



RAL 202 HIM

Alternating Relay for 2 electric pumps, with alarm relay, for hydropressor plants.



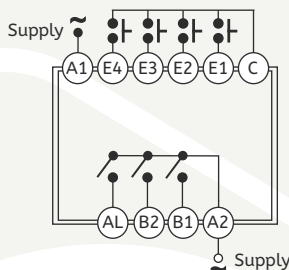
Applications

Control and protection of electric pumps installed in hydropressors, with 2 electric pumps, with:

- ▶ **Inputs** - minimum level, alternation, reinforcement and maximum / alarm.
- ▶ **Output relays** - control of B1, B2 pumps and alarm.
- ▶ **Aspiration of network or cistern**, selectable (dip-switch).
- ▶ **Water delay**, selectable (dip-switch).
- ▶ **Reinforcement timing** for support pump inlet.
- ▶ **Phases in starting the pumps** - selectable internal timing.
- ▶ **Phase stop at the pumps** - 2 sec. interval.
- ▶ **P1 failure** - connect the 2 pumps by the reinforcement. Signals alarm.
- ▶ **Minimum alarm** - due to lack of water, turn off the pumps. Signals alarm after 5 min.



Connections



Order Codes

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

Dual Alternating Relay

Hydropressor



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



Operation

FEED THE RELAY (LIGHT GREEN LED - A.1)

When powering the relay, all the LEDs will light up sequentially for lamp testing.

TOGGLE AND BOOST INPUT

During each actuation of the toggle signal, alternately connect output B1 and B2. If during the Alternating action, a reinforcement action appears, it will turn on the second available output. Outputs B1 and B2 will turn off in the same sequence they connected, that is, in the absence of the boost signal, the last pump that was turned on will turn off.

REINFORCEMENT TIMING

Selecting the respective micro-switch, changes the boost timing.

LACK OF WATER (ALARM)

As long as the minimum level float is working, the system works normally, alternating. If the float of minimum level stops giving condition, the system will shut down due to lack of water, that is, it will shut off the electric pumps, and after 5 min. will connect the alarm contact.

ARRIVAL OF WATER

- Aspiration from Cistern ▶ Turn on the pumps immediately.
- Aspiration from the mains ▶ Turn on the pumps after a 3-minute delay.

MAXIMUM / ALARM INPUT

This input is available to receive a High Level Alarm signal (float or pressure switch). When activated, it signals Alarm and turns the Alarm output relay on intermittently. This situation will not turn off changing the operating status of B1 or B2, regardless of whether they are connected or not.

PUMP START DELAY (WATER HAMMER)

When the start-up order is given simultaneously by the Alternation and Reinforcement signals, outputs B1 and B2 do not turn on simultaneously, but with a time lag of 3 or 10 sec. according to the position of the micro-switch

PUMP STOP DELAY

Whenever the two outputs are connected and the order to switch off appears, these outputs do not switch off simultaneously, but with a 2-second delay.

