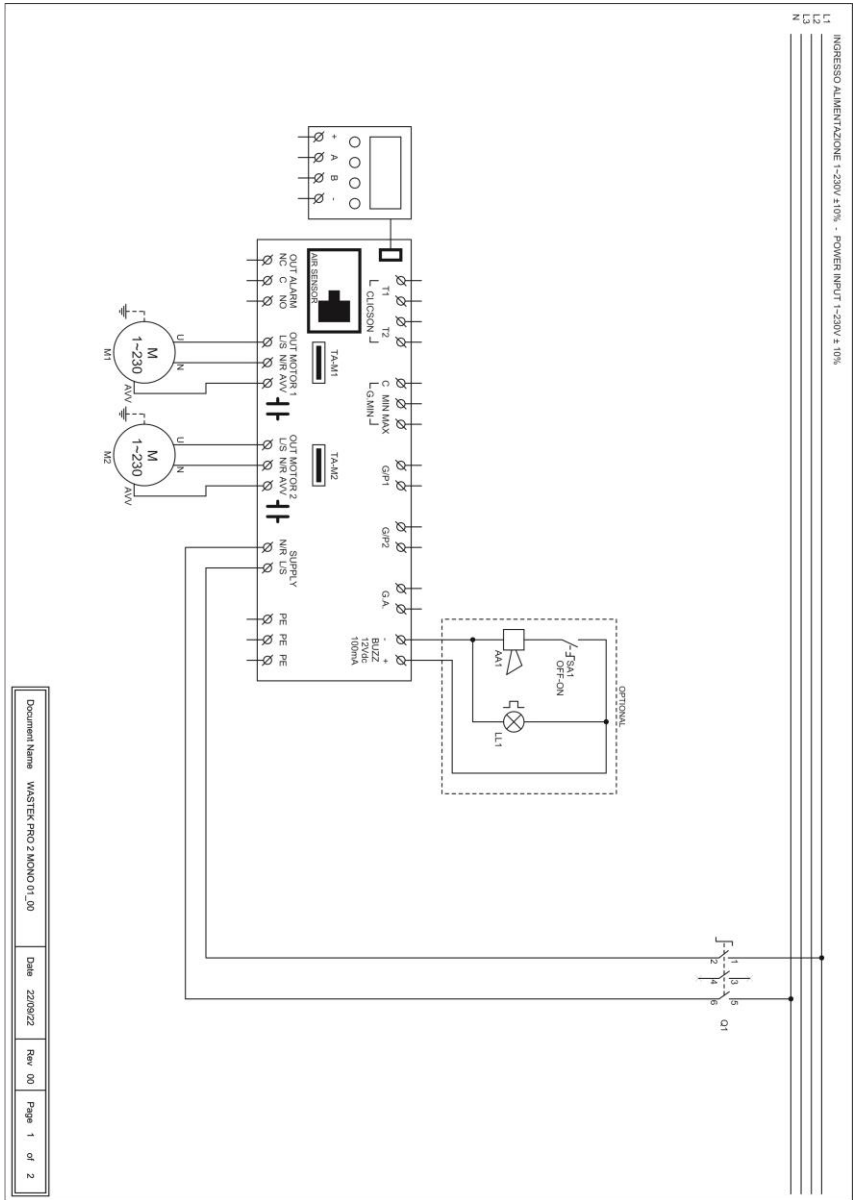
**CONNESSIONE RS485
RS485 CONNECTION**

15. WIRING DIAGRAMS

15.1 WASTEK PRO 1 MONO

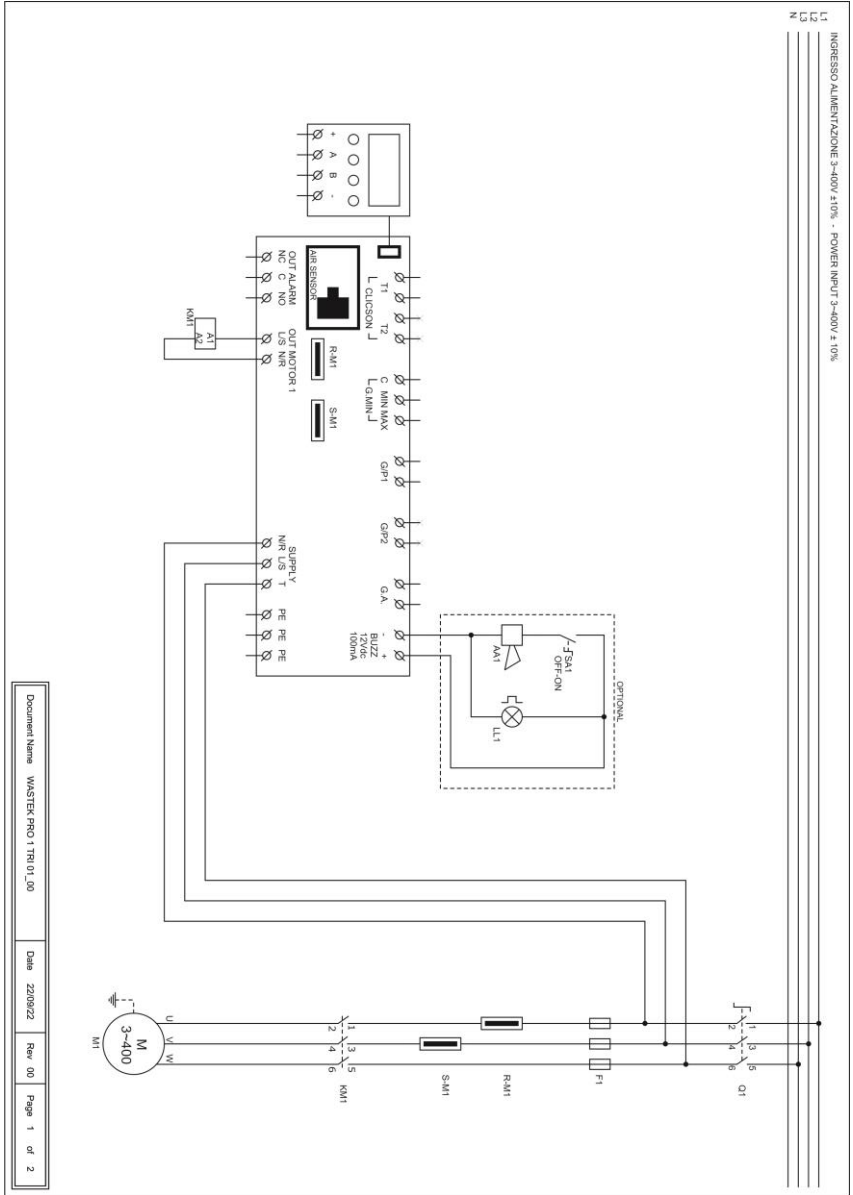


15.2 WASTEK PRO 2 MONO

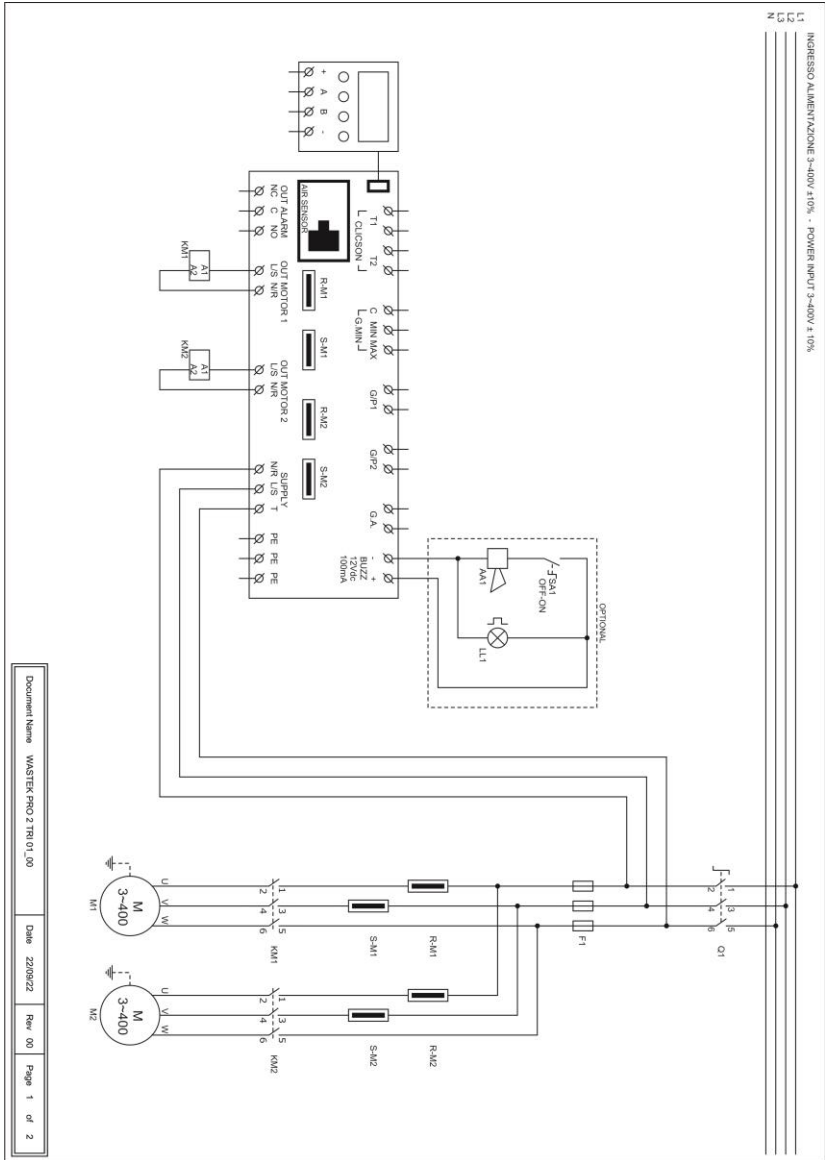


Document Name: WASTEK PRO 2 MONO 01.00 | Date: 22/09/22 | Rev: 00 | Page: 1 of 2

15.3 WASTER PRO 1 TRI



15.4 WASTER PRO 2 TRI



Document Name: WASTER PRO 2 TRI 01_00
 Date: 22/08/22
 Rev: 01
 Page: 1 of 2

16. RS485 MODBUS ADDRESSES

0x100	Board data
