

SMAC MAX Controller

Industrial Lubrication Systems



Operation

The SMAC-MAX Controller is a multi-purpose programmable controller used with industrial lubrication systems. Controller settings are saved whenever power is interrupted. Up to four operating modes can be selected which allows the controller to be used with various lubrication system designs. The controller is available in both 110 and 220 VAC service.

Features

- + Digital status display on front cover for easy programming
- + System monitoring capabilities
- + Data memory function initiated at power down
- + 0-99 second afterblow
- + Monitoring of low pressure switch
- + Remote reset/manual run
- + Compact design

Technical Data

Operating Voltage	110 VAC or 220 VAC (50/60 Hz)
IP Enclosure Rating	IP-55 (Liquid tight connector)
Fault Relay Contacts	30 W (220 VAC)
Ambient Temperature	-4°F to 131°F (-20°C to 55°C)
Vibration	2G
Switch Input	5V/20mA
Weight	4 lbs (1.8 kg)
Electrical Fuse	5 amp (5x20)

Installation

- + Mount the controller in a clean area with easy access for programming and visual checking.
- + Mount controller on a flat surface.

How to Order

Name	Description	Part #
SMAC-MAX Controller	Controller with liquid tight connector (110 VAC)	42012-5
	Controller with liquid tight connector (220 VAC)	42012-4

When ordering, specify by name, description and part number, e.g. SMAC-MAX Controller with liquid tight connector (110 VAC), Part #42012-5.

Accessories

Description	Part #
Replacement Fuse 5x20 5 amp	31076-2



SMAC-MAX Controller

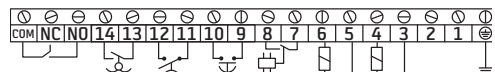
Controller Status LEDs

Power	Green
Lube Pump	Green
Line Spray	Green
Low Level	Red
Air Pressure Low	Red
Pause	Yellow
None Lit	No input power to controller

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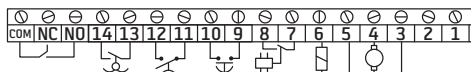
Electrical Terminal Connections

Motor Driven Lubricators



Connection #	Description
	Ground
1, 2	L1 (1) and L2 (2) 110 or 220/230 VAC power supply
3, 4	Motor or solenoid valve output (110 or 220/230 VAC)
5, 6	Air solenoid for spray system
7, 8	Input- cycle completion Mode 2 (pressure switch) Mode 3 (cycle switch)
9,10	Stop signal switch (close at switch stop)
11, 12	Monitoring air pressure switch (close at air pressure lost)
13, 14	Input- low level (closed at low level) Or Machine Count Input
COM, NO, NC	Fault switch (normally open contact rating 1 amp max), NO: COM/NO, NC: COM/NC

Pneumatically-activated Lubricators



Legend

	Ground
	Power supply (110 or 220/230 VAC)
	AC motor
	AC solenoid
	Cycle switch or pressure switch
	Low level switch (closed at low level)
	Air pressure switch

Operation

Keys Description

With the controller energized:



- + Press keys **S** and **R** simultaneously and release to enter control mode.
- + The display panel will now show a fixed letter for the selected mode and a flashing number (1-4).
- + To select the required mode press the **▲** key.
- + Press the **S** key to advance to the next parameter of the selected mode.
- + Repeat steps 3 and 4 above using the **◀▶** key to move across the digits and the **▲** key to change the value of the selected flashing digit.
- + On completion, press the **R** key to save the data and initiate a lubrication cycle.

Manual Override

- + With the controller energized press the **R** key to initiate a lubrication cycle.

Program Review

- + To review the preset data, press the **S** key repeatedly with the controller energized.
- + To return to operating condition display, release **S** key or depress **S** key for 5 seconds.

