

# ELECTRIC FIRE PANEL

INSTALLATION, MAINTENANCE and OPERATION GUIDE



**DUYAR** 



**Control panels, to get the best results this manual information must read carefully. This manual, all your problems can help solve.**

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### PURPOSE OF USER MANUAL

- To convey the instructions regarding the pump's installation, maintenance, and repair.
- To explain the pump's starting, operating, and stopping methods.

### SAFETY SIGNS



Safety measures that can cause life-threatening if not implemented



Warnings on electric current



Safety instructions, which, if not followed, may damage the machine and its operation.

### GENERAL INSTRUCTIONS

- Control panels read the instructions before using.
- Especially obey the safety instructions.
- Control panels all transactions must be done by qualified personnel in accordance with the user guide instructions.
- All repair and processing warranty made by unauthorized persons terminates.

*Within Easy Reach Of The Clipboard User Guide  
Near And Place Should Be*

#### PLEASE REMEMBER TO STORAGE

### SAFETY INSTRUCTIONS

- Read instructions carefully before starting the clipboard.
- Follow the instructions in the user guide.
- The front panel be careful. The front panel fragile gets hit.
- Do not install where water can take directly to the clipboard. Any water in the cabinet and Do not spill liquid. Disconnect power the main fuse in the case of water in panel contact the please institutions and authorized person.
- Do not operate if any foreign substance enters into the panel. This may cause electric shock or damage to the panel. Entrust panel control by authorized personnel.
- Fire risk avoid naked flame keep away from flammable liquids and materials.

- Electrical connection as shown in the user's guide input must be connected to the fuse. Otherwise you may cause serious injury or death as a result of electric shock.
- The power cord is damaged, replace the original with the appropriate new cable through authorized service.
- Do not use electrical connection cable damaged and torn. Do not place heavy objects on the power cord, and do not make an operation on the cable or injure. Cables may be damaged and may cause a fire or electric shock. In such cases, please contact the authorized person or institutions.
- See the troubleshooting section in Troubleshooting and fault finding practice immediately and call service if necessary. Never attempt to repair this dashboard.
- Do not dispose of together with general household waste your clipboard. Please observe local laws and regulations for disposal.



**Failure to follow the safety instructions, will void the product warranty.**

### Situations That May Be Harmful For Human And Environmental Health Warnings

Installation, commissioning and service procedures performed by qualified personnel as long as the board is does not constitute a security risk to any.



- Burns, electric shock, and death may result.

● Disconnect the electrical connections to the panel before working on them.



- Please do the clipboard the grounding connection.

● Relaxation of the electrical connections and electrical leakage may cause injury.

- Panel manual starting and stopping methods have been described. During the re-commissioning of the panel, the departments should operate on.
- "Leakage Relay" Should be, possible water leaks and splashes clipboard against must installed.
- All electrical wiring must be connected to the clipboard using the protective cover.

### Unacceptable Actions

- On the control panel of design changes must be with made not only the permission of the manufacturer.
- Control panels are used on the other parts, the manufacturer is not responsible for the consequences of changes.

**On The Control Panel The Special Security Equipment And Recommendations**



May result in electrical shock or death.



In the wrong intervention to the control panel may cause damage to the panel.

- Control panel electronic card in order to protect from external factors is made of plexiglass with a specially designed insulation protection is available.
- This protection panels and electronic card intervene must not removed by unauthorized persons.

**Efficient Use of Energy Saving Information**

- Pumps and motors energy-consuming products. Personal causes and is extremely important for the national economy.
- Control panel suitable motor and pumps be used.
- All electrical connections to the instructions by providing appropriate and accurate. Be provided to prevent any loss and leakage of electricity.

**Usage Life**

The product is determined by the Ministry of Industry and declared usage life (time required to carry out the functions of the appliance spare parts) 10 years.

**1. TRANSPORT / STORAGE / MONTAGE**

**1.1 Transfer**

- Handle carefully control panels.
- Appropriate size of the control panels are shipped in cardboard boxes.
- Do not remove the cardboard box inside the control panels during transport.

**1.2 Transport**

- Measure damage to the panel, and bad weather conditions during transport should be taken to avoid exposure.
- Received by the panel in order to comply with the model and should be checked for any damage during transport.
- If the clipboard contains a damaged or missing damage assessment report should be given written information to the shipping company our company.

**1.3 Storage**

- Control panels of instead of immediately montage if not ;
- Do not store in damp environments.
- Do not put weight on the control panels.
- Protect from direct sunlight at the control panels.
- Keep out of the control panels watertight.