0x101	Board serial data
0x102	Voltage of board 1 in V
0x103	Voltage of board 2 in V
0x104	Current of pump 1 in A/10
0x105	Current of pump 2 in A/10
0x106	Current of pump 3 in A/10
0x107	Current of pump 4 in A/10
0x108	Cos-Phi of pump 1 in /100
0x109	Cos-Phi of pump 2 in /100
0x10A	Cos-Phi of pump 3 in /100
0x10B	Cos-Phi of pump 4 in /100
0x10C	Dip-switch Status
0x10D	Input status
0x10E	Output status
0x10F	Alarm 2 status
0x110	Alarm 1 status
0x111	Free
0x112	Free
0x113	Free
0x114	Free
0x115	Free
0x116	Alarm 2 reset
0x117	Alarm 1 reset
0x118	MANUAL control logical status
0x119	AUTOMATIC control logical status
0x11A	Hours of operation P1
0x11B	Hours of operation P2
0x11C	Hours of operation P3
0x11D	Hours of operation P4
0x11E	Program to be followed
0x11F	Type of AT
0x120	Language
0x121	Display brightness on standby
0x122	ELENTEK name displayed on panel
0x123	Panel name enable
0x124	Klixon self-reset
0x125	Max. settable current in A/10
0x126	Alarm inhibition time at start in s/10

