

INSTRUCTION SHEET

SPECIFICATIONS

Power Requirements: 120VAC 50/60 Hertz
Ambient Temperature Range: 32 F to 140 F (Operating)
 - 40 F to 85 F (Storage)
Environment: NEMA 12 & 13

Input Power Fuse in Processor: 315ma/250v
Mounting Dimensions: 25.24" x 14"
Overall Dimensions: 26.5" x 20" x 11.97"

INITIAL SET UP PROCEDURE

- Follow wiring diagram 241849 for field wiring connections.
- The programmable controller and EEPROM chip have both been programmed. The field adjustable timers and counters have been programmed with the values listed in Table 1.
- Using the Timer/Counter Access Terminal (located on the enclosure door) the above timers and counters can be changed to match your requirements.

Pump 1
Pump 2
Pump 3
Pump 4
Pump 5
Pump 6
Pump 7
Pump 8

Counter Address	Value Counts	Timer Address	Value Seconds
901	10	902	10
903	10	904	10
905	10	906	10
907	10	908	10
909	10	910	10
911	10	912	10
913	10	914	10
915	10	916	10

Table 1.

CONTROLLER DESCRIPTION

The controller has the ability to monitor each pump for a runaway condition, typically caused by an empty material container, loss of pump prime or broken supply line. The number of cycles that normally occur within a given time period is set for each pump. The TCAT located on the enclosure door is used to input this data.

When the number of pump cycles exceed the preset counter number within the preset time a runaway condition occurs. The pump will shut down, the horn will sound and the appropriate red light will turn on indicating what pump has runaway. After the cause of the runaway condition is corrected the appropriate reset button is pushed and the pump will restart.

EXTERNAL COMPONENTS

PRESSURE SWITCH - One is located at each pump and provides the signal to the controller for the pump counter.

AIR SOLENOID - One is located at each pump and will energize shutting down that pump during a runaway condition.

Refer to the service page that is included with the airmotor kits for proper installation of the air solenoid, quick exhaust air valve, pressure switch and proper setting of the pressure switch.

Refer to wiring diagram 241849 for proper electrical connections from the air solenoid and pressure switch to the controller.

LOCATED ON ENCLOSURE DOOR

Horn - Provides audible signal if any of the pumps are in a runaway condition.

Alarm Silence - Depressing the "Alarm Silence" pushbutton will turn off the horn during a runaway condition. The red alarm light and air solenoid for the runaway pump will remain on until the "Reset" pushbutton has been depressed. If another pump goes into a runaway condition the horn will sound.

TCAT - The field adjustable timers and counters can be modified or monitored by using this terminal.

Modifying the preset of a Timer or Counter

- Key must be in the modify position.
- The address of the timer or counter that you wish to modify must appear in the address display.

- Depress PRESET key - current preset value will appear in the data display and preset LED will be lit.
- Depress PRESET key - If it is a timer you are modifying the data display will show "_____". If it is a counter you are modifying the data display will show "_____".
- Depress the numerical keys to obtain the desired new value. The data display will show the new value.
- Depress the enter key.

Monitoring a Timer or Counter

- Key can be in the modify or monitor position.
- The address of the timer or counter that you wish to monitor must appear in the address display.
- Depress PRESET key - The current preset value will appear in the data display.
- Depress ACCUM key - The current accumulated value will appear in the data display.

Lights - All lights are push to test type.

Green "Power On" Indicates power on to controller

Red "Alarm" Indicates what pump is in runaway condition

Red "Battery Low" If light comes on the PLC internal battery needs to be changed.

Pushbutton "Reset" - Depressing the appropriate reset pushbutton will take that pump out of alarm. Removing power from controller will reset all alarms.

WARNING

ELECTRICAL SHOCK HAZARD!

Turn off and lock out power before connecting external components or opening enclosure.

Failure to do so could result in injury or death.

INSIDE ENCLOSURE

PROGRAMMABLE CONTROLLER

1. LED's - 1 through 10 and 101 through 110 indicate status of input devices: Pressure and reset switches. When an input circuit is energized, the corresponding LED status indicator will be lit.
2. LED's - 11 through 16 and 111 through 116 indicate status of output devices: Solenoids, horn and battery low light. When an output device is energized, the corresponding LED indicator will be lit.
3. Auto/Manual switch - keep in auto position.
4. Five red LED diagnostic indicators.
 - a. DC POWER - Indicates that the processor unit is energized and DC power is being supplied.
 - b. PC RUN - Indicates the processor unit is in the Run mode.
 - c. CPU FAULT - Indicates the processor has detected an error in either the CPU or memory. Operation is automatically stopped.

