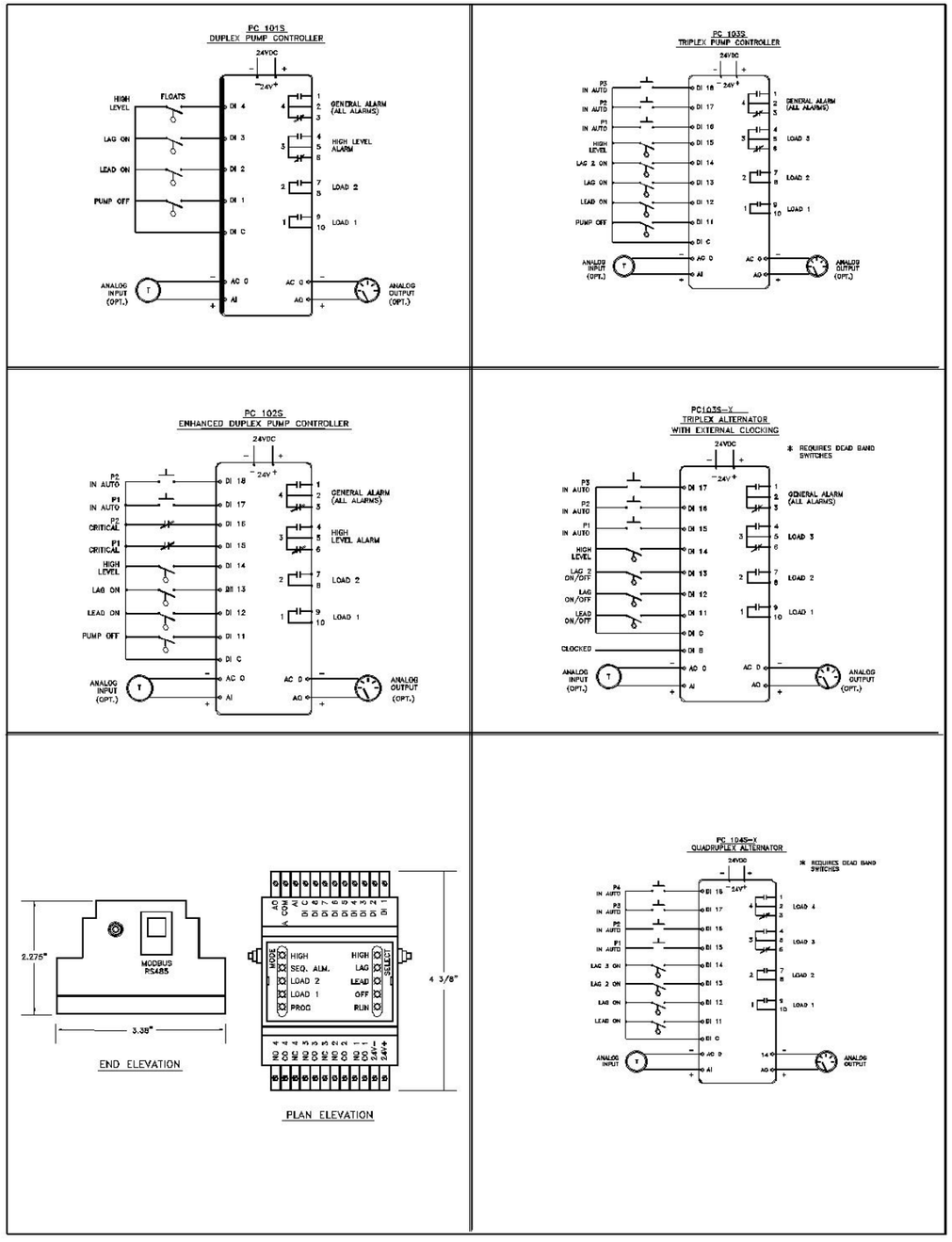



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# PC100S SERIES FLOAT/SWITCH OPERATED PUMP CONTROLLERS

- **Microprocessor Based**
- **Alternating Pump Controller**
- **Duplex, Triplexing and Quadraplex Models**
- **16 Status Indicating LED's**
- **1 Analog Input and Output (4-20Ma) (Optional)**
- **8 Digital Inputs**
- **4 10A Relay Outputs**
- **Removable Barrier Terminals**
- **RS 485 Modbus Port (Networkable)**
- **Custom Programming Available**
- **Primary or Backup Control**
- **User Programmable**
- **Din Rail Mount**
- **24 VDC Power**

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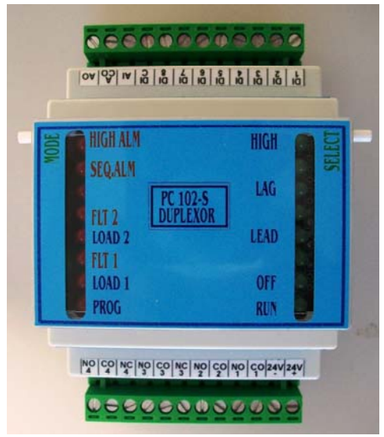


