IC PUMP STATION

IC Pump Station Model 2A-XXX*-O, on-off operation

1. Adjustments.

When the IC Pump Station (ICPS) is first "powered up" the display will show:

SUSPEND	No signal source (pressure sensor) is connected and pump will remain off. Control will not go into safety shutoff and pumps will start when signal source (pressure sensor or other device) is connected.
0-100* PSI XXX	*0-100 indicates pressure range that may be adjusted from 0-25.0 to 0-250 PSI. "XXX" is whatever pressure the sensor measures.
ADVANCE ->	Press the "Advance" key to advance to next display.
LOW PRES ON XXX	Pressure that Pump 1 will turn on the pump (after delays). When the system pressure goes below this setting the pump will turn on.
MIN ON TIME XXX	Minimum on time in seconds. When the pump turns on it will stay on for at least this amount of time.

Note: Display will switch back and forth from "Low Pres On" to "Min On Time" every five (5) seconds. If the other display is desired simply wait for it to change. Display will not change while it is being adjusted.

ADVANCE ->	*Press the "Advance" key to advance to next display.*
HI PRES OFF XXX	Pressure that pump 1 will turn off (after delays). When the system pressure goes above this setting the pump will turn off.

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Phone: 541-296-3792. Fax: 541-610-1995. Toll Free: 1-800-760-6874. http://www.p2flow.com

MIN OFF TIME XXX

Minimum off time in seconds. When the pump turns off it will stay off for at least this amount of time.

Note: Display will switch back and forth from "Low Pres On" to "Min On Time" every five (5) seconds. If the other display is desired simply wait for it to change. Display will not change while it is being adjusted.

ADVANCE -> *Press the "Advance" key to advance to next display.*

LO PRES SAFE XXX

The pressure that the ICPS unit will go into safety shutoff. The system pressure must be below this pressure for 30 seconds (default) continuously in order for the safety shutoff to activate. To clear the safety shutoff condition press AUTO/OFF to turn off and press AUTO/OFF again to turn it back on. If the Low Pressure Safety feature is not desired move the setting to "00" and the safety shutoff will not activate.

Note: With this model the low pressure safety is the same for both pumps.

ADVANCE -> Press the "Advance" key to advance to next display.

HI PRES SAFE XXX

The pressure that the ICPS unit will go safety shutoff. This number can be adjusted anywhere on the scale to act exclusively as a safety override.

Note: On this model the high pressure safety is the same for both pumps.

LOW PRES ON2 XXX

Pressure that Pump 2 will turn on the pump (after delays). When the system pressure goes below this setting the pump will turn on.

MIN ON TIME2 XXX

Minimum on time in seconds. When the pump turns on it will stay on for at least this amount of time.

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Note: Display will switch back and forth from "Low Pres On" to "Min On Time" every five (5) seconds. If the other display is desired simply wait for it to change. Display will not change while it is being adjusted.

ADVANCE ->	*Press the "Advance" key to advance to next display.*
HI PRES OFF2 XXX	Pressure that pump 2 will turn off (after delays). When the system pressure goes above this setting the pump will turn off.
MIN OFF TIME2 XXX	Minimum off time in seconds. When the pump turns off it will stay off for at least this amount of time.

Note: Display will switch back and forth from "Low Pres On" to "Min On Time" every five (5) seconds. If the other display is desired simply wait for it to change. Display will not change while it is being adjusted.

ADVANCE ->	Press the "Advance" key to advance to next display.
ALT TIME, S	Alternate pressure selection - this setting is not used on this model.
HOURS	This panel displays the hours pump 1 has been on
HOURS2	This panel displays the hours pump 2 has been on Press "RESET/NO" (down arrow) to reset to zero.
ADVANCE ->	Press the "Advance" key to advance to next display.
CYCLES	This panel displays the number of cycles for pump 1
CYCLES2	This panel displays the number of cycles for pump 2 A cycle is defined as on turn on and one turn off of the given pump. Press "RESET/NO" (down arrow) to reset to zero
ADVANCE ->	Press the "Advance" key to advance to next display.

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START PUMP? 1 (or 2)	When in this display the pumps can be started manually. Press the "YES" - up arrow key to turn on the pump # displayed. If the pumps have been turned off because of pressure the pumps will turn on momentarily, then turn off.
ADVANCE ->	Press the “Advance” key to advance to next display.
0-100* PSI XXX	The control unit goes back to the beginning.

2. Control Functions

“UP ARROW” increases number viewed on display. “DOWN ARROW” decreases number viewed on display. When the AUTO/OFF switch is pressed the display will say “OFF” and will remain off indefinitely. When the indicator light turns on the relay coil is energized. Control is supplied with external relay that is intended for pilot duty only – typically to switch the coil on a much larger load relay or contactor.

3. Specifications

Temperature range: 30-120 degrees F. Power input for control unit: 12 VDC 200 mA max supplied by external “wall cube” transformer. Standard relay: IDEC RH1B-U DC12V. Relay contact rating: SPDT 7 amps @ 240 VAC. When switching high voltage relay must be mounted inside a user-supplied, grounded metal enclosure for safety.

4. Pressure sensor

Standard pressure sensor is a Measurement Specialties MSP 300 series two-wire 4-20 mA output. IC Pump Station can work with any pressure range from 0-25.0 to 0-250 PSI full scale and any 4-20 mA output pressure sensor/transducer.

5. Installation.

DIN rails (Aluminum mounting rails) are provided. Mount the IC Pump Station unit (DIN rail) out of sunlight and direct weather. Snap IC Pump Station unit on to long DIN rail. Mount short DIN rail and relay(s) inside a (user provided) grounded, metal junction box for safety. The relay can be also mounted inside most pump panels. Use the ½” knockout bushings provided to prevent wire chafing on the metal edges. This relay is intended for normally open, pilot duty only (to switch a much larger contactor) up to 250 VAC and is not suitable to drive motor loads. Wiring diagram is printed on the relay. Contact the factory regarding higher voltage/current relays.

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6. Operation

To the IC Pump Station unit connect power supply ("wall cube" transformer), pressure sensor and relay output. Plug in the power supply and make adjustments. Observe pump operation to make sure it's working correctly and re-adjust if needed.

Note: IC Pump Station display may go blank momentarily from time to time. This is normal and is a computer "housekeeping" function.

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