Description:

The Rechner KAS series sensors are ideal for use as level detection devices. The sensors work equally well for liquids, granulates, or powders. When a system is required to replenish a bin or tank when a low-level point is reached, a control can be made using 2 sensors and the EGI-RLC-MM power supply logic controller.

Function:

When the system is installed as shown, the pump or conveyor used to fill the tank or bin will be controlled by the relay in the EGI-RLC-MM.

When the level in the tank drops below the min sensor, the relay will energize to start the pump motor. The relay will remain energized until the tank has been filled to the max sensor. At this point, the relay will de-energize and stop the filling process. The relay will remain de-energized until the level drops below the min sensor again. The cycle then repeats to keep the tank filled.
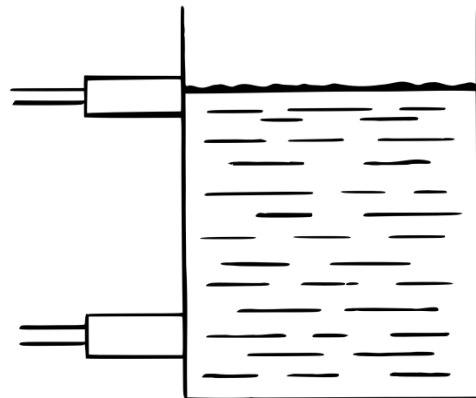
Once the sensors are mounted and connected to the EGI-RLC-MM, each sensor needs to be adjusted as follows:

1. **Locate the sensitivity adjustment potentiometer** on the back of the sensor.
2. **Fully immerse the sensor** into the product to be detected.
3. **Reset the sensor's sensitivity** by turning the potentiometer counter-clockwise 20 full turns, or until the sensor no longer sees the product.
4. **Adjust the sensor** to the product to be detected by turning the potentiometer clockwise until the sensor sees the product.
5. **Add 1/4 turn for safety** by turning the potentiometer a further 90 degrees clockwise.

Parts Required:
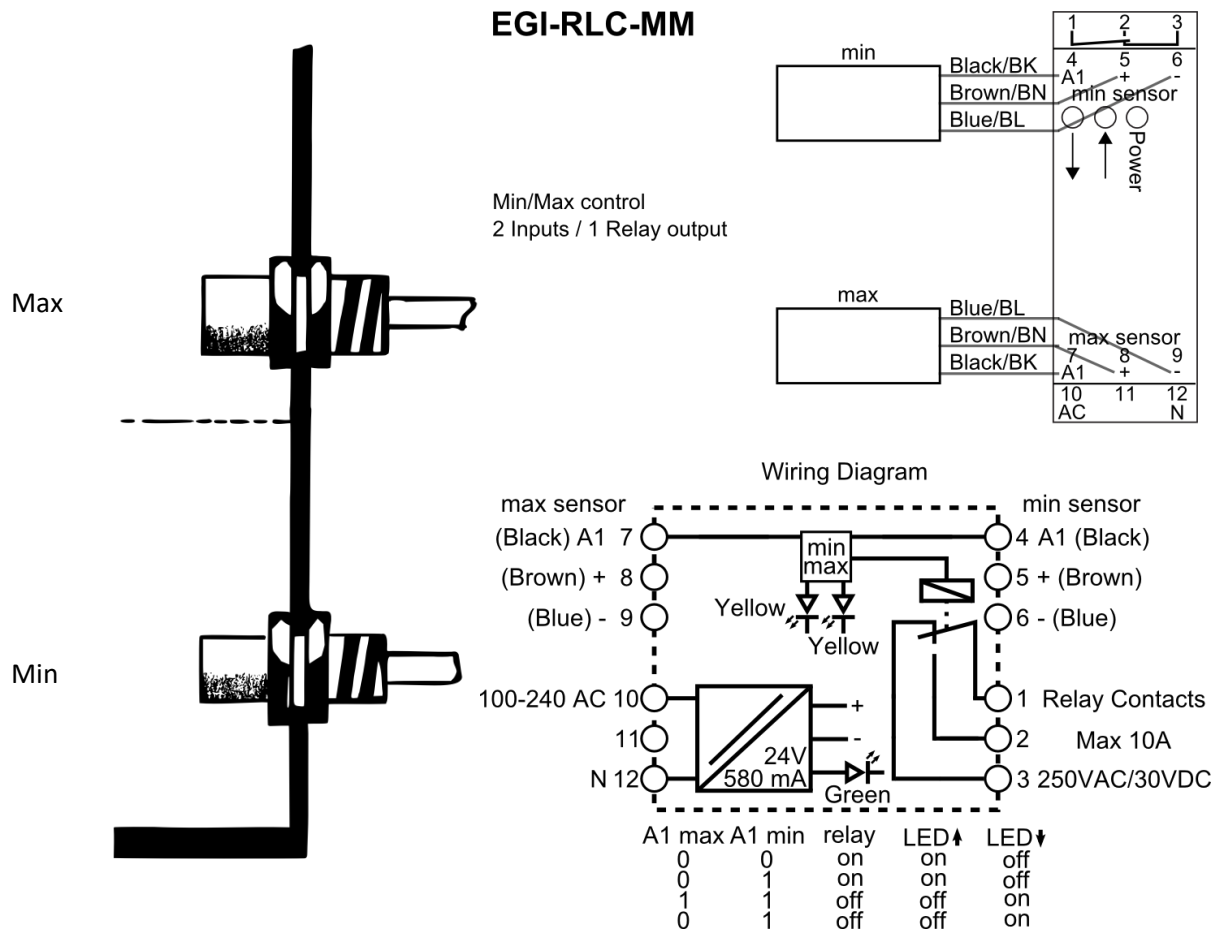
2 Sensors: KAS-80-35-A-M32-PPO-Y3-1-NL
2 5 Meter Cables: 0.25SQX4C
1 Rechner Logic Controller: EGI-RLC-MM

Wiring Diagrams:

EGI-RLC-MM

Min/Max control
2 Inputs / 1 Relay output

Wiring Diagram

A1 max	A1 min	relay	LED▲	LED▼
0	0	on	on	off
0	1	on	on	off
1	1	off	off	on
0	1	off	off	on

Pump-in system: A tank slowly drains material. The user always wants to keep the tank from running empty. Use relay terminals 1 and 2 (NO). This will turn the pump ON when the level goes below the *min sensor* and turn the pump OFF once the level reaches the *max sensor*.

Pump-out system: A tank slowly fills with material. The user never wants the tank to overfill. Use relay terminals 1 and 3 (NC). This will turn the pump ON when the level reaches the *max sensor* and turn the pump OFF once the level goes below the *min sensor*.