POLYLOK™ Ltd.

Innovations in Precast, Drainage & Wastewater Products

Zabel® A Division of Polylok

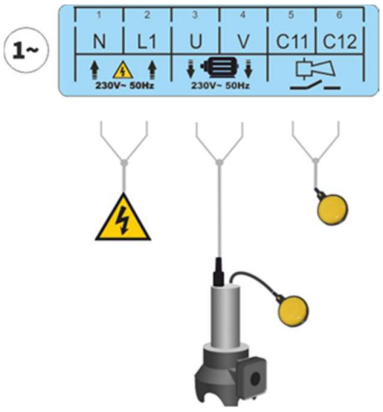
Electrical Control Panels

for

Submersible Pumps

Note: The details in this brochure are subject to change without notification

Duty Pump Control Panel with High Level Alarm (1213A)



- 200 x 125 x 110 mm ABS IP 20 Plastic Box, RAL 7035 Grey
- Motor circuit breaker
- Isolator switch with auto function, overload trip indication with handle in 45 degree position
- Audio alarm with reset switch allowing to mute alarm until new anomaly without interference with alarm light
- Single phase 240V
- Available for following current ratings:
  - 1~ 1.6 – 2.5A
  - 1~ 2.5 – 4.0A
  - 1~ 4.0 – 6.3A
  - 1~ 6.3 – 10A
  - 1~ 10 – 16A

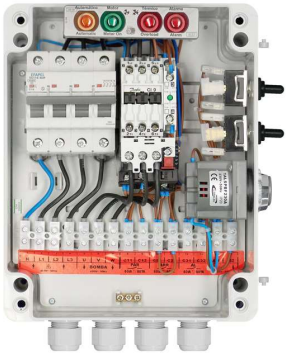
After all wiring connections are made correctly the overload relay must be adjusted according to the motor's nominal intensity.

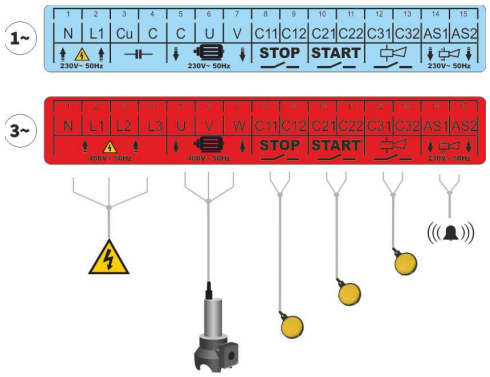
If the handle of the motor protector is on the automatic functioning position (1), the pump turns ON/OFF in conformity with the closing or opening of the external Start/Stop command.

Every time the alarm command (C11-C12) closes, the alarm signal will turn ON (red signal lamp) as well as the acoustic alarm, this may be shut OFF by its switch.

The trip of the motor circuit breaker due to short-circuit or overcharge turns OFF the pump, independently of the state of any of the commands. The position of the handle of the motor circuit breaker allows to differentiate when this was turned OFF due to manual intervention (handle in horizontal position) or by malfunction (handle in 45º).

Duty Pump Control Panel with High Level Alarm (1103A)



