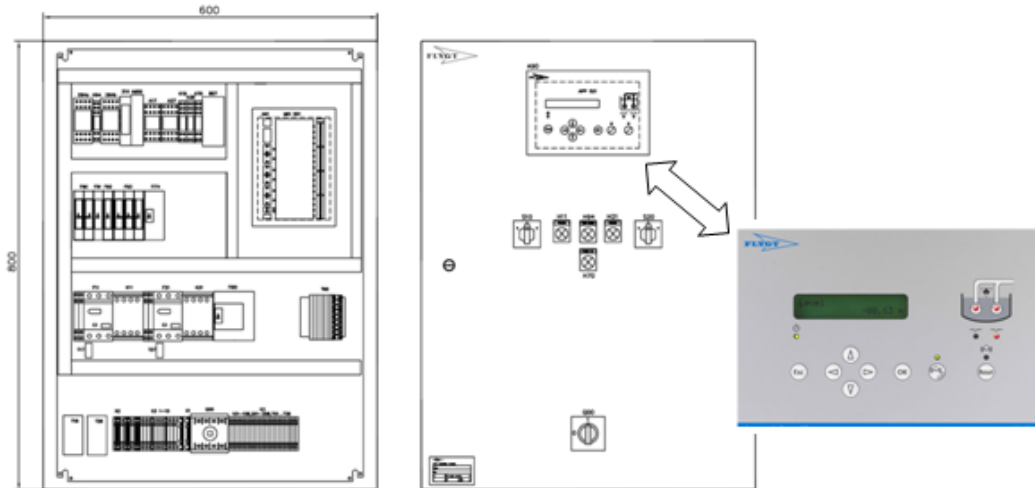


General Technical description FCP500

General:

Complete start- and control equipment including all necessary functions for start stop and monitoring the pumps. The panel is built with separate compartment for control- and power circuits respectively, i.e. adjustments and fault tracing can easily be done securely screened from power circuits. The power compartment is arranged with a door-interlocked main isolator switch. The supply side is securely screened from live-parts.



Enclosure (Outdoor installation):

The enclosure is of factory built wall-mounted type with gasketed hinged doors. Doors may not be opened without separate key or tools.

All door mounted components are placed in an inner door

Class of protection: IP 66

Material: Powder enamelled steel sheet, 1.5mm

Colour: Light grey RAL 7032

Size: 800 x 600 x 300 (HxWxD)

Power circuits containing:

Incoming supply module:

- Main load isolator switch, rated for maximum full load of 2 pumps, according to IEC 947-3

Motor starter for each pump:

- MCCB breaker with magnetic tripping for short-circuit protection , IEC 947-2
- Contactor for D-O-L start, rated for AC3 duty acc to IEC 947-4
- Thermal overload relay with single-phase protection IEC 947-4

Control circuits containing:

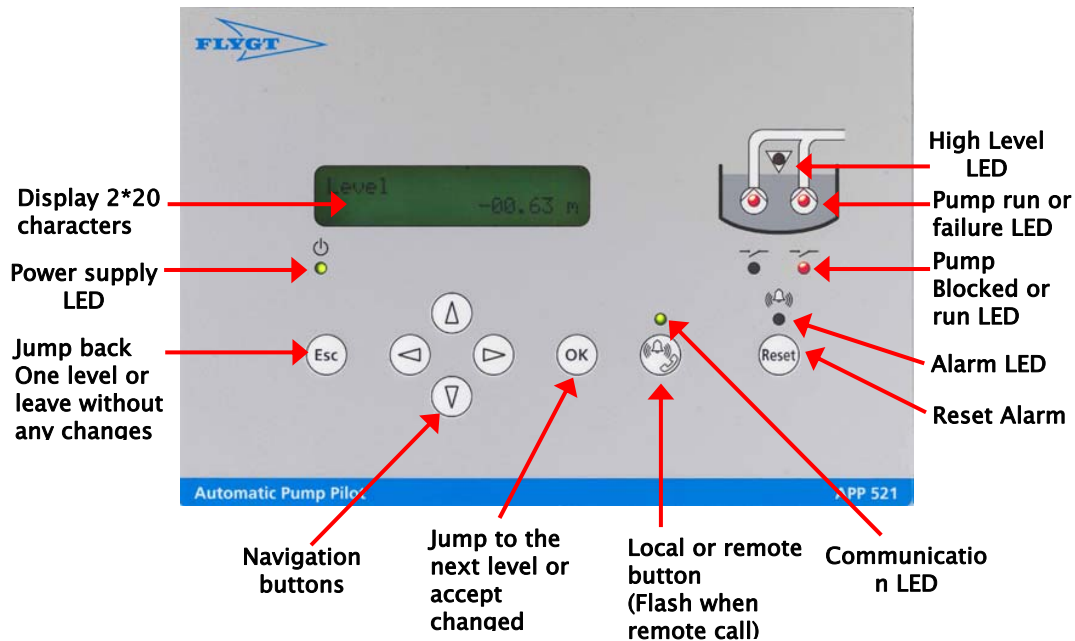
- Control voltage transformer 220/24V AC with automatic fuses
- All necessary equipment for start- and stop operations
- Automatic alternation of pump start sequence after each pumping cycle (different running modes can be selected in the APP 521 pump controller)

General Technical description FCP500

- Control circuit - all alarms from overload relays, pump monitoring sensors etc are connected to the APP 521 pump controller which will prevent the pump from running until the alarm has ceased. The pump will remain blocked until manual reset is made.
- Pump monitoring - All built-in sensors (motor temperature switch etc.) are/can be connected to a special designed monitoring relay – **MiniCas II**.

Control Panel front containing:

- APP 521 – Operator panel with buttons and LED indicators as below:



By using operator panel can settings be done for the pump station (see *separate user manual*)

Components visible on the door (Inner door):

- 0-Auto-Hand selector switch, for selection of manual or automatic mode
- Pump failure - indication lamp for each pump
- High level alarm – indication lamp
- Power on - indication lamp
- Reset button – pump failure

External signals connected to terminals

Potential-free contacts connected to terminals for remote indication:

- Pump running
- Pump failure
- High level
- Combined alarm
- Power On

General Technical description FCP500

Terminals with 24V output for connection of:

- External lamp – power on
- External alarm lamp – high level alarm
- Power supply for external combined alarm device such as alarm lamp or alarm horn

Wiring:

Power leads: All internal wiring is suitable rated with compensation for an ambient temperature of +50C° before sized.

Dimensioning according to IEC 204-1.

The power leads are of PVC insulated type, colour black and marked with L1,L2,L3.

Control wires: All control wiring has a minimum size of 1mm². The wires are colour coded for the different control voltage systems 220V and 24V. The wires are also individual marked according to accompanying circuit diagrams.

External Connections:

All connections of external power, control and monitoring devices are wired to terminals. The terminals are of block type, for mounting on 35 mm DIN-rail. All terminals are clearly marked acc. to accompanying diagrams. The terminals are located with suitable space for connection from the bottom side of the panel.

Cable entries:

All cable entries have to be made from the bottom side of the panels. Wall-mounted panels are complete and include suitable sized cable glands for all necessary cable-entries.

Standards:

All components used full-fill requirements according to relevant IEC component standard.

Panel design in applicable parts acc. to IEC-standard 439-1

Documentation:

Drawings and symbols acc to IEC standard 1082 and 617 respectively.