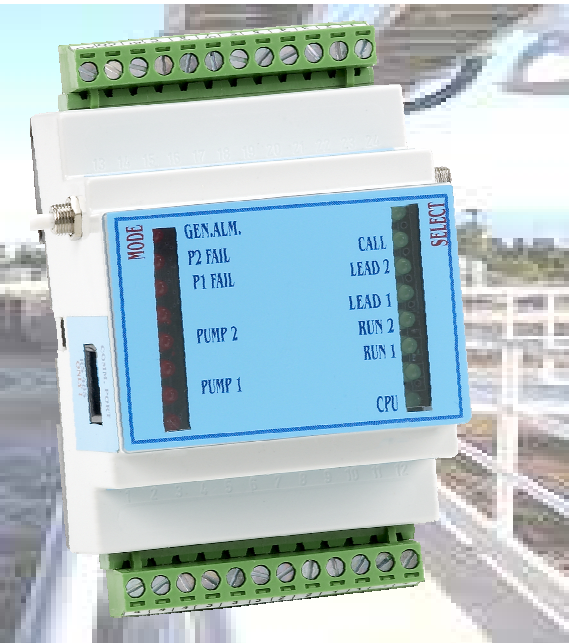


100S SERIES FLOAT/SWITCH OPERATED PUMP CONTROLLERS

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

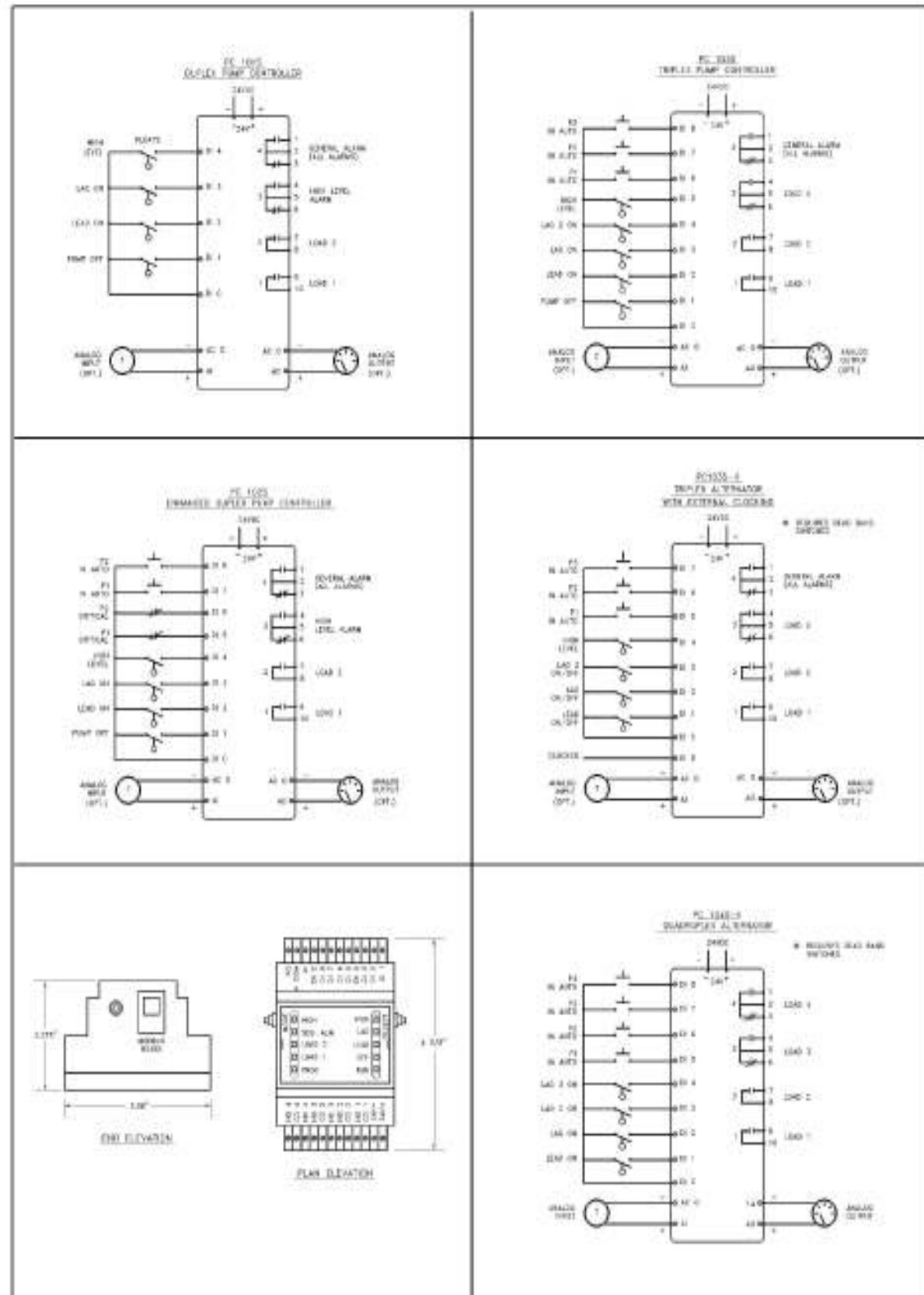


SPECIFICATIONS

Power Supply	24VDC ± 20% @ 4VA
Relay Output (4)	10A @ 120VAC, 8A @ 30VDC
Input Switch	Open Circuit: 5VDC
Temperature Operating Storage	-20° C to +60° C -40° C to 85° C
Relay Life	Electrical: 100K Cycles Mechanical: 10,000K Cycles
Termination	Removable Screw Terminal Barrier Strip
LED Indicators Input Off Lead Lag High Level 2" Lag (Triplex Only)	LED Indicators Output Load 1 Load 2 Float Alarm (Duplex Only) Pump Fault Alarm Load 3 (Triplex Only) High Level Alarm

FEATURES

Two, Three, or Four Pump Models	Selectable alternation assures even run time by changing pump sequence at the end of a pump 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.



100PC OUTSIDE OZ0913

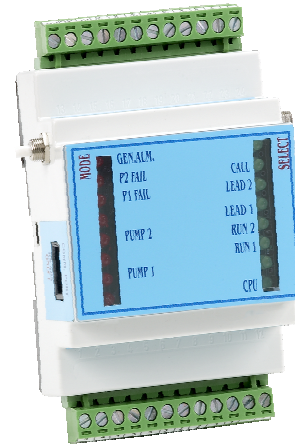
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MODEL VARIATIONS

