

MODEL 2611

Alternating Controller

- Alternate Two Loads or Lock Sequence with Lead Select Switch
- Sequence On-Simultaneous off (S.O.S.O.) Operation
- Works with 3 Switches - STOP, LEAD & LAG
- 5 LEDs Indicate Switch and Relay Status
- Control Switch Fault Detection
- Replaces Multiple Components Saving Space and Labor



DESCRIPTION

The **Model 2611** Alternating Controller is a microprocessor based controller designed for use where two loads are required to alternate to provide equal run time on the loads. LED indicators show the status of the unit's three control switch inputs and 2 load outputs. A lead select switch allows the loads to alternate normally in the center position, or disable automatic sequencing and lock in a 1-2 or 2-1 sequence.

When a Stop, Lead or Lag switch closes, the corresponding LED on top of the unit will illuminate.

When the Stop switch and Lead switch closes, Load 1 or Load 2 will come on and the corresponding green LED will illuminate. If fluid levels continue to rise and the Lag switch closes, the 2nd load will energize. Loads remain energized until the Stop switch opens or a fault condition is detected. See **Typical Pump Down Application - SOSO Operation** on page 3 for details.

FAULT DETECTION

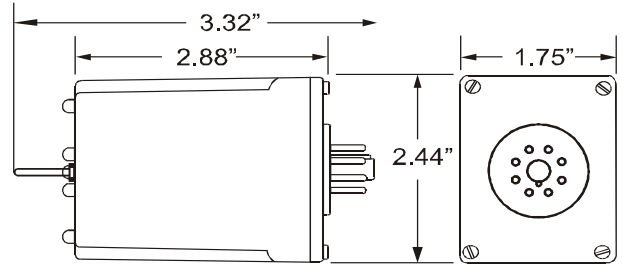
If any control switches open or close out of order, the faulty switch is bypassed by the fault detection logic. STOP, LEAD and LAG switch inputs are reassigned to maintain safe operation. Should a faulty or fouled switch begin operating normally, the fault detection logic will restore STOP, LEAD and LAG assignments to their proper designation.

SPECIFICATIONS

MODEL	2611	
Supply Voltage	24V AC/DC	120V AC/DC
Voltage Range	20 - 28V	90 - 130V
Max Voltage	30V	140V
Supply Current	0.05A	0.01A
Control Current	0.001 amp	
Operating Duty	Continuous	
Min. Cycle Time	100ms	
Contacts	10A at 120VAC resistive	
Expected Relay Life	Mech:	10 million operations
	Elec:	100,000 operations at rated load
Operating Temp	+32°F to +140° F	
Humidity Tolerance	0 - 97% w/o condensation	
Mounting	8-pin socket*	
Enclosure Material	ABS plastic	
Weight	4.3 oz.	
Agency Approvals	UL Recognized (U.S. & Canadian)	

* Order with 8-Pin Socket 51X120

DIMENSIONS - Model 2611



(dimensions have tolerance of ± 0.06)



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Alternating Controller

READ ALL INSTRUCTIONS BEFORE INSTALLING, OPERATING OR SERVICING THIS DEVICE.
KEEP THIS DATA SHEET FOR FUTURE REFERENCE.

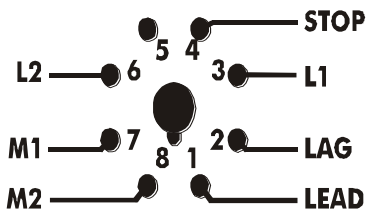
GENERAL SAFETY

POTENTIALLY HAZARDOUS VOLTAGES ARE PRESENT AT THE TERMINALS OF THE MODEL 2611.
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

INSTALLATION

Connect wiring to the socket as indicated in the following examples.

The **Model 2611** Alternating Controller is extremely versatile and can be used in many other configurations besides those shown. Any type of switches (float, pressure, etc.) can be used as a control switch; however, it must be connected as shown (from L1 to the control input) or the alternator will not function properly.



TROUBLESHOOTING

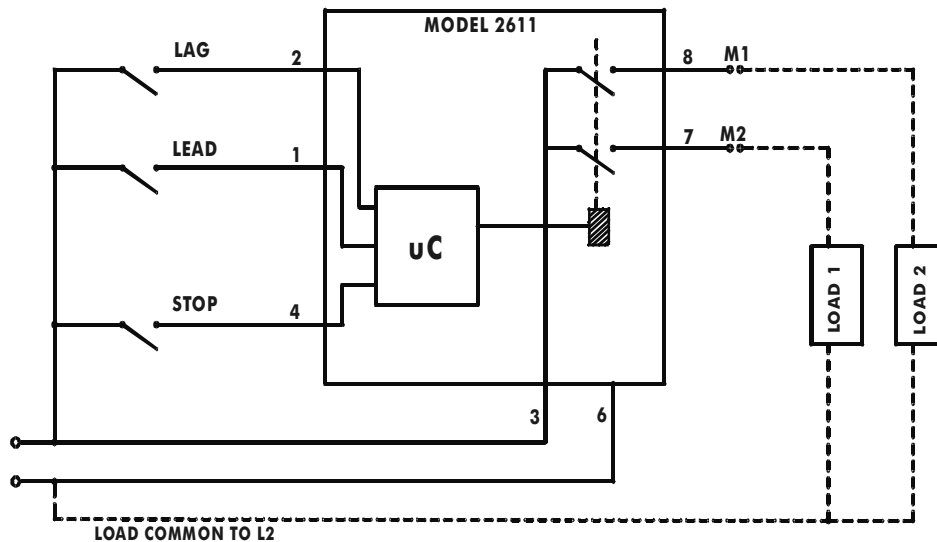
Should the **Model 2611** fail to operate properly, check to see that voltage level and connections are correct and securely attached to equipment. Should problems persist, contact the factory at 800-862-2875 for assistance.

