Control panel for 1 and 2 pumps Type ABS ECP

ECP is a control panel to be wall-mounted inside a building designed for one or two-pump pumping stations. It can run pumps with direct-online (DOL) starting up to 16 Å, star delta up to 23 Å or soft start up to

Making use of the benefits of the dual-pump PC 211 pump controller (PC 111 for single-pump version), it includes everything necessary to satisfy different operating requirements (with level float switch or sensor, with or without thermal sensors, with or without leakage

Sump and pump monitoring through PC 211/PC 111

- Sump water level or float switches condition
- High level float condition
- Built-in current transformer for each pump consumption measurement
- Power factor of each pump motor
- Pump running time
- Pump start count

Safety for both operator and station

- Safety voltage (12 VCC) for level sensors, float switches, pump integrated thermal and leakage sensors, as well as for control
- Four-pole main switch for total switch-off
- □ Independent circuit breaker for 230 VAC control circuit
- Circuit breaker for auxiliary output at 230V AC (not available for mini version)

Pumps protection

- Thermal magnetic circuit breaker with trip load curve for motor protection (MCB), integrated in PC211/PC111 mini version.
- Option: 300 mA sensitivity residual-current device. Not included neither available in standard supply for mini version.
- Dry run protection and motor thermal protection for each pump as a result of consumption and power factor surveillance
- Suitable for pumps with or without leakage monitoring via DI electrode
- Suitable for pumps with or without thermal sensor, either Klixon or $\ensuremath{\mathsf{PTC}}$

Signaling via PC 211/PC 111

- Lamp indicating controller status
- Lamp indicating alarm (active or to be reset) detected by the controller
- □ Indicator lamp for each pump (P1 and P2) showing running status
- Alarm indicator lamp (active o to be reset) for each pump
- Voltage free output relay for alarm signaling (active or to be reset)

Technical specifications

Protection class:	IP 65 / IK09
Type of cabinet enclosure:	Insulating self-extinguishing
Power supply	Three-phase 400V AC with neutral (single-
	phase version is also available)
Frequency:	50 Hz / 60 Hz
Ambient operating temp.:	-20 to + 50° C
Humidity:	0-95% RH non condensing



Automatic operating modes (all with alternation function activated by default)

- 2 pumps with 1 start float: First pump starts when float triggers and second pump time after. Both pump stop if the float switches off for some time or due to vacuum operation.
- 2 pumps with 2 start floats: Each pump starts just when each float triggers. Pump stops when corresponding float switches off for some time or due to vacuum operation.
- 2 pumps with 1 start float and 1 stop float: First pump starts when float triggers and second pump time after. Both pumps stop when the stop float switches off.
- 2 pumps with 2 start floats and 1 stop float: Pumps start when start floats trigger. Pumps stop when stop float switches off.
- 2 pumps with level sensor: It allows to set different start and stop levels for each pump (as well as high level, low level and overflow alarms).

Manual operation

- Menu selection knob for user-friendly navigation to scroll and select menu items, change values, confirm a choice/operation, acknowledge alarms
- Switch for each pump that controls whether the pump is in Auto mode (A), turned off (0), or manually started (H)
- ESC button to cancel or reset the current menu operation or revert to

Other features

- Easy and quick start-up (permanent monitoring through transparent panel door, standard wiring diagram and navigation knob) Option: GSM modem to allow SMS alarms sending to mobile phones
- Panel, enclosure size and components are the same for different
- pumps, excepting circuit breaker which is specific for each motor. As a result, reduced number of spare parts and higher flexibility for convenient application benefit
- Excellent quality performance price ratio
- Helpful for users: Spanish/English menus and user guide, complete settings register that even could be used as quick user guide, standard Plug & Play supply,...
- Highly resistant, reliable and quality finish supported by a market leading brand providing a high level of service.

Designed and manufactured according to European Standards and REBT (Spanish Low Voltage Norms)

