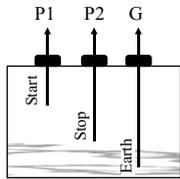


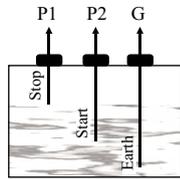


HAWKER LEVEL CONTROL SYSTEMS

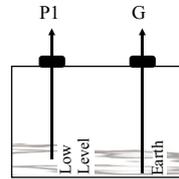
AC5/6, AC5/6/AS Level Control for Conducting Liquids



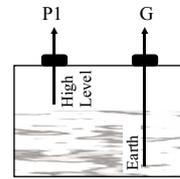
Pumping out between two levels use controller in FSL



Pumping in between two levels use controller in FSH



Low level alarm use controller in FSL



High level alarm use controller in FSH

Applications

Aqueous solutions such as water, sewage, most acids, milk, beer, etc.

- * Double probe operation for control between two levels.
- * Single probe operation for alarms.
- * Very accurate - relay switches at the exact tip of the probe.
- * Easily set up and very stable.
- * Fail safe switch. Fail safe high for pumping IN
Fail safe low for pumping OUT

Uses

Controls between 2 levels, high level alarm, low level alarm, borehole level control.

- * Adjustable sensitivity and close switching differential to ignore electrode fouling and save electric power.
- * Intrinsically safe models available (Data Sheet No 307).
- * AC current at the probes to prevent possible electrolytic action between them.
- * Full range of hardware available for easy site operation.

Operating Principle

The conducting properties of the liquid enable an electrical circuit to be completed between electrodes fixed at the levels to be controlled. Low voltage alternating current is used to avoid electrolysis.

Sensitivity

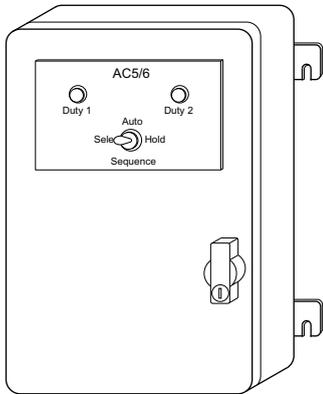
In dirty applications such as sewage which may contain debris such as rags, paper, etc, spurious operation of the controller may occur. It can cause the pump to stop not at the tip of the lower electrode, but at the end of the rag clinging to it. The controller may operate at the top of the foam and not at the liquid below it. Both these occurrences can cause the pump to dry run, with the consequent damage and excess use of electricity. To overcome this, the A.C. and P range of controllers operate with close switching differential between switching on and switching off of better than 5%. to obtain optimum results, therefore, it is necessary to adjust the sensitivity of the controller to suit the ohmic resistance of the liquid. This is easily carried out by means of a graduated knob and LED indicating the relay state. Full information is given in the operating manual.

Specification

Sensitivity:	Adjustable from 100 to approx 18,000 ohms
Switching Differential:	Better than 5% of sensitivity setting e.g. better than 5 ohms @ 100 ohms
Ambient Temperature:	-10°C to 50°C
Relay Contact Rating:	AC5/6, AC5/6/AS @ 250V, 50Hz 80% PF 5Amps
Supply Voltage:	AC5/6, AC5/6/AS 110V or 240V, 50Hz
Supply Variation:	AC5/6, AC5/6/AS +10% to -12%
Fail Safe:	Selectable by internal switch e.g. FSL for pumping OUT, FSH for pumping IN
Relay Energised Indication:	L.E.D.

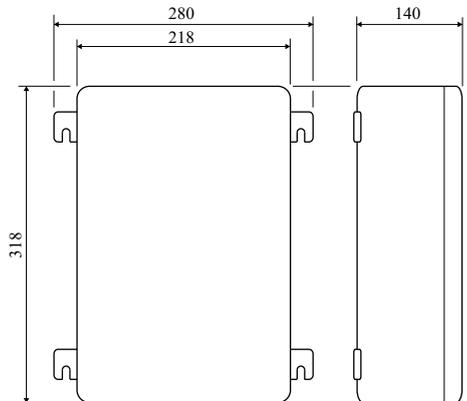


HAWKER LEVEL CONTROL SYSTEMS



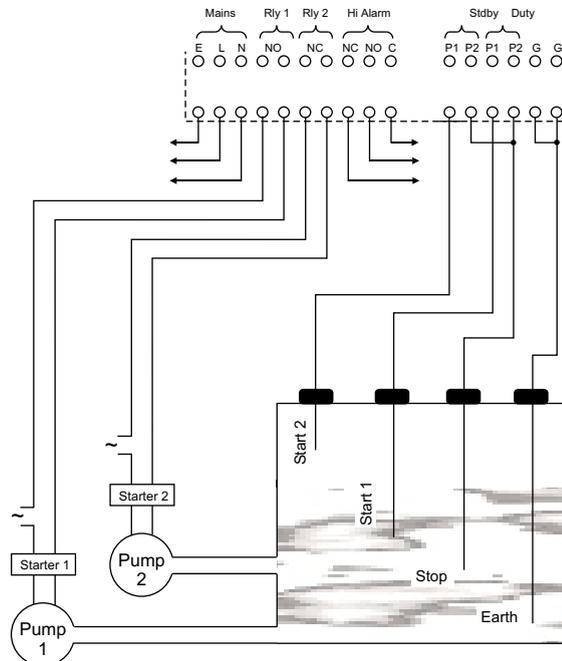
Dual Pump Controller Varies Starting Order

- AC5/6 Mode change by internal links
- AC5 Duty and standby pumps run together
- AC6 When standby pump starts, duty pump stops.
- AC5/6/AS
Pump starting order automatically reversed at end of cycle.
An override switch is fitted.



The AC5/6 controller manually changes the starting order of the duty standby pumps. In mode 6 the duty pump stops, when the standby starts. In mode 5 the duty pump starts, and then the standby, and then they both run together, mode 6 is fitted at works. to convert to mode 5, link the two-labelled terminals on the PCB. Fail-safe ex works is normally set at FSL for pumping out applications. FSH pumping in applications can be supplied to order. Independent stop electrodes are required for FSH applications.

The AC5/6/AS auto sequencing controller automatically changes the duty standby pumps starting order at each operating cycle. The switch has three positions: AUTO for automatic operation. Hold inhibits the automatic operation and the starting order becomes fixed even after mains failure. SELECT gives instant pump sequence changeover, which can be fixed by moving the switch to HOLD. Red and amber LED's indicate respective pump 1 and pump 2 running conditions. In addition, when both pumps happen to be stopped, it will indicate which the last pump to run as duty was.



Controllers **AC5/6** and **AC5/6/AS**

Because of continuing development we reserve the right to change the specifications without notice

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