

MKN-01 Pump Control Panel Series

Mechanical Control Panel 1-2 Pump(s) 0,37—11 kW



Instruction Manual



TayTech[®]
advanced automation solutions

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1. Introduction

This manual provides the necessary information for proper installation, use and maintenance of the MKN-01 Series model device. The user must read this manual before operating the device. Misusage may cause damage to the user or product and void the warranty.

This document should be viewed as an integral part of the MKN-01 device. For this reason, it should be protected and stored for the duration of use.

The information and instructions in this manual relate to the standard use of this product. In case of special situations, functions or applications not described in this document, contact our service center for assistance.



When you receive the product, check that is not damaged during transportation. If the product is damaged, report directly to TAYTECH technical service unit within 5 days of receipt.

The information provided in this manual is subject to change without notice. Note that failure to follow the instructions given in this manual may cause physical injury or damage to objects.

The product should be installed in a sheltered, well ventilated, non-hazardous environment and used at a maximum temperature of 40°

2. Warnings

DANGER, WARNING symbols indicate critical points related to the product. Please consider these symbols when you see them.

	ELECTRICAL DANGER Risk of Electric Shock There is a risk of electrical shock where this warning is located.
	WARNING There is a risk of damage for human health, pump or system.

The MKN-01 Series should only be used for the purpose specified in the design. Products used for different purposes are considered dangerous because they are inappropriate. In case of fire in or around the installation site, use a suitable extinguisher (dry, chemical powder, foam, carbon dioxide). Install the product in a dry and sheltered place in accordance with the degree of protection, away from heat sources and easily flammable substances.

Any part of the MKN-01 Series product should not be disassembled without the permission of TAYTECH. No changes should be made to the product. Otherwise, the product will be out of warranty.

The installation and maintenance of the product must be done by the authorized person in accordance with the current standard. The environment in which the product is installed must have a grounding line.

3. Transportation



The MKN-01 Set should be handled with care, as falls and bumps can cause damage. If the delivered products are not installed and started to operate immediately for any reason, the unit should be stacked neatly. The outer packaging and accessories packaged separately should not be damaged and should be stored as a whole. It should be stored in a suitable ambient temperature and dry environment.

NOTE: Check whether the product is damaged during the transportation. If there is any damage to the product, report it to TAYTECH service center within 5 days from the delivery date.

4. Operation Limits

MKN-01 Set is a smart, simple, easy to understand and reliable control panel specially developed for booster, sewage, circulation and HVAC systems. It integrates all of the mechanical and electronic devices in these systems and controls the system perfectly. It operates without the need for industrial type electricity with its Monophase option. With the three-phase option, it can work under heavy conditions with industrial electricity.

TAYTECH is not responsible for damaging the panel or users as a result of using the panel in different applications other than the manual or wrong connection.

4.1. Technical Characteristics

- Input Voltage 3 ~ 380-400VAC 50 / 60Hz. Three Phase.
- IP Protection Rating: IP54.
- On / Off switch button
- Pressure Switch Control for Automatic Operation
- Level Control with Floater
- Thermic – Magnetic Circuit Breaker
- Fuse protector for control protection.
- Pump Protection Against dry running.
- Metallic Box.
- Ambient Temperature: -5 / +40 ° C.
- Discharge valve output

5. Assembly

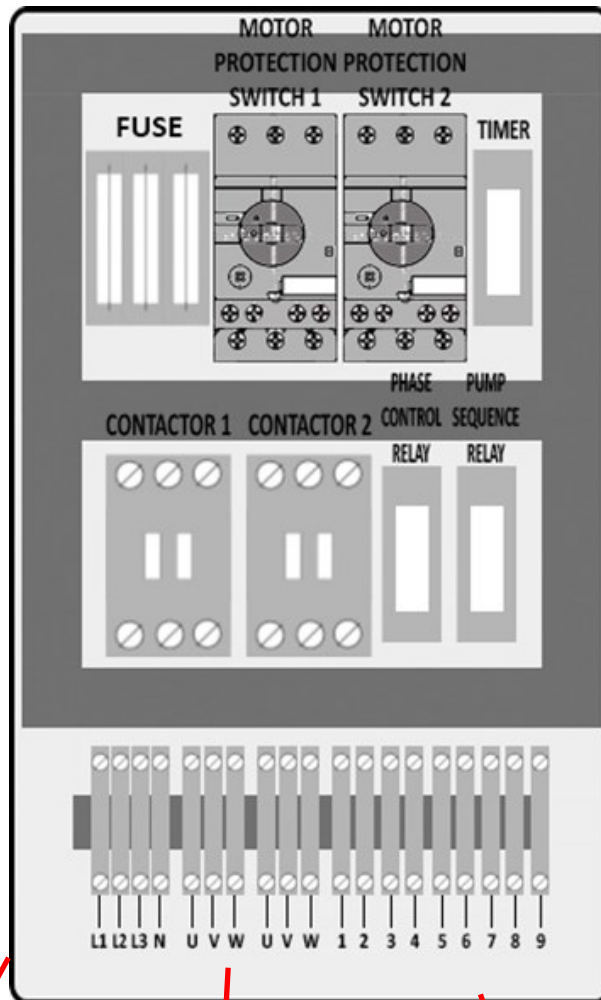
5.1. Wall Mounted Assembly



WALL

- Fix them on the wall using the mounting screws on the back of the panel.
- Please do not drill any holes in the cabinet.
- For electrical connection, install and assemble the cables regularly through the gland holes.
- Do not try to open the cabinet door while the load-disconnecting latch button (Isolating Switch) is in position 1.