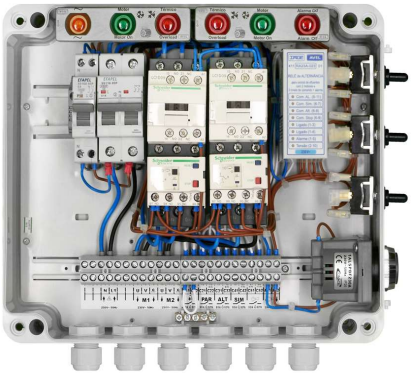


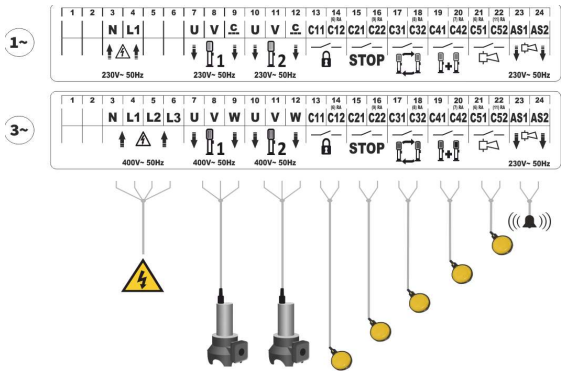
- 250 x 200 x 140 mm ABS IP 20 Plastic Box, RAL 7035 Grey
- Contactor and overload relay
- Automatic Manual or Off mode system, controlled by a 3 position toggle switch with rubber cap
- Automatic acoustic alarm functioning, test or OFF, mode system controlled by 3 positions toggle switch with rubber cap, without interfering with the light alarm
- Protection against short-circuits by a circuit breaker
- Protection against overloads by an overload relay
- Available for following current ratings:

1 ~ 1.6 – 2.5A	3 ~ 1.6 – 2.5A
1 ~ 2.5 – 4.0A	3 ~ 2.5 – 4.0A
1 ~ 4.0 – 6.0A	3 ~ 4.0 – 6.0A
1 ~ 5.5 – 8.0A	3 ~ 5.5 – 8.0A
1 ~ 7.0 – 10A	3 ~ 7.0 – 10A
1 ~ 9.0 – 13A	3 ~ 9.0 – 13A

After all wiring connections are made correctly the overload relay must be adjusted according to the motor's nominal intensity. The control box will maintain all the signalling OFF until the toggle switch is switched to the automatic mode, turning ON the yellow signal lamp.
If the start (C21-C22) and stop control (C11-C12) closes the pump turns ON (green signal lamp), only turning OFF when the STOP control reopens. If you wish to use only one command for Start/Stop control, a "shunt" should be made on the (C21-C22) command, keeping the (C11-C12) working as the Start/Stop command.
Every time the (C31-C32) command closes, the alarm red signal will be turned ON as well as the acoustic alarm, which may be shut OFF by its own switch.
When the toggle switch of the control circuit is switched over to manual mode, the pump turns ON, independently of the state of the start/stop control.
The trip of the overload relay due to an overload (red signal lamp) turns OFF the pump, independently of the state of the other controls.

Economy (Duty/ Standby & Assist) Pump Control Panel with High Level Alarms (3303A)



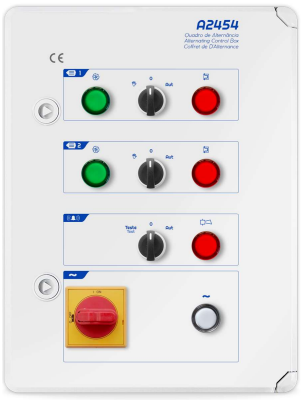


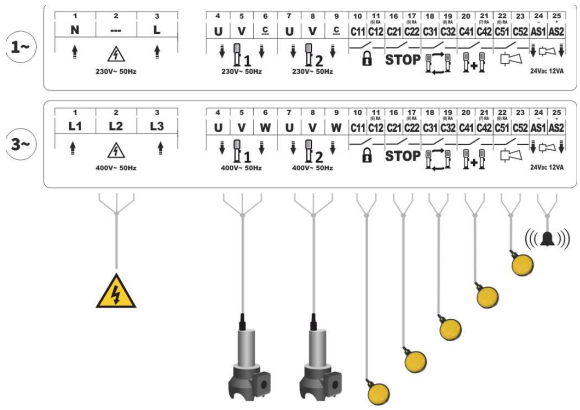
- 300 x 250 x 140 mm ABS IP 20 Plastic Box, RAL 7035 Grey
- Contactor and overload relay
- Alternating and simultaneity control by alternating relay
- Buzzer and light alarm included
- Automatic, Manual or OFF mode system controlled in each pump independently by a 3 position toggle switch with rubber cap.
- Buzzer and light alarms controlled by a 3 position toggle switch with rubber cap keeping the buzzer in automatic, text or OFF mode system, and not interfering with the light alarm.
- Protection against short-circuits by a circuit breaker
- Protection against overloads by an overload relay
- Available for following current ratings (Single 1~ and Three 3~) :