## SPECIFICATIONS

- **Power Supply:** 24VDC ± 20% @ 4VA
- **Relay Output (4):** 10A @ 120VAC
  8A @ 30VDC
- **Input Switch:** Open Circuit >5VDC
- **Temperature Operating:** -20°C to +60°C
  **Storage:** -40°C to 85°C
- **Relay Life:** Electrical 100K Cycles
  Mechanical 10,000K Cycles
- **Terminations:** Removable Screw Terminal Barrier Strip
- **LED Indicators:**

Input:

| | |
|---|---|
| Off | Green |
| Lead | Green |
| Lag | Green |
| High Level | Green |
| 2nd Lag (Triplex Only) | Green |

Output:

| | |
|---|---|
| Load 1 | Red |
| Load 2 | Red |
| Float Alarm | Red |
| Pump Fault Alarm | Red |
| Load 3 (Triplex Only) | Red |
| High Level Alarm | Red |

## FEATURES

- **Two, Three, or Four Pump Models**
  Selectable alternation assures even run time by changing pump sequence at the end of a pumping cycle.
- **Programmable Functions**
  Allows full alternation/sequencing fixed mode or pump out of service selection and LED test.
- **Fault Monitoring**
  Short circuited or failed open control switches are monitored and removed from the operating sequence, indicated by LED.
- **Status Indicators**
  LED indicators provide for each control switch, each load relay, and alarms.
- **Lag Pump Delay**
  On power up, prevents simultaneous pump starts after a power failure.
- **Alarm Contact Output**
  Duplex models provide a 5A relay output of switch failure, high level and general alarm. (All system alarms)
- **Din Rail Mounting**
  and compression screw terminals.
- **RS485 MODBUS® Port**
  with TX/RD LED indicators for SCADA applications

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MADE IN U. S. A.

# MODEL VARIATIONS

## DUPLEX MODEL PC101-S


### OPERATION

- Designed for operation of two loads requiring alternation to equalize wear, where floats or pressure switches are the primary sensors.
- The PC101-S accepts up to 4 switch inputs (pump off, lead on, lag on and high level) and provides continuous monitoring of the input devices. Should any input switch fail during an operational cycle, a sequence alarm LED is activated and the pump sequence is shifted to operate with the remaining switches.
- Fully programmable, the PC100-S allows user programming of alternation on or off and selection of fixed lead (pump 1 or pump 2) operation.
- LED indicators provide status of all inputs, output relays and CPU activity.
- RS485 MODBUS® dataport can be used for SCADA, telemetry or networking.
- 4 Form 'C' alarm outputs, for load 1, load 2, high level, and general alarm.

## ENHANCED DUPLEX MODEL PC102-S


### OPERATION

- The PC102-S is designed for the operation of two loads requiring alternation for the equalization of wear, where floats or pressure switches are the primary sensor.
- The PC102-S is similar to the PC101-S with additional monitoring functions for hand/off/auto selector position and critical alarm inputs such as pump overtemperature, VFD fault, etc.
- Operation differs from the PC101-S in that during a pump operation cycle, if a pump specific critical alarm occurs, then that pump is taken out of service. The non-operational pump started and a pump fault alarm is indicated.
- Inputs are provided to allow the controller to monitor each pump's H-O-A selector. Pumps will be called into the duty cycle only if their H-O-A is in the "auto" position.
- All other features are the same as the PC101-S.

## TRIPLEX MODEL PC103-S


### OPERATION

- Designed for operating 3 loads requiring sequencing and alternation, with 'AUTO' selector switch monitoring.
- The PC103-S accepts 5 switch inputs (pump off, lead on, lag on, lag 2 on and high level alarm).
- All input switch and output relay status is indicated by clearly visible LED indicators.
- Additional inputs are provided for monitoring the 'AUTO' position of each pump. If any pump is deselected via its H-O-A, it will be removed from the operational sequence automatically.
- User programmable, alternation and fixed sequence.
- RS485 MODBUS® data port provides SCADA interface.
- 4/20ma input/output.

## SPECIALTY UNITS (Factory Order)

### TRIPLEXER WITH EXTERNAL ALTERNATOR INPUT

- Triplexer with external clocked alternation option.
- Allows for user alternation of loads based on external clocking device such as a repeat cycle timer to allow alternation based on time rather than pump cycle.
- Each lead input stops/starts a load in an alternating sequence. The clocked input will alternate running loads when activated.
- Inputs provided for 'AUTO' selection.
- All other features similar to PC103-S.

### QUADRAPLEX ALTERNATOR

- Designed to operate 4 pumps with alternation and sequencing.
- Inputs must be differential dead band devices where off and on action is provided by a single device (float switch, pressure switch, etc.)
- No external clocking is provided.
- All other features similar to PC103-S.