0x127	Pump start delay time in s/10
0x128	Pump off delay time in s/10
0x129	Pump trigger delay time in s/10
0x12A	Minimum current alarm delay time in s/10
0x12B	Maximum current alarm delay time in s/10
0x12C	High/low voltage alarm delay time in s/10
0x12D	Pump 1 current calibration
0x12E	Pump 2 current calibration
0x12F	Pump 3 current calibration
0x130	Pump 4 current calibration
0x131	Voltage of board 1
0x132	Voltage of board 2
0x133	Pump rotation enable
0x134	Alarm output enable
0x135	Self-holding enable
0x136	Board 1 probe sensitivity
0x137	Board 2 probe sensitivity
0x138	Panel operation
0x139	Min level alarm enable
0x13A	Min voltage alarm threshold
0x13B	Max voltage alarm threshold
0x13C	Max current alarm threshold of pump 1 in A/10
0x13D	Max current alarm threshold of pump 2 in A/10
0x13E	Max current alarm threshold of pump 3 in A/10
0x13F	Max current alarm threshold of pump 4 in A/10
0x140	Cos-fi/current alarm selection
0x141	Min cos-fi alarm threshold of pump 1 in 100
0x142	Min cos-fi alarm threshold of pump 2 in 100
0x143	Min cos-fi alarm threshold of pump 3 in 100
0x144	Min cos-fi alarm threshold of pump 4 in 100
0x145	Min current alarm threshold of pump 1 in A/10
0x146	Min current alarm threshold of pump 2 in A/10
0x147	Min current alarm threshold of pump 3 in A/10
0x148	Min current alarm threshold of pump 4 in A/10
0x149	Automatic reset due to minimum current
0x14A	Automatic restart of time 1 in min
0x14B	Automatic restart of time 2 in min
0x14C	Automatic restart of time 3 in min
0x14D	Automatic restart of time 4 in min
0x14E	Cyclic restart enable
0x14F	Analog signal enabling
0x150	Sensor type selection

0x151	Measurement unit selection
0x152	Analog signal operation
0x153	Analog sensor full scale in /10
0x154	Set point in /10
0x155	Start/stop threshold 1 in /10
0x156	Start/stop threshold 2 in /10
0x157	Start/stop threshold 3 in /10
0x158	Start/stop threshold 4 in /10
0x159	Service mode
0x15A	Scheduled maintenance due days
0x15B	Days since latest maintenance
0x15C	Scheduled maintenance alarm postponement days
0x15D	Installed expansion type
0x15E	MODBUS address
0x15F	Analogue sensor emergency system enable

17. ALARMS



The value of the minimum current detected is lower than the programmed value and the panel stops the relevant motor.

The display and the red LED flash, activating the cumulative alarm output and the "BUZZ" output.

The system resets automatically according to the times set during programming.

The alarm can still be reset manually by pressing the OFF key; the system can then be reset automatically.



The motor current absorption is higher than the set value and the panel shuts the related motor.

The display and the red LED flash, activating the cumulative alarm output and the "BUZZ" output.

To reset the alarm manually, press the OFF key; the system can then be reset automatically.



The motor thermal switch (Klixon) has tripped on temperature overload.

The display and the red LED flash, activating the cumulative alarm output and the "BUZZ" output.

If Klixon self-reset is enabled, the system automatically restarts when the Klixon contact is closed;

if the self-reset is disabled, when the Klixon contact is closed, press the "AUT" key and then restart the individual motors in alarm with "MAN".

If not used, close the motor Klixon input/s.



The measured mains voltage is too low (the motor stops).

The display and the red LED flash, activating the cumulative alarm output and the "BUZZ" output.

The system is reset automatically when voltage increases.



The measured mains voltage is too high (the motor stops).

The display and the red LED flash, activating the cumulative alarm output and the "BUZZ" output.

The system is reset automatically when voltage decreases.



The phase sequence is incorrect or one phase is missing (the motor stops).

The display and the red LED flash, activating the cumulative alarm output and the "BUZZ" output.

The system is reset automatically turning off and on the electrical panel after reconnecting the phase wires correctly.



The float in the G.A. input detects the alarm for maximum level reached (motor does not stop).

The display and the red LED flash, activating the cumulative alarm output and the "BUZZ" output.

The system automatically resets itself when the alarm float is opened.



The minimum level float, or the minimum level sensors, will detect the minimum level reached (the motor stops).

The display and the red LED flash, activating the cumulative alarm output and the "BUZZ" output.

The system automatically resets itself when the minimum level float or the minimum level probes are closed (this alarm can be disabled from the SERVICE menu).



The analog sensor used is disconnected, wrongly connected or failed;

The display and the red LED flash, activating the cumulative alarm output and the "BUZZ" output.

