

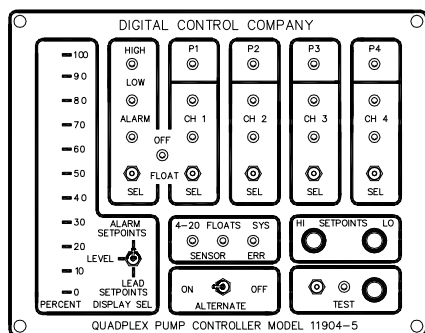


Quadplex Pump Controller II (QPC2)

Model Number: 11904-5

(For External Transducers and Backup Float Switches)

Manufacturer of High Performance Instrumentation and Control Systems



Description:

The Quadplex Pump Controller II (QPC2) model 11904-5 is a control and display unit which automatically controls up to four single speed pumps. It is designed to be the heart of a quadplex pump control system for lift stations, water tanks, and other fluid pumping applications. The QPC2 provides built-in pump alternation, pump start time delay, high and low level alarms. It can use any level sensing system that generates a 4-20 mA signal proportional to level as well as backup float switches. The QPC2 is also capable of using up to two additional 4-20 mA input signals as backup sensors in the event that the primary sensor fails. The controller automatically detects and uses the sensor type which is present and working. The QPC2 also includes an RS-232 serial communications interface designed to support SCADA systems using a variety of Modbus based communication devices giving the unit remote data acquisition, monitoring, and control capability.

Applications:

- Wastewater Pump Station Level Control
- Water and Wastewater Plant Level Control
- Storm Water Level Control
- Liquid Level Control for Tanks
- Holding Pond Level Control
- Most Liquid Level Control Applications

Features:

- Controls up to 4 pumps with built-in alternation and time delay between pump starts.
- Accepts 2 types of sensors including any 4-20 mA level transmitter and floats switches.
- Automatically selects a backup sensor in the event the primary sensor fails. If the primary sensor fails then the system will operate with a backup 4-20 mA signal sensor (optional) or backup floats.
- On, Off, High, and Low setpoints adjustable from front panel or remotely via serial port.
- 40 segment bargraph displays level, and setpoints.
- External digital level display available.
- Pumps, sensors, and alarms status indicators on front panel.
- Front panel test knob for simulated level input testing.
- 4-20 mA signal output proportional to level.
- RS-232 serial port for SCADA communications support.
- Uses non-volatile memory allowing system to retain program software and setpoints during power loss.
- Proven software that allows for easy setup and reliability.
- Custom software available from factory.

Specifications:

Input Power:

- 12 VAC $\pm 10\%$, 3 A max.

Operating Temperature Range:

- -30°C to $+60^{\circ}\text{C}$ (-22°F to $+140^{\circ}\text{F}$)

Accuracy:

- $\pm 0.25\%$ of span

Display Resolution: 2.5%

Ranges:

- Limited to external level sensor pressure range

Inputs (Non-isolated):

- 4 - Pump disables
- 4 - Float switches
- 1 - 4-20 mA level sensor (standard)
- 2 - 4-20 mA backup level sensors (optional)

Relay Outputs:

- Pump 1, 2, and 3 - SPST Form A - 15 A at 125 VAC
- Pump 4 - SPDT Form C - 10 A at 125 VAC
- High and Low Alarm - 5 A at 125 VAC

Discrete Outputs:

- System Error - Open Drain FET, Non-isolated

4-20 mA Current Loop Output:

- Non-isolated transmitter
- Total compliance of 12 VDC

Transient Protection:

- Metal Oxide Varistor

Interconnect:

- Pluggable terminal blocks (screw type)
- Relays quick connect terminals (#250 tab)
- DE-9 connector for RS-232 Bus

Communications Protocol:

- Modbus ASCII

External Dimensions:

- 6.10"H x 7.70"W x 3.70"D

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