DUPLEX MODEL PC101-S

OPERATION

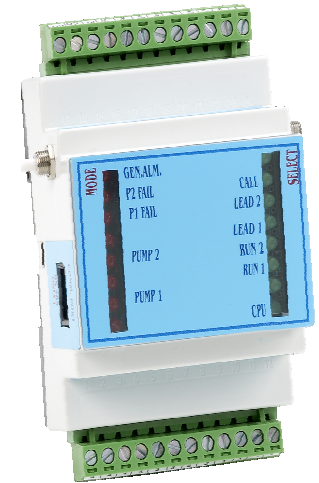
- Designed for operation of two loads requiring alternation to equalize wear, where floats or pressure switches are the primary sensors.
- The PC101-S accepts up to 4 switch inputs (pump off, lead on, lag on and high level) and provides continuous monitoring of the input devices. Should any input switch 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.



TRIPLEX MODEL PC103-S

OPERATION

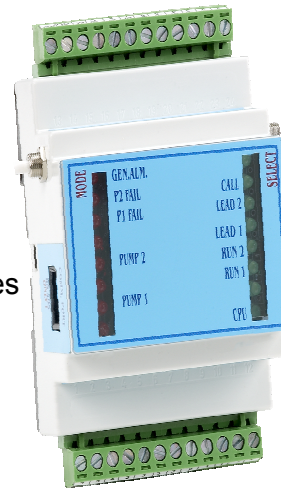
- Designed for operating 3 loads requiring sequencing and alternation, with 'AUTO' selector switch monitoring.
- The PC103-S accepts 5 switch inputs (pump off, lead on, lag on, lag 2 on and high level alarm).
- All input switch and output relay status is indicated by clearly visible LED indicators.
- 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.



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.



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.