5.2. Electrical Connection



3~380-400VAC
50/60 Hz

Motor
Connections

Sensor Connection Terminals

- (1-2) Floater Control
- (3-4) Pressure Switch
- (5-6) PTC Sensor
- (7-8) Solenoid Valve
- (9-10) Fault Relay

6. Functions and Settings

6.1. Current Settings

The current adjustment bar on the thermal magnetic switch is adjusted with 10% tolerance according to the rated operating current in the motor label value.

GAMAK		Tip GM 9052	
3 fazlı AC MOTOR		Nr:900375498	
Δ/λ	220 / 380	6 / 3,5 A	
1,5 kW	2 HP	Cos ϕ =0,88	
2820 d/d		50 Hz	
3-990	iz.KL B	P: 33	



6.2. Pump Active / Passive

When 1-0 latch pushbutton 0 on the panel cover is in the “**OFF**” position, the pump is deactivated, and in the “**ON**” position, the pump becomes active. When the pump is active, it works if low pressure information comes from the mechanical pressure switch. As long as the pressure full information comes, the pump waits ready for operation.



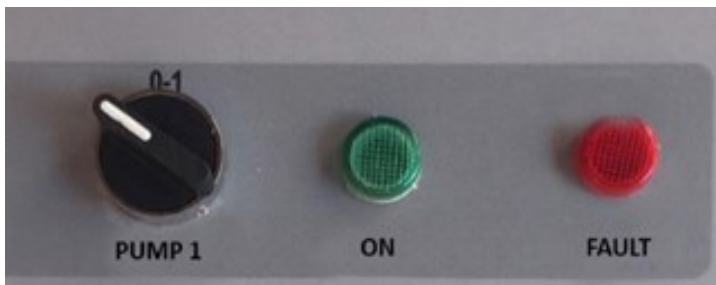
7. Troubleshoots



The current adjustment bar on the thermal magnetic switch is adjusted with 10% tolerance according to the rated operating current in the motor label value.



If the phase error lamp is energized, the order of the phases at the energy input of the board is reversed. When this error is seen, you should notify the authorized service.



If the fault lamp is energized, the thermal magnetic switch has opened the circuit. If the thermal magnetic switch is constantly opening the circuit, the pump is consuming too much current, or the current setting is wrong. In this case, the situation should be reported to the authorized service.

8. General Conditions

8.1. Warranty

All products are covered by a 24-month warranty, covering production defects and replacing / repairing defective parts.

Warranty conditions; does not cover damage caused by missing / incorrect electrical connections, improper installation, misuse or any negligence due to the installation and operation of the facility.

In addition;

- Damage due to corrosion or wear of any type or quality
- Malfunction due to incorrect installation;
- Repair, dismantling or tampering by unauthorized persons
- Natural disasters such as fire, flood, water or lightning occur

Damages that may occur due to their reasons are not considered under warranty.

The defective material must be shipped by the customer and sent to the Taytech factory address.

8.2. Maintenance



FxA series panel does not require routine maintenance, within the working limits and provided that the instructions in this manual are followed. Special maintenance or repairs should only be carried out by authorized service centers. Only original spare parts should be used in case of repair. The manufacturer rejects all responsibility for injury or material damage resulting from maintenance interventions by unauthorized personnel.

8.3. Disposal

If the product is taken out of service, local regulations on waste regulations must be observed. According to the material categories, it should be separated within the scope of recycling. You can get help by applying to appropriate recycling centers.

8.4. Spare Parts

When you request technical information or spare parts from our sales or service / service center, always state the product model and serial number.

Any defective product component should only be made by an authorized person in accordance with the applicable standard.

9. Certification



CONFORMITY OF DECLARATION



The company name: **TAYTECH OTOMASYON ve BILISIMTEKNOLOJILERI A.S.**

İnönü Mahallesi, Atatürk Blv. No:7/2 41400 Gebze Plastikçiler O.S.B Gebze / Kocaeli

DECLARES UNDER HIS OWN RESPONSIBILITY THAT THE MACHINE DESCRIBED BELOW:

MKN-01 – Mechanical Series

ARE IN CONFORMITY WITH COMMUNITY DIRECTIVES REGARDING:

- European Directive 2014/35/EU (Low Voltage Directive)
- Electromagnetic Compatibility Directive 2014/30/EU

AND IN COMPLIANCE WITH THE FOLLOWING STANDARTS:

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



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