1 ~ 1.6 – 2.5A	3 ~ 1.6 – 2.5A
1 ~ 2.5 – 4.0A	3 ~ 2.5 – 4.0A
1 ~ 4.0 – 6.0A	3 ~ 4.0 – 6.0A
1 ~ 5.5 – 8.0A	3 ~ 5.5 – 8.0A
1 ~ 7.0 – 10A	3 ~ 7.0 – 10A
1 ~ 9.0 – 13A	3 ~ 9.0 – 13A

After all wiring connections are made correctly the overload relay must be adjusted according to the motor's nominal intensity. The control box will maintain all the signalling OFF until the toggle switch is switched to the automatic mode, turning ON the yellow signal lamp.
When the toggle switches are switched on the automatic mode (AUT), when the start level switch energises (C31-C32), one of the pumps turns ON the pump alternates each time, only turning OFF when the level drops to the STOP level switch (C21-C22). If the level continues to rise to the assist level switch (C41-C42) the 2nd pump turns ON simultaneously, only turning off with the STOP level switch (C21-C22).
The opening of the safety control (C11-C12) level switch turns OFF the pumps, independently of the indications of the start/stop control. If you don't want to use this float it must be closed with a "shunt"
When the level rises to the alarm float switch (C51-C52) closes the buzzer and light alarm will turn ON (red lamp signal). The buzzer can be turned OFF with the alarm toggle switch.
When the toggle switch of the control circuit is switched to manual mode the selected pump turns ON, independent of the status with the start/stop and safety controls.
The trip of the overload relay due to an overload (red signal lamp) turns OFF the corresponding pump, independently of the state of the other controls.

Premium (Duty/ Standby & Assist) Pump Control Panel with High Level Alarms (2454A)





- 400 x 300 x 220 mm ABS IP 54 Plastic Box, RAL 7035 Grey
- Contactor and motor circuit breakers
- Alternating and simultaneity control by alternating relay
- Command and alarm signalling module
- Automatic, Test or OFF functioning of the acoustic alarm, 3 position toggle switch without interfering with the light alarm
- Command circuits with reduced tension
- Protection of the control circuit by a fuse
- Protection of the power circuit against short circuits and overloads by a motor circuit breaker
- Available for following current ratings (Single 1~ and Three 3~) :

1 ~ 1.6 – 2.5A	3 ~ 1.6 – 2.5A
1 ~ 2.5 – 4.0A	3 ~ 2.5 – 4.0A
1 ~ 4.0 – 6.0A	3 ~ 4.0 – 6.0A
1 ~ 6.0 – 10A	3 ~ 6.0 – 10A
1 ~ 9.0 – 14A	3 ~ 9.0 – 14A

After all wiring connections are made correctly the overload relay must be adjusted according to the motor's requirements.
When the toggle switches are switched on the automatic mode (AUT), when the start level switch energises (C31-C32), one of the pumps turns ON the pump alternates each time, only turning OFF when the level drops to the STOP level switch (C21-C22). If the level continues to rise to the assist level switch (C41-C42) the 2nd pump turns ON simultaneously, only turning off with the STOP level switch (C21-C22).
The opening of the safety control (C11-C12) level switch turns OFF the pumps, independently of the indications of the start/stop control. If you don't want to use this float it must be closed with a "shunt"
When the level rises to the alarm float switch (C51-C52) closes the buzzer and light alarm will turn ON (red lamp signal). The buzzer can be turned OFF with the alarm toggle switch.
When the toggle switch of the control circuit is switched to manual mode the selected pump turns ON, independent of the status with the start/stop and safety controls.
The trip of the overload relay due to an overload (red signal lamp) turns OFF the corresponding pump, independently of the state of the other controls.