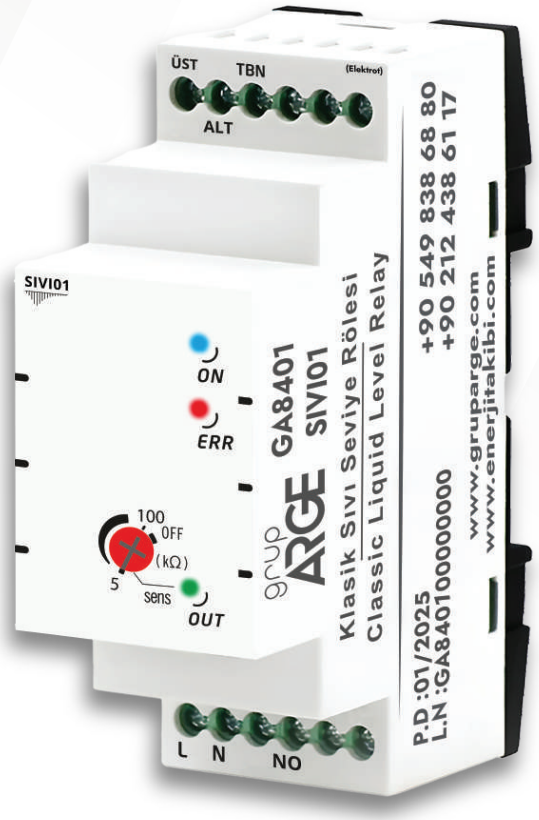
SIVI01
Classic Liquid Level Relay
User Manual



ADDRESS: Ikitelli OSB Mah. Cevre 14.
Blok Sok. Telas Blok Dis Kapi No: 1
Kat: 1-2 Basaksehir/Istanbul

Phone: +90 212 438 80 24
Fax: +90 212 438 80 25

info@gruparge.com

V.25.1

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PROPER USE and SAFETY REQUIREMENTS

Cut all the power when connecting and disconnecting the device to a panel.

Do not clean the device with a solvent or similar material. Only use a dry cloth.

Please do not intervene to the device when a technical problem is encountered and get in contact with a technical service within the shortest time.

If the warnings are not taken into account, our company or the authorized dealer shall not be held responsible for the negative consequences.

Do not dispose in the trash, the device must be delivered to the collection centers (electronic device recycling centers). It should be recycled or disposed of without harming human health and environment.

The installation, assembly, activation and operation of the device hould be done and used by only expert professionals and in accordance with safety regulations and instructions.

1.INTRODUCTION

1.1. General Features

SIVI01 Liquid Level Relay is designed to sensitively monitor and control the conductive liquid level in industrial and commercial applications, tanks, water tanks, wells, etc. SIVI01 Liquid Level Relay keeps the liquid level within a certain range, ensuring safe and efficient operation of devices such as motors, pumps, etc.

1.2. Usage and Operating Principle

Make the device connections according to the connection diagram.

Three electrodes are used with the device: upper, lower and base.

When the conductive liquid level reaches the level of the upper electrode (ÜST), the relay pulls. When the relay is pulled, that is, when the output is activated, COM and NO terminals are short-circuited and COM and NC terminals are open circuit. The signal entering through the COM terminal is no longer output through the NC but through the NO terminal. The water motor connected to the NO terminal starts to drain the tank. When the conductive liquid level drops below the level of the lower electrode (ALT), the relay will release. (This will prevent damage to the water motor by running with an empty tank). SIVI01 waits for the water tank to refill and when the conductive liquid level reaches the upper electrode, the relay will pull again. (This will prevent the tank from overfilling and overflowing.)

If the tank, container or reservoir is made of conductive material, there is no need to use the base electrode. In this case, the the base output (TBN) of the relay can be connected directly to the tank, container or reservoir.

As a result, SIVI01 will ensure safe and efficient operation of the system by keeping the conductive liquid level within the specified limits.