**1.4 Montage**



● When performing mounting, follow the instructions otherwise It may be damaged panels.



● Montage are not observed instructions during the that as a result of electric shock, serious injury or death may result.

- While mounting nuts at the rear of the control panel should be mounted with suitable screws.
- Do not mount the back of the board is drilled with another screw. This may cause damage to the electronic card.
- Control panel electrical connection must be carried out only by qualified personnel necessary safety precautions.

**2. OPERATING**

- Control panel electrical connections should be checked.
- The control panel should be checked that the cover is closed.
- There is power cut. the phases should be checked to be complete.
- Control panel settings to be used should be based on pump or motor. Introduction to the settings menu, you will find that you are using the appropriate settings to the clipboard

**3. MAINTENANCE**

**3.1 Monthly Maintenance**



● Disconnect electrical power before maintenance operations.

- Control panel electrical connections should be checked relaxation. The grounding line of the control panel should be checked.
- Electric cables, abrasion, puncture should be examined for color change and warming.

### 4. GENERAL INFORMATION OF THE PRODUCT

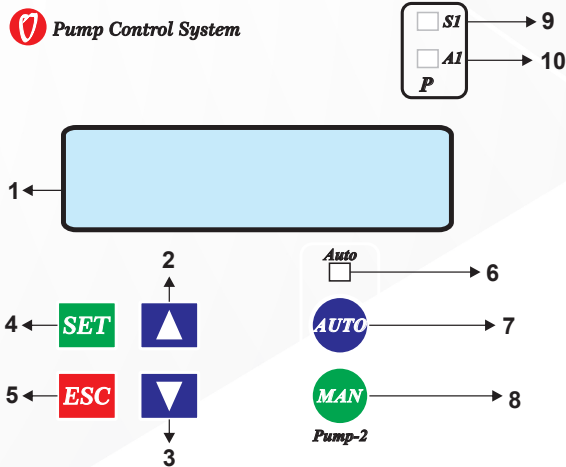
#### 4.1 General Specifications of the Product

- The control board you have purchased is designed based on microcontroller.
- All of the control operations on the panel are done electronically and stored in memory.
- The electronic board in the control panel is produced with high-tech SMD material.
- SMD led lamp and LCD screen with minimum energy consumption are used as indicators.

#### 4.2 Technical Specifications of the Product

- Microprocessor based design.
- 48Mhz operating frequency.
- 64 Kb Program memory.
- 3936 byte SRAM
- 1024 byte EEPROM.
- 1,000,000 read/write data capacity.
- 100 years data retention life.
- Design with nanowatt technology.
- Automatic test feature.
- Automatic test solenoid valve output.
- Voltage protection active-passive option.
- Voltage protection high-low valuespossibility of adjustment.
- Pump stop delay setting.
- Turkish-English language support.
- Floater protection against run without water.
- Ability to select active-passive float protection.
- Measuring pump current values.
- Current protection active-passive option.
- Possibility to set error delay time.
- Auto Manual selection switch.
- Record of 20 events that occurred in the past.
- Ability to see all error states on the screen
- Reporting fault conditions by relay contact.
- Ability to monitor the number of pump switchgears on the screen.
- 2X16 character LCD display.
- Ability to monitor pump operating hours on the screen.

### 5. FRONT PANEL DESCRIPTION AND USE



1. 2x16 LCD screen.
2. Up arrow key to move up in the menu ont main screen and provides paging.
3. Down arrow key to move down inthe menu provides.
4. Set key to enter the menu and used the changes made in the menu.
5. ESC key to to return to the menu and the menu before a transacton is allowed rise.
6. Automatic run led.
7. Auto select button.
8. Manual Run button.
9. Lights when pressure switch is start.
10. Error lihgt.

**6. SETTINGS MENU**



Press the **SET** button to enter the menu.

**Voltage Settings**  
High Volt=250V

The Voltage Settings menu appears. When we press the **SET** button once, the above screen appears. The upper voltage text starts to flash. In this case, the value can be changed with the help of the **▲▼** arrow keys. Press the **SET** button and save the High Voltage set, and the following screen appears automatically.

**Voltage Settings**  
Low Volt=180V

When we press the Lower Voltage Setting **SET** button, the Lower Voltage setting starts to flash, in this case the **▲▼** arrow keys. The value can be changed with the help of Press the **SET** key, save the lower voltage set and return to the menu page.

