



| 4391 SERIES

-65°F to 450°F Hermetically Sealed

Introduction

This Klixon® snap-acting disc type control is designed to provide crisp, positive switching action. The 4391 is the most versatile of the Klixon® precision thermostats with its available SPST or SPDT switching, automatic or manual reset, and overmold options. The high current carrying capacity in a hermetic package make it ideal for applications such as aircraft galley equipment, aircraft lavatory hot water heaters, semiconductor equipment, and locomotive/railcar heaters.



Features

- High current capacity
- Snap-action switching
- Normally open or closed
- Automatic or manual reset
- SPST or SPDT
- Capacity optional overmold



PERFORMANCE CHARACTERISTICS

Dielectric Strength	1250 VAC, rms, 60 cycles for 1 minute
Vibration Resistance	Standard Construction : 5–500 Hz, 3G High Vibration Construction : 5–500 Hz, 5G
Hermeticity	1 X 10 ⁻⁵ atm cc/second maximum
Weight	Without overmold : 21 grams (average) With overmold : 56 grams (average)

Contact Ratings

30 VAC/DC	125 VAC	250 VAC	Life Cycles
Amperes			
10	4	2	100,000
11	6	3	50,000
12	8	4	25,000
13	10	5	10,000
14	12	6	5,000

Ambient Temperature Range

Non-Overmold: -65°F to 450°F (-53.9°C to +232.2°C)
 Silicone Overmold: -60°F to 400°F (-51.1°C to +204.4°C)

Operating Temperature Range

Non-Overmold: 0°F to 450°F (-17.8°C to +232.2°C)
 Silicone Overmold: 0°F to 400°F (-17.8°C to +204.4°C)

Standard Temperature Settings								
Operating Temperature	SPST (Single Pole / Single Throw), Standard Vibration				SPDT (Single Pole / Double Throw), High Vibration			
	Differential		Tolerance		Differential		Tolerance	
	°C	°F	± °C	± °F	°C	°F	± °C	± °F
-18 to 93°C (0 to 200°F)	8	15	3	5	14	25	4.4	8
-99 to 149°C (210 to 300°F)	14	25	4	7	17	30	6	10
-160 to 177°C (325 to 350°F)	25	45	7	12	25	45	7	12
-191 to 232°C * (375 to 450°F) auto reset only	33	60	8	15	14	60	8	15

Standard temperature set points are at every 5°F degrees (for example, 320°F, 325°F, 330°F).
 Consult Sensata Technologies if a custom operating temperature range is required.
** Available in automatic reset only*

CONFIGURATIONS

Our most common configurations and options are depicted below. Other styles are also available.

<p>4391-8 Style SPST automatic reset without overmold</p>	<p>4391-6 Style SPDT automatic reset without overmold</p>												
<p>Automatic reset with overmold (SPST shown)</p> <table border="1" data-bbox="609 808 812 882"> <thead> <tr> <th>Overmold Material</th> <th>SPST</th> <th>SPDT</th> </tr> </thead> <tbody> <tr> <td>Silicone</td> <td>4391S7</td> <td>4391S5</td> </tr> </tbody> </table>	Overmold Material	SPST	SPDT	Silicone	4391S7	4391S5	<p>Manual reset with overmold (SPDT shown)</p> <p>All dimensions same as above unless otherwise specified</p> <table border="1" data-bbox="1112 808 1315 882"> <thead> <tr> <th>Overmold Material</th> <th>SPST</th> <th>SPDT</th> </tr> </thead> <tbody> <tr> <td>Silicone</td> <td>4391S14</td> <td>4391S13</td> </tr> </tbody> </table>	Overmold Material	SPST	SPDT	Silicone	4391S14	4391S13
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TYPICAL MOUNTINGS

<p>CHOICE OF TWO HOLE SIZES 3/32 OR 11/64 (9510-2) (9510-1)</p> <p>1 15/32</p> <p>MTG. PLATE 9510</p>	<p>TWO 5/32 HOLES</p> <p>1 13/16</p> <p>MTG. PLATE 9755-1</p>	<p>AVAILABLE ON UNITS WITHOUT OVERMOLD ONLY</p> <p>TWO 5/32 HOLES</p> <p>1 13/16</p> <p>MTG. PLATE 7484-1</p>
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Mounting brackets which are readily available are shown below. Variation from these mountings can be tooled at extra cost. Please advise us if a bracket is required. Dimensions in inches.

WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

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