1.3. Installation

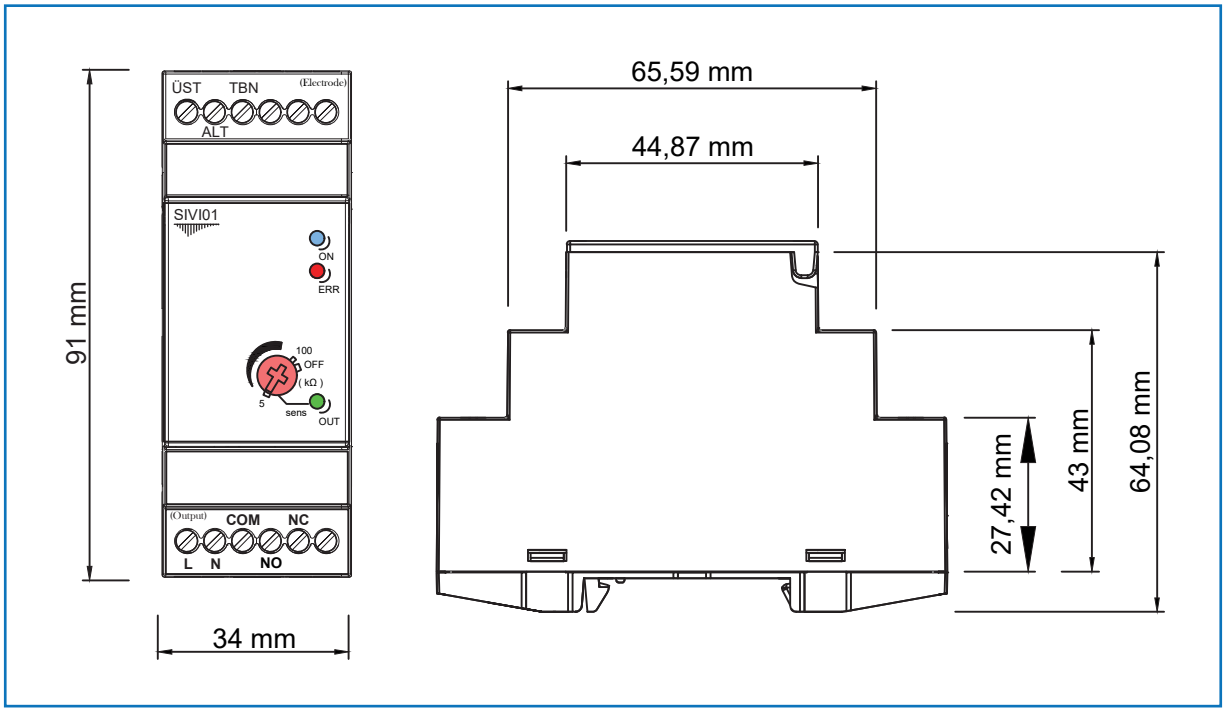
When adjusting the impedance between the electrodes, make sure that the electrodes are in contact with the conductive liquid. Sensitivity adjustment between 5-100 kΩ can be made for different liquids. Turn the adjustment button slowly from OFF to 5 kΩ. The relay will detect and output the electrodes. By turning the adjustment button a little more in the direction of 5 kΩ, the relay is taken into the safe operating zone. This means that the appropriate value is set.

Note: The Liquid Level Relay is not used with flammable liquids.