**Current Settings**  
P.1 High =15.0A

In order to change the current settings, press the **SET** button and the current settings appear. Press the **SET** button. P.1 saves the upper current setting by setting, and the following screen appears automatically.

**Current Settings**  
P.1 Low =01.0A

When the Sub-Stream setting **SET** button is pressed, the P.1 subtitle starts to flash. In this case, the value can be changed with the help of the **▲▼** arrow keys. Press the **SET** key, save the P.1 Sub stream set and return to the menu page.

**History Fault**  
01= High Current

From the historical fault information settings menu, with the help of the **SET** button, the past fault information is highlighted, and by pressing the **▲** down arrow button, the most recent fault of the device always moves to the first place. A total of 20 records are stored in memory.

**Language Select**  
English

Language selection is pressed, **SET** button is pressed, Language Selection is highlighted with the help of the **▲** arrow button in the settings menu, and the menu is entered by pressing the **SET** button. The desired language is selected with the help of the **▲▼** arrow keys and automatically saved by pressing the **SET** key.

**Operating Time**  
P1=0h / 0S

Press the Working Hours **SET** button, and in the settings menu, use the **▲** arrow key to scroll to the Working Times. By pressing the **SET** button, the menu is entered. The operating time of the pumps is displayed in hours.

**Enter Password**  
0000

A password is required by the system to enter the general settings. When the **SET** button is pressed, a 4-digit password is requested. If the password is incorrect, the system automatically discards it from the menu. When the password is entered, the screen on the next page appears.

### 6. SETTINGS MENU



Press the **SET** button to enter the menu.

#### General Settings

Voltage On = 05

Press the **SET** button in the General Settings menu, the text Voltage On starts to flash and the value next to it can be changed with the help of the **▲▼** arrow keys, after the change is completed, by pressing the **SET** button value is memorized. **▲▼** arrow keys are used to find the parameter we want to change and when the parameter is hovered, the **SET** key is pressed and the text starts to flash, in this case the value is changed.

**Voltage On:** It is the voltage-on time setting. Waiting time for automatic reset when the voltage values measured when the system is in fault state due to voltage error again within the desired limits.

**Voltage Off:** It is the voltage error tripping time setting. When the measured voltage values go out of the set values, it is the waiting time to turn off. It is necessary in order not to take the pump off frequently in case of instantaneous fluctuations.

**SSR On:** It is the liquid level (SSR) reset time setting. It is the waiting time setting for automatic reset when the water comes back when the system is in a malfunction state due to dehydration.

**SSR Off:** It is the liquid level error tripping time setting. When the water in the tank or well runs out, it is the time to wait for the circuit to go out.

**Demerage:** Inrush current time setting. During the period set here, the currents drawn from the moment the pump starts up for the first time cannot be compared with the set values.

**Current Delay:** Current fault trip time setting. When the lower or upper current goes out of the set value, the time setting for stopping the motor is set in seconds.

**Start Delay:** When the signal comes from the pressure switch, the pumps are activated as late as the set time for the time set here.

**Stop Delay:** When the signal from the pressure switch is lost, it turns off the pumps within the set time.

**Reset Time:** Reset time setting allows us to set how long it waits for the system to be activated again when it fails due to current error. The setting is in seconds.

**Reset-2:** It is the reset number setting.

**Salt:** Ability to limit the number of pumps on and off in 1 hour.

#### Auto Test Settings

Test = Active

The automatic test setting is pressed, the **SET** button is pressed, the test factory setting is passive. when we press the set button, the Test text starts to flash. appears as a clock. The run time setting allows us to set how long (seconds) the pump will run. Pump operation active or passive option is selected by pressing the **▲** arrow key and the **SET** key is pressed, it automatically saves.

#### Transmitter Set

There is Sensor

Transmitter Setting is adjusted with the help of **▲▼** arrow keys while the text "Sensor available or No sensor" is flashing, and it is stored by pressing the **SET** key. If the sensor is selected, the system now works with the transmitter and does not read the pressure switch input.

**Maximum:** Pressure transmitter maximum (label) value, enter 16 bar for 16 bar transmitter.

**Set Value:** Pump stop set pressure value.

**Hys Value:** Pressure hysteresis adjustment. For example, if our set pressure is 8.0 bar hysteresis 1.0, then 1 pump works at 7.0 bar, 2 pumps work at 6.0 bar, and 3 pumps at 5.0 bar.

