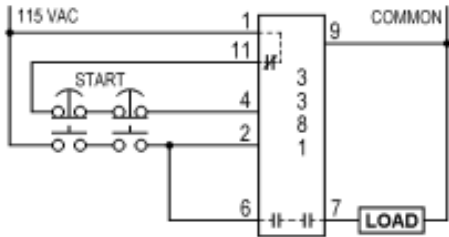


SERIES 3381 - Anti-Tiedown Controls With Adjustable Timed Output

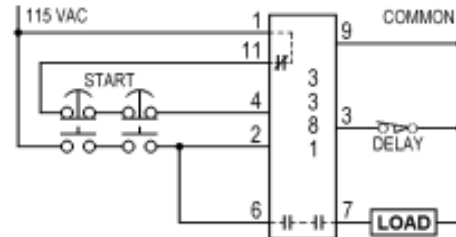
BltN: 3381APP-B

SUGGESTED WIRING



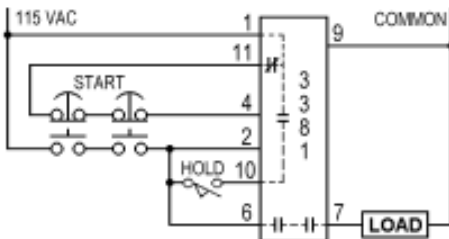
TIMED OUTPUT

Both start switches must be pressed within a fixed time to operate. The load will remain energized until the timer runs out or one or both switches are released.



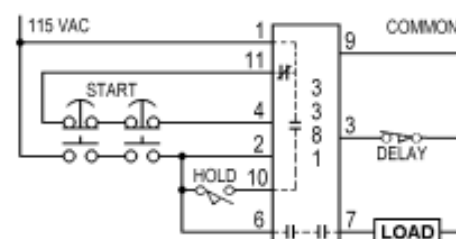
DELAYED TIMED OUTPUT

This circuit has the feature of time delay. When the two start buttons are activated, the load will stay energized until the timer runs out. However, the timer will not time out while the Delay switch is closed. The control will reset if either start switch is released or upon time out.



MAINTAINED TIMED OUTPUT

Adding the optional Hold switch will allow the load to remain energized after the start switches are released. *The Hold switch must not be closed until after the pinch point is passed.* The Hold switch should stay closed for the rest of the machine cycle. If the Hold switch is opened after one or both switches are released, the load will de-energize. When the timer runs out, the control will reset.



MAINTAINED AND DELAYED TIMED OUTPUT

This circuit uses the optional Hold switch which allows the load to remain energized after the start switches are released. *The Hold switch must not be closed until after the pinch point is passed.* The Hold switch should stay closed for the rest of the machine cycle. If the Hold switch is opened after one or both switches are released, the load will de-energize. The control will reset when the timer times out. However, the timer will not time out while the Delay switch is closed.

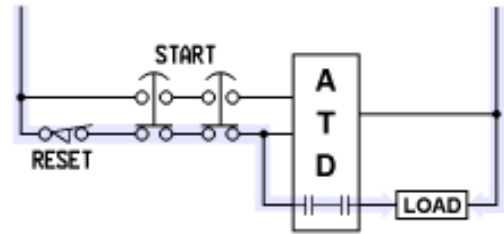
Specifications:

| | |
|--------------------------|--|
| Physical | 4 3/4" (121mm) High, 2 3/8" (60mm) Wide, 1 3/4" (45mm) Deep |
| Wiring Connection | Standard 11 pin octal base (socket sold separately) |
| Operating Voltage | 115 VAC, 50/60Hz. (12 and 24VAC also available) |
| Power Consumption | 1 Watt (pin 4 energized) / 6 Watts (pin 2 energized) |
| Output Ratings | 8 Amps @ 115 VAC (switching), 6 Amps @ 115 VAC (continuous) |
| Max. Switch Differential | Switches must be pressed within 0.5 sec. - internally adjustable |
| Output Time | Solid State knob adjustable, ±1% repeatability <u>3381-5:</u> .5-5 seconds, <u>3381-10:</u> 1-10 seconds, <u>3381-50:</u> 5-50 seconds, <u>3381-100:</u> 10-100 seconds, <u>3381-360:</u> 36-360 seconds |
| Output Life | 10 million mechanical operations (minimum) Note: The use of a load suppressor will greatly extend the output life when used with inductive loads. Order Nolatron part#: 30165 for loads up to 240 VAC. |

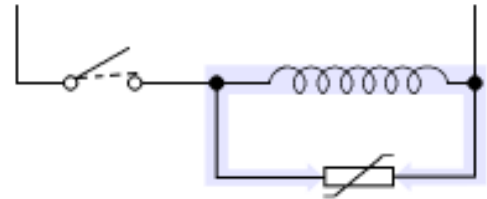
APPLICATION NOTES

HAND SWITCHES - The 3381 series is designed to operate with mechanical hand switches only. The normally closed and normally open contact of each switch must be isolated and of the "break before make" type. The user must determine the compatibility and safety of the hand switches. **These controls are not designed to be interfaced with electronic hand sensors** (request information on series 4480 & 4481).

LOAD CIRCUIT - Whenever possible, the load should receive power through the start switches as shown to the right. In this circuit if either start switch or the reset switch is opened, the power to the load will be interrupted by the switch as well as the output relay contacts. This circuit will offer additional safety when de-energizing the load.



LOAD TRANSIENT DAMAGE - If the load is a solenoid, a motor, a relay coil or a transformer, it will have inductive properties. When a relay contact breaks the current to an inductor, a high voltage will result across the contact. This high voltage may damage the contacts when they begin to separate. Good transient suppression (placed across the load) can greatly reduce this damaging high voltage and increase operating life. **Order Nolatron Part # 30165 - Load Suppressor**



LIMITED ONE YEAR WARRANTY: Nolatron, Inc. warrants its products against defects in material and workmanship under normal and proper use for a period of one year from date of shipment. Nolatron's obligation under this warranty is limited to furnishing, without charge and at our discretion, either replacement or repair of any defective part. This warranty does not apply under the following conditions: (1) When the product has been operated at other than specified voltage or currents. (2) When the product has sustained contact damage due to improper load transient protection. (3) When the product has been subjected to abuse or has otherwise been tampered with. The foregoing warranty is exclusive and in lieu of all other warranties of quality whether written, oral or implied. Nolatron is not liable for damage or injury which may result from the use of these products.

WARNING: These anti-tiedown controls are not intended for use without adequate point of operation safety guards. It is the user's responsibility to assess all potential hazards when installing safety equipment. The user must see that these controls are properly installed, cared for and operated to meet all applicable local, national and OSHA codes and requirements. Failure to comply could result in serious bodily injury and/or property damage.

No other circuitry capable of supplying power to the load should be wired into the load circuit. Do not connect the output of the Anti-tiedown control to the input of any other control device. General purpose programmable controllers and electronic controls are not intended for safety related applications.