

Alternating Relay for 2 waste water electropumps

Sanitation plants



Operation

POWER THE RELAY (GREEN LED ON – A.1)

When powering the relay it will turn on all the LEDs sequentially, for lamps testing.

ALTERNATING AND REINFORCEMENT INPUT

During each actuation of the toggle signal, alternately powers outputs B1 and B2. If a boost actuation appears during the alternating operation, it will switch on the second available output. The outputs B1 and B2 will switch off in the same sequence as it were connected in the absence of the minimum level signal.

REINFORCEMENT TIMING

Selecting the respective micro-switch changes or shifts the boost timing.

ALTERNATION AND REINFORCEMENT BOOM FAILURE

Due to the absence of the alternating level control float switch signal, the two pumps will only turn off in order of the booster float. Due to the absence of signal from the two level control float switch, the pumps will only turn on the alarm level control float switch, and turn off by the minimum level control float switch. Actuates the alarm output relay.

LACK OF SIGNAL OF MINIMUM LEVEL CONTROL FLOAT SWITCH

In the absence of the minimum level control float switch signal, the system will run in command timed by the maximum float, connecting the two pumps. When the maximum buzzer is turned off, the delay time of 5 or 15 seconds starts, at the end of which the two pumps are switched off.

MAXIMUM / ALARM INPUT

This input is available to receive an alarm signal by High Level (float). When activated it signals alarm, it turns on the alarm output relay and the two pumps (B1 and B2). The alarm cancels when the level is reset.

DISPLACEMENT AT START OF PUMPS (WATER HAMMER)

When the start and stop commands are given simultaneously, the outputs B1 and B2 do not switch simultaneously, but with a time offset equal to 3 or 10 seconds, according to the position of the micro-switch.

MISALIGNMENT OF PUMPS

Whenever the two outputs are switched on and the order to switch off occurs, these outputs do not switch off at the same time, but with a 2 sec.

MAINTENANCE CYCLE

If there is a minimum level float condition for more than 60min., Without the condition of the toggle float, an electric pump will be connected, which will only turn off when deactivating the minimum float.



micro controle
automação electrónica, lda.

RAL 202 SAM

Alternating relay for 2 electro pumps, with alarm relay for sanitation plants.

Of its main characteristics, we highlight the box of 2 modules, the detection of the float fault of minimum level and also, the fact that the various timings can be adjusted by Micro Switch, which gives high flexibility and resource savings.



Technical Specifications

Room temperature: [-10°C , + 55°C]

Output relay: AC 8A-250V

Supply: AC (230V, 400V) / 50Hz

Consumption: 2VA (approx.)

Modular relay for DIN rail mounting



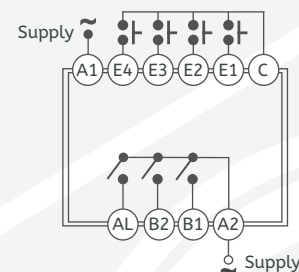
Applications

Command and protection of electro pumps installed in waste water systems, with 2 electro pumps, with:

- ▶ **Inputs** - minimum level, toggle, boost and maximum / alarm.
- ▶ **Output relays** - B1, B2 and alarm.
- ▶ **Reinforcement timing** - with backup electro pump.
- ▶ **Pump start delay** - selectable internal timing.
- ▶ **Pump stop distance** - 2 sec. of interval.
- ▶ **Lack of alternating signal** - 2 pumps are connected by the reinforcement. Signal alarm.
- ▶ **Maximum alarm** - Starts a command timed 5 or 15 sec, commanded by the maximum level regulator float switch. (by dip-switch selection)



Connections



Order Codes

- ▶ RAL 202 SAM 230V AC
- ▶ RAL 202 SAM 400V AC