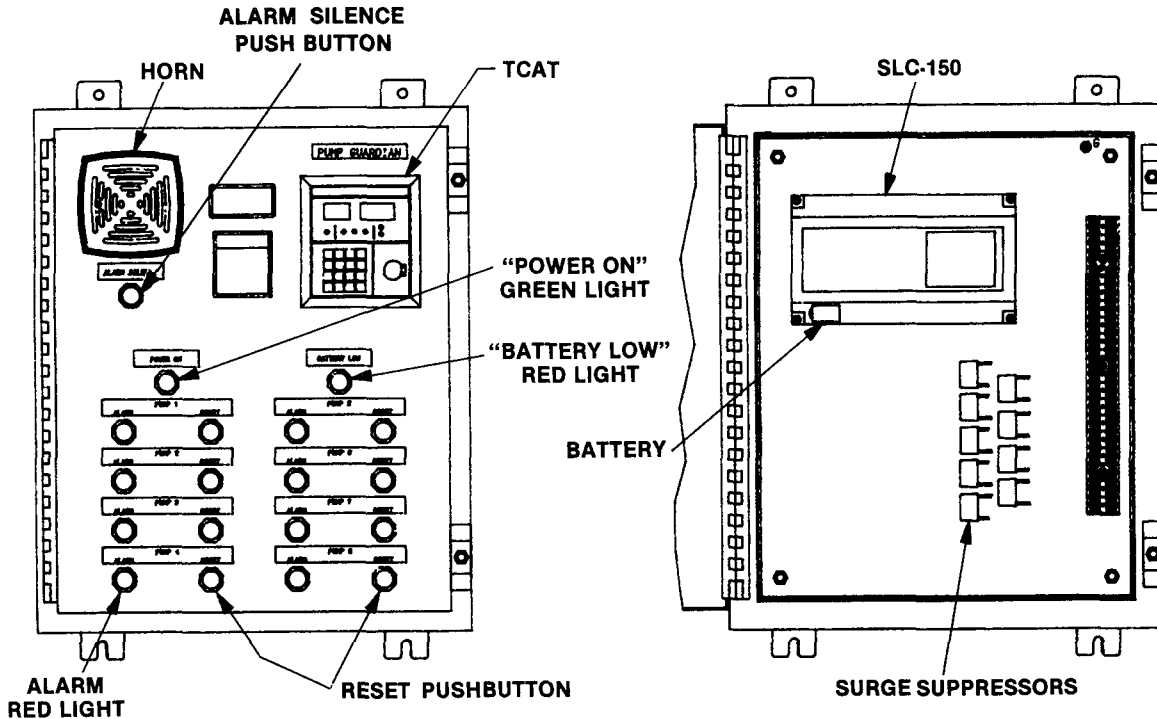
- d. BATTERY LOW - Alerts you that the battery has fallen below a threshold level and needs to be changed.
- e. FORCED I/O - Indicates that one or more input or output addresses have been forced to an ON or OFF state.
5. Input Power Fuse - located behind front cover.
6. Lithium Battery - provides back-up power to the P.C. memory for approximately 2 to 3 years. Located behind the front cover.
7. EEPROM - The EEPROM chip should only be inserted into the P.C. if it has lost its stored program. When the EEPROM is inserted into the P.C. it will write over the field adjustable timer and counter values with the factory programmed values.

If the program in the P.C. is lost the EEPROM chip is used to reload the program. Please follow this procedure.

CAUTION

Always disconnect power from the P.C. before inserting or removing the EEPROM chip.

- A. Turn power off to the P.C.
- B. Insert EEPROM into the P.C.
- C. Turn on power to the P.C. Program is automatically loaded into the P.C.
- D. Remove power from the P.C.
- E. Remove EEPROM chip.
- F. Turn power back on to P.C.
- G. Using the TCAT set the timers and counters (901 through 916) to match your needs.
8. Refer to Allan Bradley's Product Data for detail information concerning the P.C., EEPROM and TCAT
9. Surge Suppressors - All outputs from the P.C. have surge suppressors located inside the enclosure.



Description	Part No.
SLC 150	241844
TCAT	237529
Battery	241828
EEPROM	241840
Red light assembly	241821
Green light assembly	241820
Pushbutton	241822
Horn	69779
Surge suppressor	236814
Red LED (Part of 241821)	237757
Green LED (Part of 241820)	237758