Fault Alarm

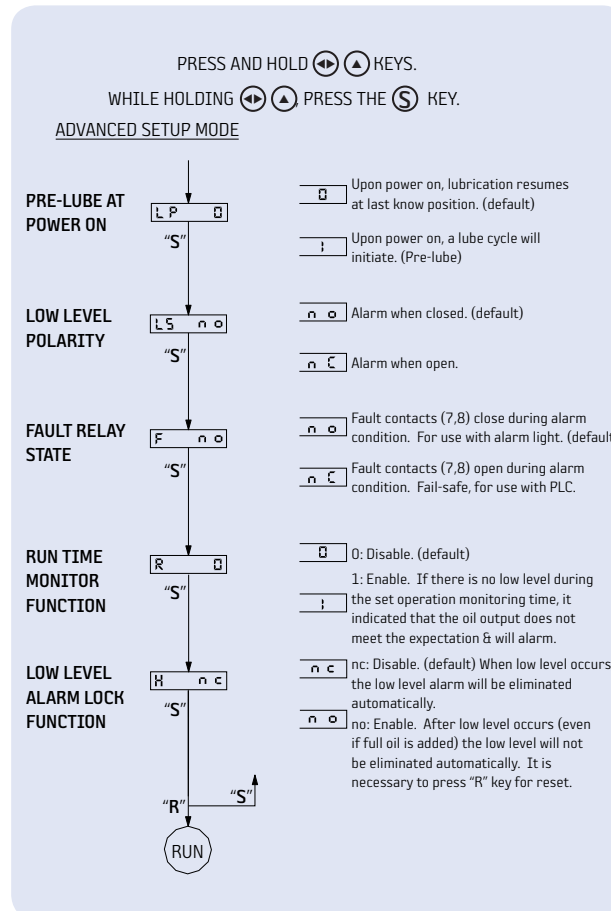
- + In any alarm condition, e.g. low level, low pressure etc., the pump will not be able to operate and the alarm lamp will illuminate. The fault condition must be rectified to cancel the alarm and reactivate the system.

Operation Mode Cont.

Advanced Setup Mode

In Advanced Setup Mode, additional features may be set to suit special application requirements.

To enter Advance Setup Mode:



Fault Conditions:

- **"EEPP"-Monitor time-out**

(Mode d2 - Injectors) Pressure switch did not activate within monitor time.

- **"EEHP"-Pressure switch failure**

(Mode d2 - Injectors) Pressure switch was activate at the beginning of a lube cycle. Once customer fixes pressure switch - alarm will clear automatically.

- **"EECY"-Monitor time-out**

(Mode d3 - Progressive) Cycle switch did not activate within monitor time.

- **"EE"-Internal memory failure**

(Checked at power up) No recovery. Turn off power and try again. If problem persists, replace control.

- **"EELL"-“Yellow LED” -Low Level**

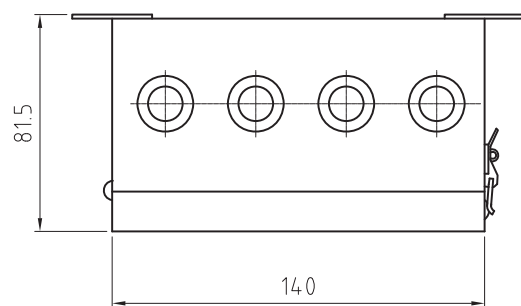
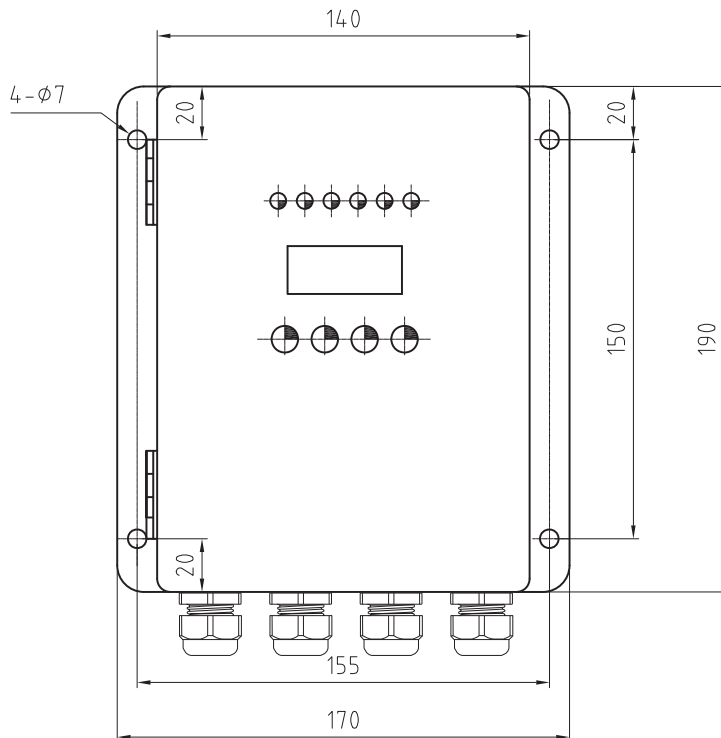
(Steady Yellow) Low lubricant level has been detected.

- **"EERt"-“Yellow LED” -Low Level**

(Steady Yellow) Make sure to disable Run Time Monitor Function.(only used on the CLP lubricator)

Dimensional Schematics

Measurements shown in millimeters.



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