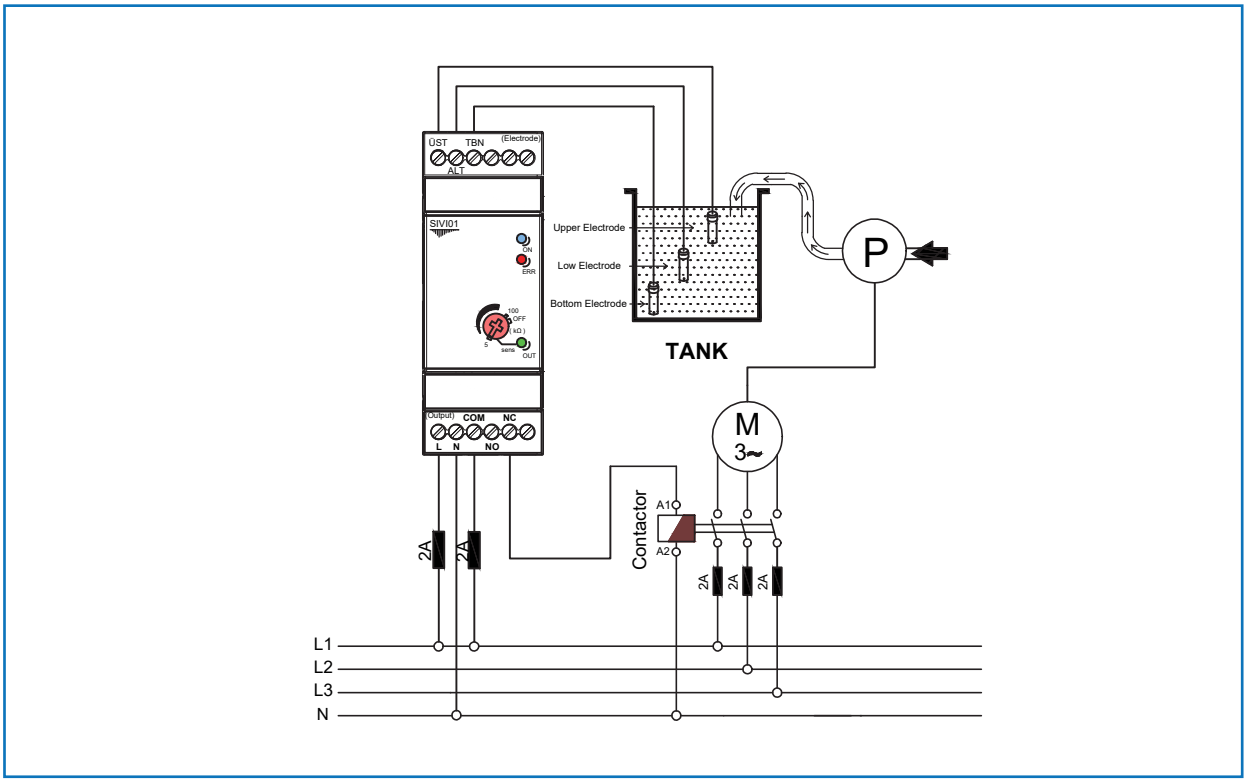
1.4. Technical Features

- **Operating Voltage :** 190 – 260 V AC
- **Operating Frequency :** 50/60 Hz
- **Power Consumption :** < 3 VA
- **Indicator:** 3 x LED
- **Connection Type :** Terminal Connection
- **Sensitivity Adjustment :** Adjustable between 5-100 kΩ
- **Operating Temperature :** -5 °C / +55 °C
- **Protection Class :** IP20
- **Cable Diameter :** 2,5mm²
- **Weight / Dimensions :** 0,180 kg / 34 x 91 x 64 mm
- **Mounting :** DIN Rail
- **Output Contacts :** NO – 5A@250V AC
  NC – 2A@250V AC

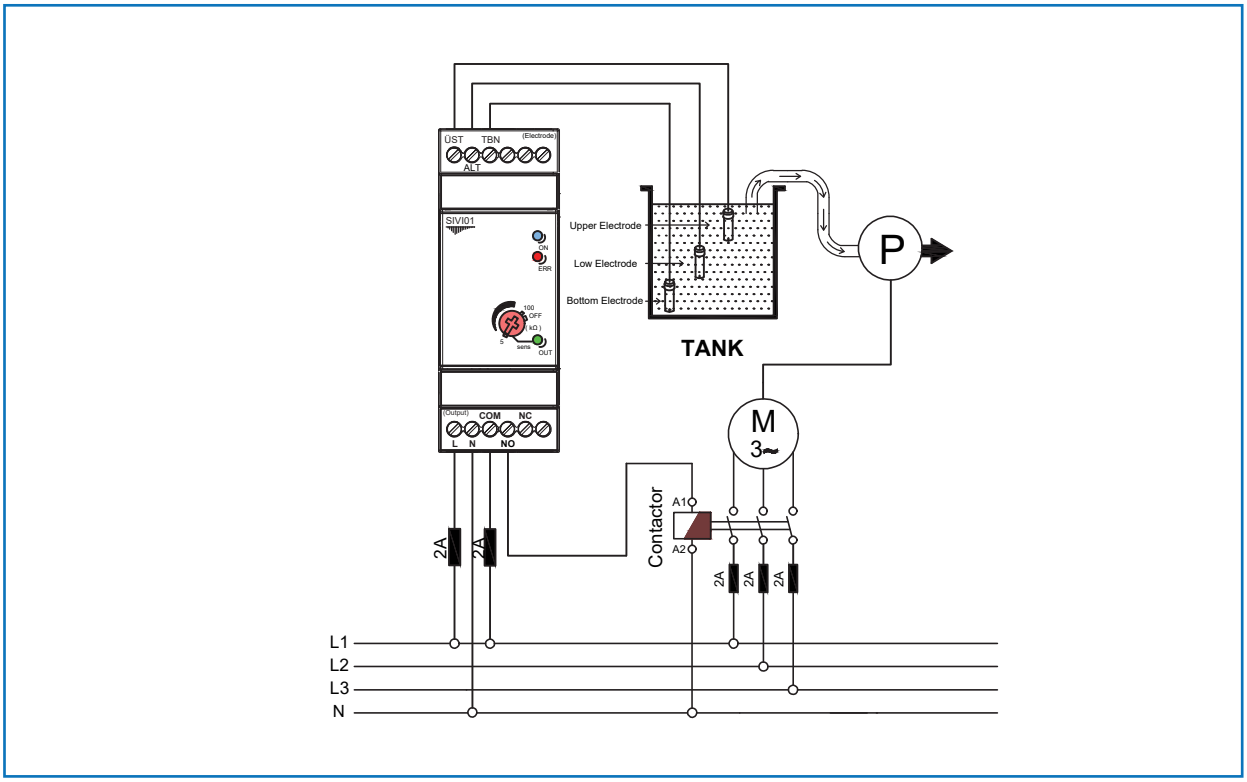
1.5. Technical Drawing



1.6. Connection Diagram



Connection Diagram for Filling the Tank



Connection Diagram for Draining the Tank