WARRANTY

This product is warranted to be free from defects in materials and workmanship, and is covered by our exclusive **5-year Unconditional Warranty**. Should this device fail to operate for any reason, we will repair it for five years from the date of manufacture. For complete warranty details, see the *Terms and Conditions of Sales* page in the front section of the Time Mark catalog or contact Time Mark at 1-800-862-2875.

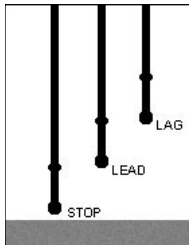
APPLICATION DIAGRAM - 2611

NOTE: All drawings shown with no power applied.

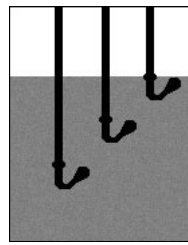


TIME MARK
CORPORATION

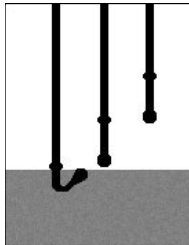
TYPICAL PUMP DOWN APPLICATION - SOSO Operation



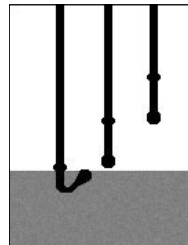
Step 1
In this example, the three normally open dry float switches are designated Stop, Lead and Lag. All switches begin open and Load 1 and Load 2 are de-energized. The lead select switch begins in the center (alternate) position.



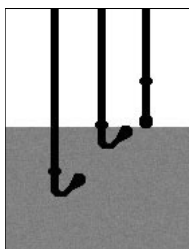
Step 4
Fluid levels continue to rise, LAG switch closes, energizes 2nd load, and lights red LAG switch LED and remaining green LOAD LED.



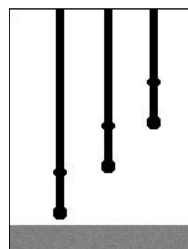
Step 2
Fluid levels begin rising. STOP switch closes, red STOP LED lights indicating switch closure. No loads are energized.



Step 5
As fluid levels fall, LEAD and LAG switches open, loads remain energized until the STOP switch opens. Red switch status LEDs turn off as corresponding switches open.



Step 3
Fluid levels continue to rise, LEAD switch closes and energizes 1st load. Red LED lights indicating LEAD switch closure and a green LOAD 1 or LOAD 2 LED lights indicating which load is currently LEAD.

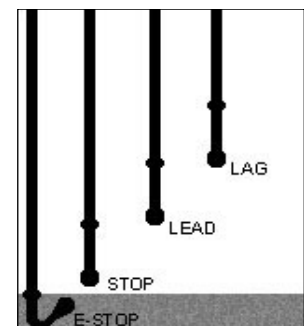
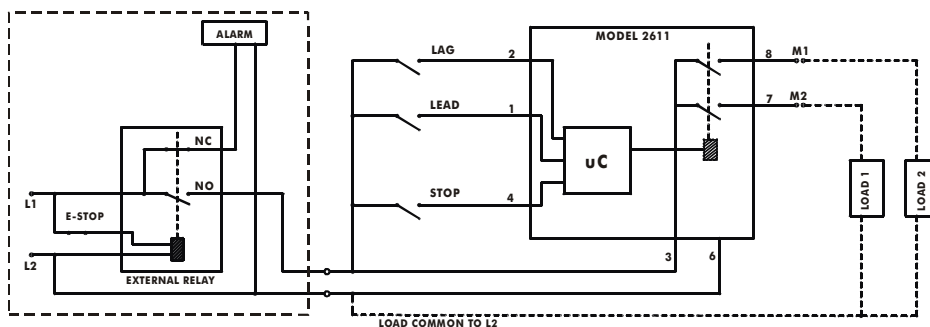


Step 6
Fluid levels fall below the STOP switch, de-energizing all loads and turning off green load status LEDs. Control logic alternates LEAD load, unless automatic sequencing is disabled by the Lead Select switch.

OPTIONAL APPLICATION DIAGRAMS

NOTE: All drawings shown with no power applied.

Using emergency STOP float switch (E-Stop) and SPDT relay to trigger alarm & cut power to LOAD 1 and LOAD 2.



As above, but wired with a high alarm float switch