#### Operation Mode Select

Hydrophore

Operation Mode Selection, operation selection is made with the help of **▲▼** arrow keys according to the pump used. Press the **SET** button and it will save automatically.

**Hydrophore:** Standart hidrofor motorlarında bu mod seçilmelidir.

**Hydrophore + Ptc:** If there is PTC protection in booster pumps, this mode should be selected. Otherwise, PTC protection will not do.

**P+Joker:** It is the choice of 1 main and 1 wildcard in fire systems.

**Waste Water:** This mode should be selected for wastewater pumps. When this mode is selected, water leakage and Ptc inputs are active.

**Waste Water Stop Fit:** In the selection of waste water with stop floater, water leakage and Ptc inputs become active and the system stops according to the stop floater.

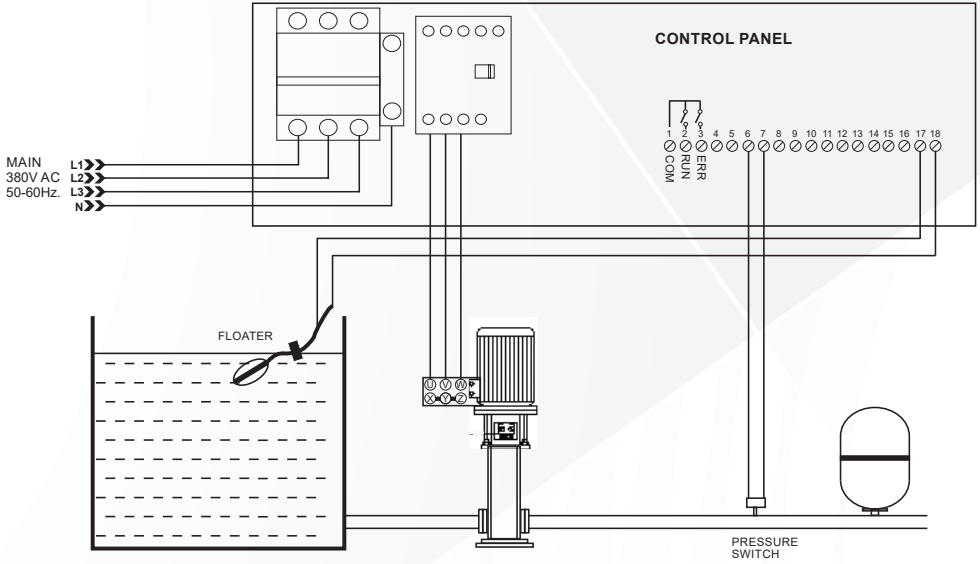
#### Floater / SSR Secim

Floater

Floater / SSR selection is the float or SSR electrode protection selection setting of the device. Selection is made with the help of the arrow key and saved by pressing the set key.