The system is activated in emergency mode where C-MIN functions as an emergency stop and GP/1 as a start of all users not simultaneously.

The system only resets when the analog sensor returns to normal conditions.

The presence of water in the motor oil chamber is detected through PRO-SL expansion (the engine stops if shutdown is enabled).

The display and the red LED flash, activating the cumulative alarm output and the "BUZZ" output.

The system is reset automatically after servicing the electric motor.



With the ATEX mode on, the fluid level is lower than the pump stop level.

The display and the red LED flash and the cumulative alarm output is activated (voltage-free contacts NC-C-NO).

The system is reset automatically when the fluid level goes above the stop level.



This alarm signals that the time to scheduled maintenance has elapsed. The day count set in the parameter MAN. DAY has come to an end. The pumps are not shut down.

However, this alarm can be postponed through the parameter MAINTENANCE ALARM POSTPONEMENT. When the alarm is reset, the days set in this parameter before the alarm reappears are counted.

The display and the red LED flash and the cumulative alarm output is activated (voltage-free contacts NC-C-NO).

To reset the alarm manually, press **UP** or **DOWN** and then the **OK** button. Then reach the parameter CNT. DAY and press **UP** and **DOWN** at the same time, to reset the counter.

18. SIZE TABLE

CODE	MODEL	MEASURES	TYPE
11720NB	WASTEK PRO 1-Mono	195X245X120	PLASTIC
12720NB	WASTEK PRO 2-Mono		
11720	WASTEK PRO 1-Mono	310X240X185	PLASTIC
12720	WASTEK PRO 2-Mono		
11721	WASTEK PRO 1-Tri/7,5	310X240X185	PLASTIC
11722	WASTEK PRO 1-Tri/11		
11723	WASTEK PRO 1-Tri/15		
12721	WASTEK PRO 2-Tri/7,5	310X240X185	PLASTIC
12722	WASTEK PRO 2-Tri/11	390X310X230	PLASTIC
12723	WASTEK PRO 2-Tri/15		

19. TROUBLESHOOTING

PROBLEM	CHECKS/SOLUTIONS
PHASE FAULT ALARM	<ul style="list-style-type: none">• Check that all phases are available at the panel input.• Check and change the phase sequence at the input of the door lock switch.
THE PANEL IS POWERED UP BUT THE MOTOR DOES NOT START.	<ul style="list-style-type: none">• Check that automatic operation is enabled on the motor screen.• Check input status and settings.
THE PANEL IS SET TO AUTOMATIC MODE BUT THE MOTOR DOES NOT START.	<ul style="list-style-type: none">• Check input status and settings.• On the single-phase model, check that the 230V~ voltage is present on the motor output terminals “L/S” and “N/R”; on the three-phase model check that the 400V~ voltage is present on terminals “L/S” and “N/R” and that the contactor winding is powered.
ON START-UP OF THE PUMP, THE THERMAL SWITCH TRIPS.	<ul style="list-style-type: none">• Check the maximum current setting in the settings.• Check the motor current with a current clamp.• Check the motor status.
THE THERMAL SWITCH DOES NOT TRIP.	<ul style="list-style-type: none">• Check the maximum current setting in the settings.
THE PANEL IS IN MOTOR TEMPERATURE OVERLOAD ALARM STATUS	<ul style="list-style-type: none">• Check that the over-temperature control is disabled if the motor(s) are not fitted with a thermal switch.• Check the motor status.
THE DISPLAY DOES NOT SWITCH ON	<ul style="list-style-type: none">• Check that the FLAT connector is inserted correctly.• Ensure that the door lock is set to ON.• On the panel input, check that the voltages 230V~ or 400V~ are present between the mains input terminals “SUPPLY”.• Check that the fuses are efficient.

ELENTEK SRL SOCIETÀ UNIPERSONALE

Via A. Meucci 5/11 - 35028 Piove di Sacco (PD) - ITALY

Tel. +39 049 9730367 - Fax +39 049 9731063

www.elentek.com - info@elentek.com

VAT No. 04534630282

Code MQ 0041 UK

Rev. 00

Is. 09/2022