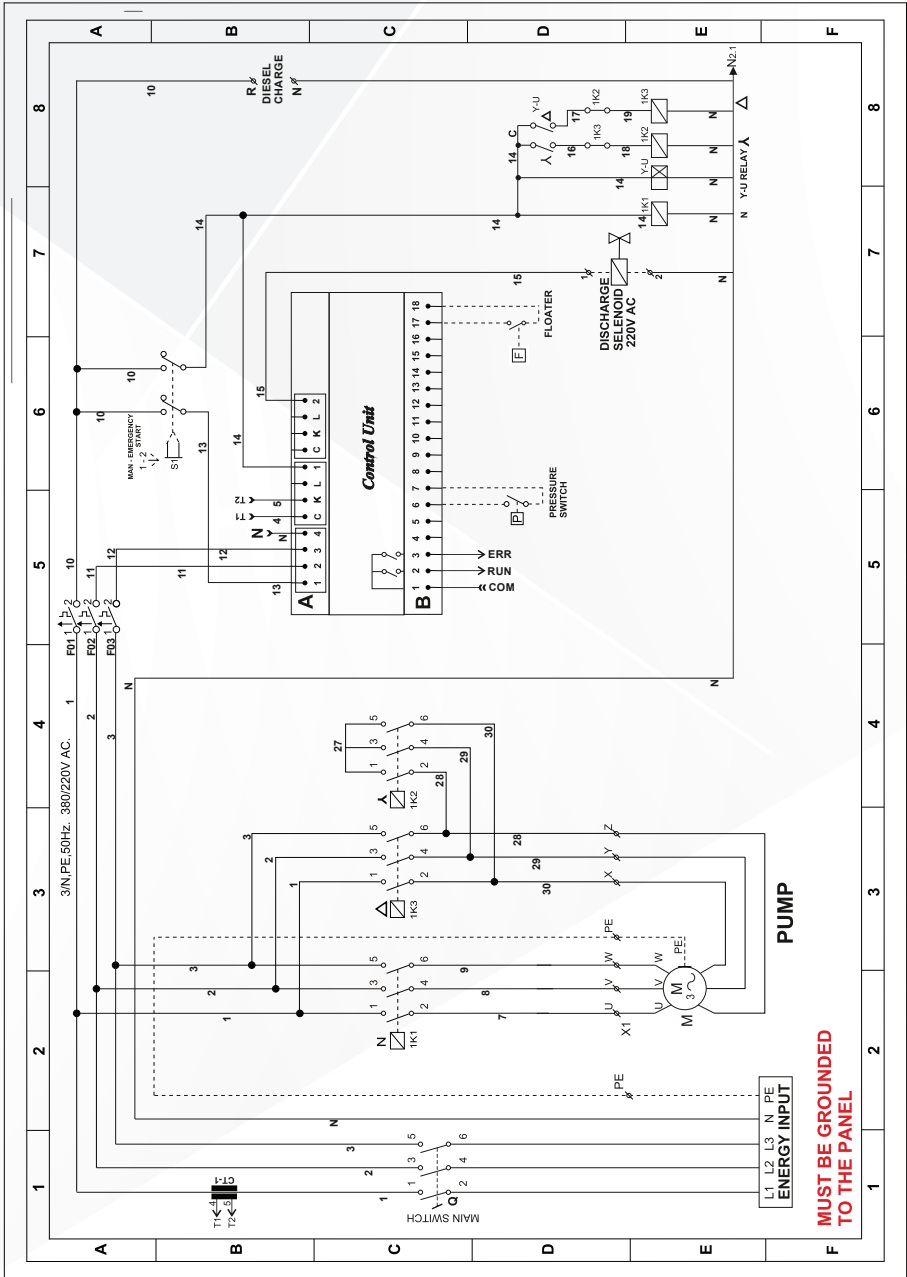
**7. CONNECTION DIAGRAM**



**8. TECHNICAL DETAILS TABLE**

PART NAME	TECHNICAL DETAILS
<b>Operating Voltage (Un)</b>	230 V - 380 VAC
<b>Operating Frequency</b>	50 / 60Hz
<b>Working Power</b>	<6VA
<b>Operating Temperature</b>	-20°C to 55°C
<b>Voltage Measurement Range</b>	10 - 500 V AC
<b>Measurement Accuracy</b>	%±1
<b>Delay Time Setting</b>	1-30 sec.
<b>Indicator</b>	2 X 16 LCD Screen and Leds
<b>Connection Style</b>	Terminal Connection
<b>Ignition</b>	5 A / 250 VAC Resistive Load
<b>Connection Insulation</b>	2.5 kV
<b>Assembly</b>	On the Pump or On The Wall
<b>Protection Class</b>	Ip55
<b>Working Altitude</b>	<2000 meter

### 9. PRODUCT DIAGRAM



## 10. WARRANTY

Principles specified in this user guide, instructions, standards-compliance No other institution and contact an authorized service maintenance, repair or other reasons, provided that untreated The materials used on the control panel manufacturer; workmanship, assembly and manufacturing defects user Company is subject to the terms of warranty.

### **Outside the Remaining Extent of Warranty Conditions :**

1. Warranty terms and conditions only on the invoice in writing the product/products covers.
2. User errors, failures and damages that occur.
3. Misuse damages use and malfunctions.
4. Incorrect installation, incorrect or incomplete damage and faults caused from installation made.
5. Shipping, vibration, storage, physical collisions, damage and malfunction caused by chemical factors, and environmental conditions.
6. Fire, lightning, floods, earthquakes and other natural disasters damage and malfunctions.
7. Failures and damages caused intentionally harming.
8. Incompatibility or lack of damage to the cables used in electrical installations and faults.
9. In the Product's user guide for damage and malfunctions occurring against the issues.
10. The interventions given to the product by unauthorized persons to the product warranty expires.

### **Caution**

*Please obey this user guide and following subjects for safety use.*

- All energy should be cut-off while device connecting to panel.
- Solvent or similar matter use when cleaning.
- Check the connections according to connection diagram.
- Defective device should repair only producer company or authorized seller.



The company or authorized seller is not responsible for bad result which born of these unperformed conditions.



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